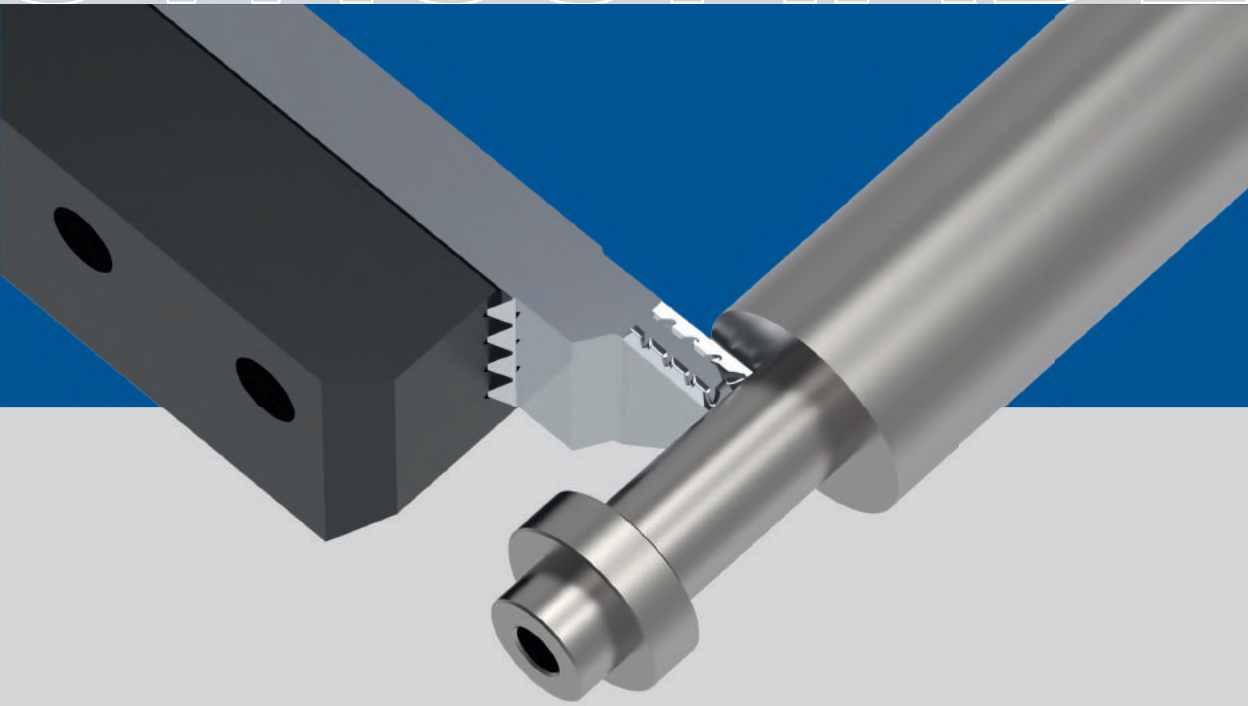
APPLITEC
SWISS TOOLING

SWISSMADE



EDITION 2022-2024

APPLITEC

OUTILS DE HAUTES PERFORMANCES POUR LE DÉCOLLETAGE ET LA MICROMÉCANIQUE

HOCHLEISTUNGSWERKZEUGE FÜR DREHAUTOMATEN UND MIKROMECHANIK

HIGH PERFORMANCE TOOLING FOR AUTOMATIC LATHES AND MICROMECHANICS

Brütsch·Rüegger Tools

www.brw.ch

TOP-LINE

APPLITEC

Index

700

Codification des plaquettes TOP-Line série 700
WSP-Bezeichnungssystem für TOP-Line 700 Serie
Inserts designation key for TOP-Line 700 series

7	6	4	X	–	2.0	–	R20	–	HTA

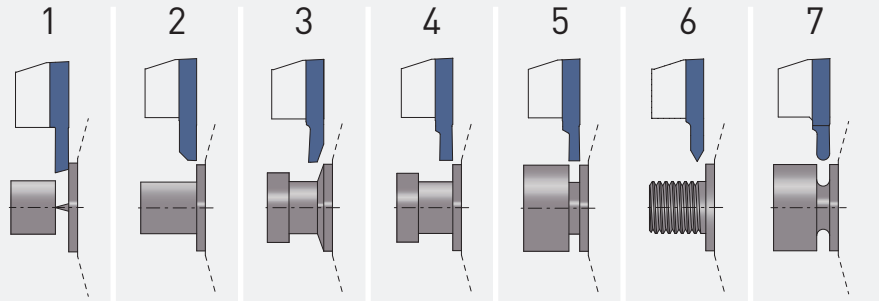
Dimension
Abmessung
Dimension

Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
Schneidgeometrie / Spanbrecher / Sondereigenschaften
Cutting geometry / Chip breaker / Special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

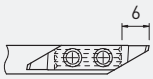


Gamme de produit
Produktserie
Product series

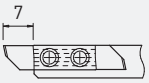
définit la compatibilité des plaquettes avec le porte-outil
bestimmt die WSP und Halter Kompatibilität
shows the inserts and holder compatibility

L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)
R = 2, 4, 6, 8 (chiffre pair / gerade Zahl / even number)

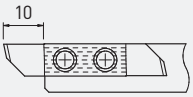
L 710	R 720	L 730	R 740	L 750	R 760	L 770	R 780



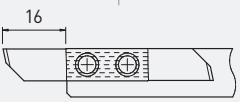
pour machines à cames
für kurvengesteuerte Maschinen
for cam driven machines



main series
small type



main series
large type



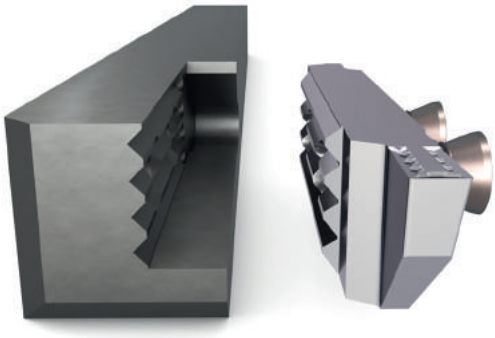
tronçonnage uniquement
nur für abstechen
only for parting off

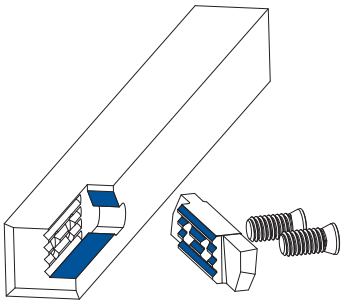
Applitec série 700
Applitec 700 Serie
Applitec 700 series

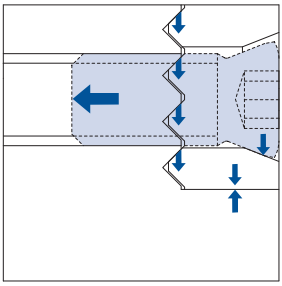
Système de serrage à denture décalée avec 2 vis de fixation
Spannsystem mit 2 Schrauben und verschobener Verzahnung
Shifted teeth clamping system with 2 screws

100% rigid!

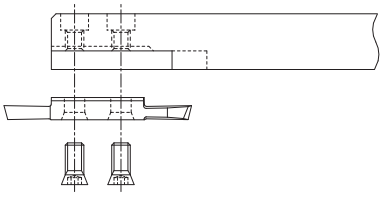
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

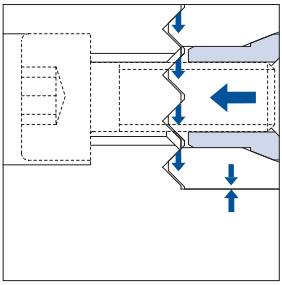






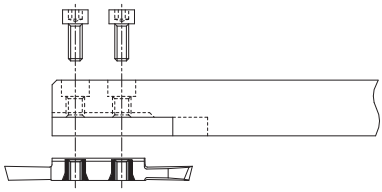
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

700-ZX geometries

Très bonne maîtrise du copeau pour matières difficiles

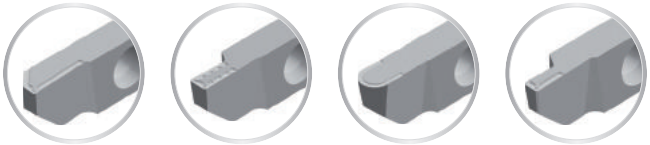
Sehr gute Spankontrolle für schwierige Werkstoffe

Very efficient chip control for difficult materials

Multitude de géométries possibles

Mehrere mögliche Spangeometrien

Many different cutting geometries are possible

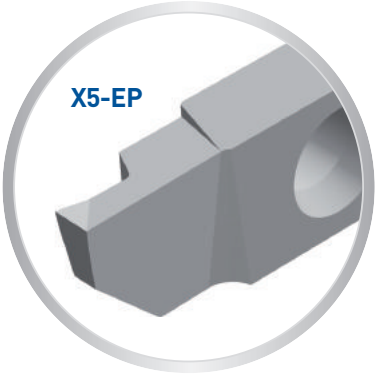


700-honed

Géométrie positive 5° avec arête de coupe renforcée (honée)
Meilleure durée de vie dans l'usinage des matériaux abrasifs (aciers au carbone, aciers alliers)

Positive Geometrie 5° mit verstärkte Schneidkante (gehont)
Bessere Standzeit für die Bearbeitung von abrasive Materialen (Kohlenstoff Stahl, legierter Stahl)

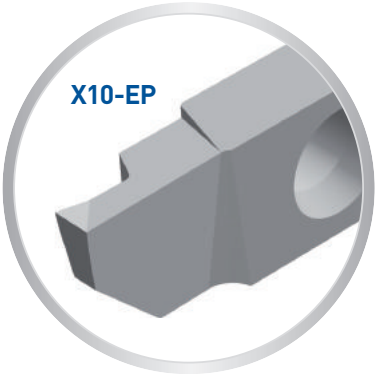
Positive geometry 5° with reinforced cutting edge (honed)
Better tool life for abrasive materials (carbon steel, alloy steel)



Géométrie positive 10° avec arête de coupe renforcée (honée)
Meilleure durée de vie dans l'usinage des matériaux tenace (acier inox, inox martensitique)

Positive Geometrie 10° mit verstärkte Schneidkante (gehont)
Bessere Standzeit für die Bearbeitung von zähe Materialen (Rostfreier Stahl, martensitische Rostfreier Stahl)

Positive geometry 10° with reinforced cutting edge (honed)
Better tool life for tough materials (stainless steel, martensitic steel)



Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Tronçonnage
Abstechen
Parting off

700 Series

Géométries de coupe Spanformgeometrien Cutting geometries	Acier de décolletage Automatenstahl Free-cutting steel	Acier Stahl Steel	Acier inoxydable Rostfreistahl Stainless steel	Aluminium	Titane Titan Titanium	Laiton, bronze Messing, Bronze Brass, bronze	Cuivre Kupfer Copper	
0°	★	✓	✓	✓	✓	★	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
X4°	★	★	★	✓	✓		✓	Réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar Decreases cutting force, allows regrinding
XF	☆	★	★				☆	Pour matières difficiles (pointe renforcée) Für schwierige Werkstoffe (verstärkte Spitze) For difficult materials (reinforced point)
X12°			☆	★	★		★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
X25°			☆	★	☆		☆	Pour matières collantes faisant de très longs copeaux Für klebrige Werkstoffe mit sehr langen Spänen For long chipping sticky materials
U	☆	☆	☆					Pour resserrer le copeau, réaffûtage aisé Für Spanverschmälerung, einfaches Nachschleifen To narrow the chips, easy regrinding
ZU8	★	★	★	☆ <5% Si	☆	☆		Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U

★	1er choix 1. Wahl 1st choice
☆	Recommandé Empfohlen Recommended
✓	Pour pièces fragiles de très petits diamètres Für empfindliche und sehr kleine Werkstücke For fragile and very small work pieces

Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Tournage
Drehen
Turning

700 Series

★ 1er choix / 1. Wahl / 1st choice

☆ Recommandé / Empfohlen / Recommended

✓ Pour pièces fragiles de très petits diamètres / Für empfindliche und sehr kleine Werkstücke / For fragile and very small work pieces

Géométries de coupe / Spanformgeometrien / Cutting geometries	Acier de décolletage / Automatenstahl / Free-cutting steel	Acier / Stahl / Steel	Acier inoxydable / Rostfreistahl / Stainless steel	Aluminium	Titane / Titan / Titanium	Laiton, bronze / Messing, Bronze / Brass, bronze	Cuivre / Kupfer / Copper	
 0°	★	✓	✓	✓	✓	★	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
 X	★	★	★	★	★		★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
 X5-EP	★	★	☆					Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U
 X10-EP	☆	☆	★	☆	☆			Très bonne maîtrise du copeau (arête de coupe honée) Sehr gute Spankontrolle (gehonte Schneidkante) Very efficient chip control (honed edge) f min: 0.02 mm/U
 VX800	★	★	☆	☆	☆		☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
 VX8°	★	★	☆	☆	☆		☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
 VUX	☆	☆	★	☆	★		☆	Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip-breaker
 VX15°	☆		☆	★	★		★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
 VS	☆		☆	✓	✓		✓	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation
 ZX10	★	★	★	☆ <5% Si	☆	☆		Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U
 ZX17			☆	★ <5% Si	★		★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U
 ZX25			☆	★ <5% Si	★		★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U
 ZXT	★	★	★	☆ <5% Si	☆	☆		Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control f min: 0.02 mm/U

Nuances micro-grain tenace
Zähe Feinkornsorten
Tough micro-grain grades

µK 20

TiAlN
µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

TiAlX
µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

TiN
µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for the machining of low resistance materials which creates build-up edge
- very low friction ratio
- not suitable for titanium machining

LOX
µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance résistante à l'usure et à la température, destinée à l'usinage des matières suivantes: Inox, Titanes, alliages à base de Nickel, Chrome Cobalt, les matières avec une dureté supérieure à > 50HRC
- bonne alternative pour l'usinage des aciers de construction types ETG88, ETG100, 36SMnPb14

- verschleissfeste und temperatubeständige Sorte. Für folgende Materialien empfohlen: Inox, Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50HRC
- gute Alternative für die Bearbeitung von Baustähle Typ ETG88, ETG100, 36SMnPb14

- wear and high temperature resistant grade. Recommended for following materials: inox, titanium, nickel alloys, materials harder than > 50HRC
- good alternative for machining of structural steels type ETG88, ETG100, 36SMnPb14

N (µK20)
non revêtu
unbeschichtet
uncoated

- supporte les coupes interrompues et autres conditions d'usinage défavorables

- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- suitable for interrupted cut and other unfavourable machining conditions

Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

µK 10

HTA

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

HTAX

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faibles avances de petites pièces, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. For light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

HTiN

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for light machining of low resistance materials which creates build-up edge
- very low friction ratio
- not suitable for titanium machining

HAS

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet

- grade for non-ferrous materials
- very low fiction ratio
- first choice for aluminium up to 5% Si, copper and low alloyed titanium

HN (µK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning			Tronçonnage Abstechen Parting off		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 3.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel < 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 3.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel < 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel > 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 3.50	0.01 - 0.03 0.03 - 0.06

Indications pour premier réglage
Hinweise für die erste Einrichtung
Indications for first setting

Ébauche Schruppen Roughing	Finition Schlichten Finishing
• vitesse de coupe moyenne • avance élevée	• vitesse de coupe élevée • avance faible
• durchschnittliche Schnittgeschwindigkeit • hohe Schnittgeschwindigkeit	• hohe Schnittgeschwindigkeit • niedriger Vorschub
• average cutting speed • high cutting speed	• high cutting speed • low cutting feed

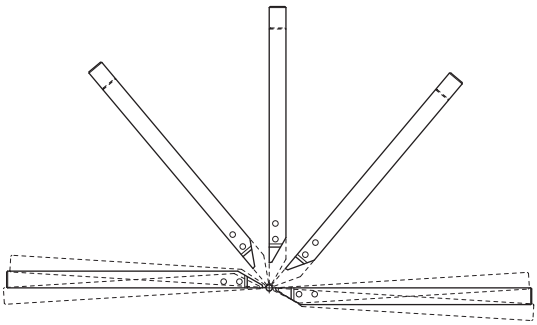
Remarques importantes
Wichtige Bemerkungen
Important remarks

- en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées
- les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables
- des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces

- wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen
- Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein
- die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen

- in many cases, it is impossible to reach the recommended cutting speed, due to the machine limits
- Applitec tools are especially designed to be efficient even in bad cutting conditions
- applications not mentioned in the opposite table can also be efficient

Index



Porte-outils et plaquettes pour machines à cames
Halter und WSP für kurvengesteuerte Maschinen
Tool holders and inserts for cam driven machines

Index

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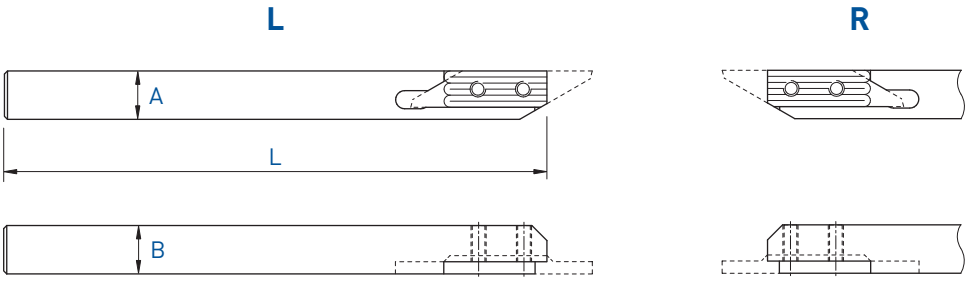
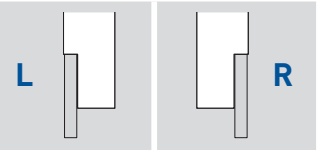
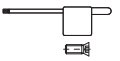
Porte-outils
Halter
Holders

710 / 720





A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
6 x 6	115	A	**710-6**	**-**
7 x 7	115	A	**710-7**	**720-7**
8 x 8	115	A	**710-8**	**720-8**
8 x 8	140	A	**710-8-140**	**-**
10 x 10	115	A	**710-10**	**720-10**
12 x 12	130	A	**710-12**	**720-12**

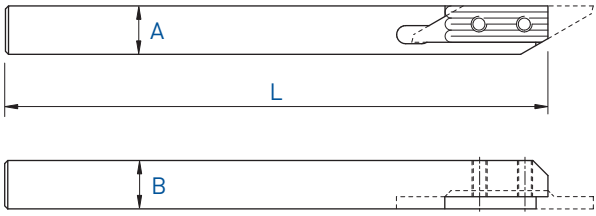


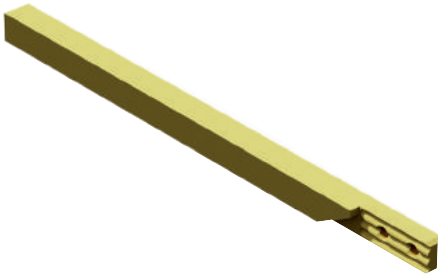
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

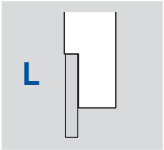
Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

710-NOVIBRA

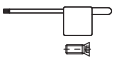
L







A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6-NOVIBRA**
7 x 7	115	A	**710-7-NOVIBRA**
8 x 8	115	A	**710-8-NOVIBRA**

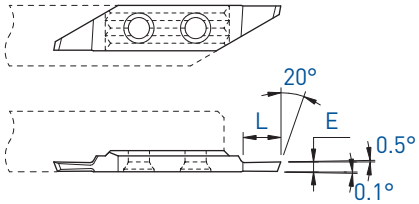


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

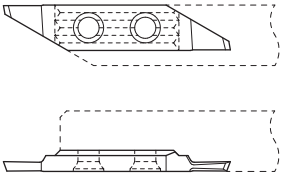
Tronçonnage
Abstechen
Parting off

711 / 721

L



R

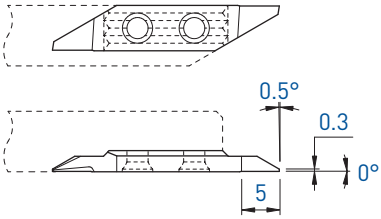


		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	2	711-0.5	■	■	■	■	□	■	-						
0.8	3	711-0.8	■	■	■	■	■	■	721-0.8	■	■	■			
0.9	3	711-0.9	■	■	■	■	□	■	-						
1.0	4	711-1.0	■	■	■	■	■	■	721-1.0	■	■	■	■	□	■
1.1	4	711-1.1	■	■	■	■	■	■	-						
1.2	5	711-1.2	■	■	■	■	■	■	721-1.2	■	■	■	■	□	■
1.3	5	711-1.3	■	■	■	■	□	■	-						
1.4	5	711-1.4	■	■	■				-						
1.5	6.5	711-1.5	■	■	■	■	■	■	721-1.5	■	■	■	■	□	■
1.8	6.5	711-1.8	■	■	■	■	□	■	721-1.8	■	■	■			
2.0	6.5	711-2.0	■	■	■				721-2.0	■	■	■			

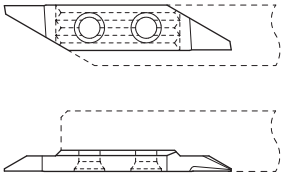
Tournage avant
Vorwärts drehen
Front turning

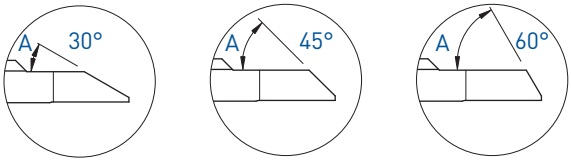
712 / 722

L



R





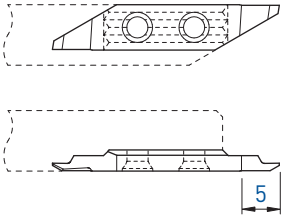
	L							R						
A	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
30°	712-30	■	■	■	■	□	■	722-30	■	■	■	■	□	■
45°	712-45	■	■	■	■	■	■	722-45	■	■	■	■	□	■
60°	712-60	■	■	■	■	□	■	722-60	■	■	■	■	□	■

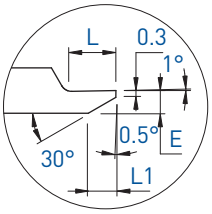
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

713-30° / 723-30°

L





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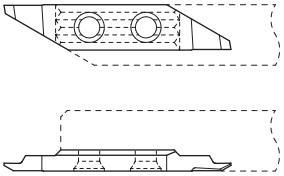
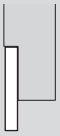
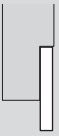
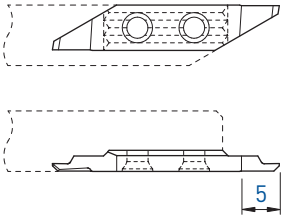


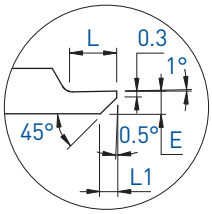
			L 						R 					
E	L	L1	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	1.6	0.85	**713-30-0.8**	■	■	■				**723-30-0.8**	■	■	■	■	□	■
0.9	1.6	1.05	**713-30-0.9**	■	■	■				**-**						
1.0	2.0	1.2	**713-30-1.0**	■	■	■	■	□	■	**723-30-1.0**	■	■	■	■	□	■
1.1	2.0	1.4	**713-30-1.1**	■	■	■				**-**						
1.2	2.5	1.55	**713-30-1.2**	■	■	■				**723-30-1.2**	■	■	■			
1.3	2.5	1.7	**713-30-1.3**	■	■	■				**-**						
1.4	3.0	1.9	**713-30-1.4**	■	■	■				**-**						
1.5	3.0	2.1	**713-30-1.5**	■	■	■	■	■	■	**723-30-1.5**	■	■	■			
1.8	4.0	2.6	**713-30-1.8**	■	■	■				**723-30-1.8**	■	■	■			
2.0	4.0	2.9	**713-30-2.0**	■	■	■	■	■	■	**723-30-2.0**	■	■	■			

Tournage arrière
Rückwärts drehen
Back turning

713-45° / 723-45°

L





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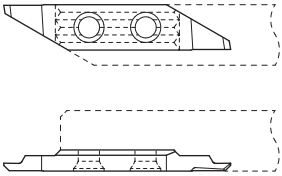


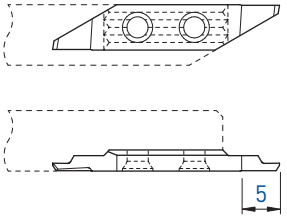
L										R					
E	L	L1	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	1.6	0.5	**713-45-0.8**	■	■	■	■	□	■	**723-45-0.8**	■	■	■			
0.9	1.6	0.6	**713-45-0.9**	■	■	■				**-**						
1.0	2.0	0.7	**713-45-1.0**	■	■	■	■	□	■	**723-45-1.0**	■	□	■			
1.1	2.0	0.8	**713-45-1.1**	■	■	■				**-**						
1.2	2.5	0.9	**713-45-1.2**	■	■	■				**723-45-1.2**	■	■	■			
1.3	2.5	1.0	**713-45-1.3**	■	■	■				**-**						
1.4	3.0	1.1	**713-45-1.4**	■	■	■				**-**						
1.5	3.0	1.2	**713-45-1.5**	■	■	■	■	■	■	**723-45-1.5**	■	□	■			
1.8	4.0	1.5	**713-45-1.8**	■	■	■				**723-45-1.8**	■	□	■			
2.0	4.0	1.7	**713-45-2.0**	■	■	■				**723-45-2.0**	■	■	■			

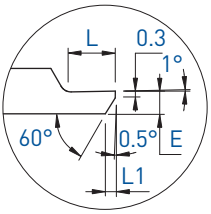
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

713-60° / 723-60°

L





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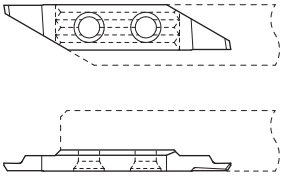
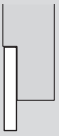
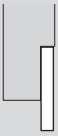
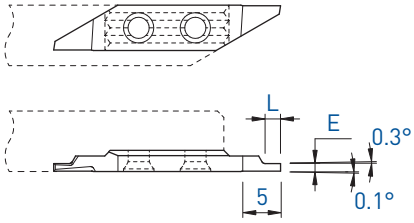


			L 				R 			
E	L	L1	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0.8	1.6	0.3	**713-60-0.8**	■	■	■	**723-60-0.8**	■	■	■
0.9	1.6	0.35	**713-60-0.9**	■	■	■	-			
1.0	2.0	0.4	**713-60-1.0**	■	■	■	**723-60-1.0**	■	□	■
1.1	2.0	0.45	**713-60-1.1**	■	■	■	-			
1.2	2.5	0.5	**713-60-1.2**	■	■	■	**723-60-1.2**	■	□	■
1.3	2.5	0.6	**713-60-1.3**	■	■	■	-			
1.4	3.0	0.65	**713-60-1.4**	■	■	■	-			
1.5	3.0	0.7	**713-60-1.5**	■	■	■	**723-60-1.5**	■	■	■
1.8	4.0	0.9	**713-60-1.8**	■	■	■	**723-60-1.8**	■	□	■
2.0	4.0	1.0	**713-60-2.0**	■	■	■	**723-60-2.0**	■	■	■

Fonçage-tournage
Einstechen und drehen
Grooving and turning

714 / 724

L



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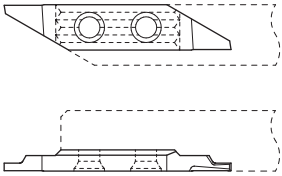


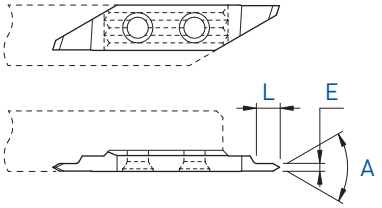
		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	1.0	714-0.5	■	■	■				724-0.5	■	■	■	■	□	■
0.6	1.0	714-0.6	■	■	■				724-0.6	■	■	■			
0.7	1.5	714-0.7	■	■	■				724-0.7	■	■	■			
0.8	1.5	714-0.8	■	■	■	■	□	■	724-0.8	■	■	■			
0.9	2.0	714-0.9	■	■	■				724-0.9	■	□	■			
1.0	2.0	714-1.0	■	■	■	■	■	■	724-1.0	■	■	■			
1.1	2.0	714-1.1	■	■	■				724-1.1	■	□	■			
1.2	2.5	714-1.2	■	■	■				724-1.2	■	□	■			
1.3	2.5	714-1.3	■	■	■				724-1.3	■	■	■			
1.4	3.0	714-1.4	■	■	■				724-1.4	■	□	■			
1.5	3.0	714-1.5	■	■	■	■	■	■	724-1.5	■	■	■			

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

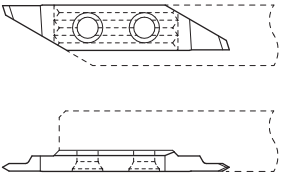
Filetage
Gewinde drehen
Threading

716 / 726

L



R

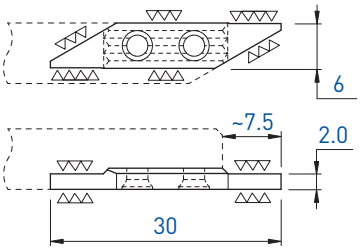


A	E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
60°	1.0	3	**716-60-1.0**	■	■	■	**726-60-1.0**	■	■	■
60°	1.5	4	**716-60-1.5**	■	■	■	**726-60-1.5**	■	■	■
55°	1.0	3	**716-55-1.0**	■	■	■	**726-55-1.0**	■	□	■
55°	1.5	4	**716-55-1.5**	■	■	■	**726-55-1.5**	■	□	■

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

711-EP / 721-EP

L



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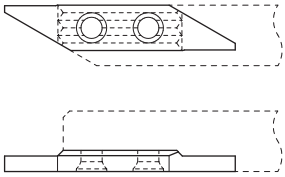


L							R					
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
711-EP	■	■	■	■	□	■	721-EP	■	□	■	□	□	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Index

730 / 740

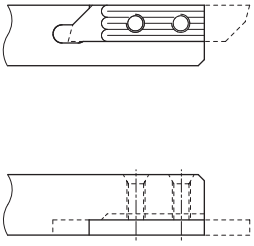
L

R

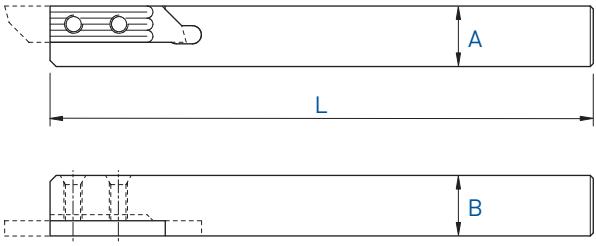
Porte-outils
Halter
Holders

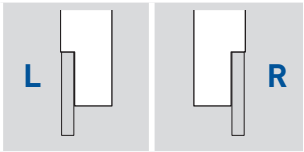
730 / 740

L



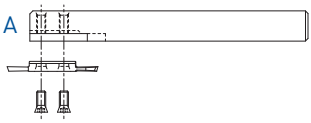
R



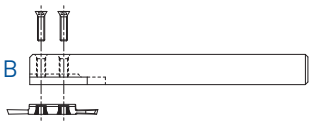


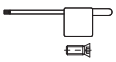
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	**730-7**	**740-7**
8 x 8	115	A + B	**730-8**	**740-8**
8 x 8	140	A + B	**730-8-140**	**-**
10 x 10	115	A + B	**730-10**	**740-10**
10 x 10	50	A + B	**730-10-50**	**740-10-50**
12 x 12	130	A + B	**730-12**	**740-12**
12 x 12	90	A + B	**730-12-90**	**740-12-90**
12.7 x 12.7	130	A + B	**730-12.7**	**740-12.7**
16 x 16	130	A + B	**730-16**	**740-16**
16 x 16	75	A + B	**730-16-75**	**740-16-75**
20 x 20	120	A + B	**730-20**	**740-20**

Serrage standard A
Standard Spannsystem A
Standard clamping system A



Serrage B
Spannsystem B
Clamping system B

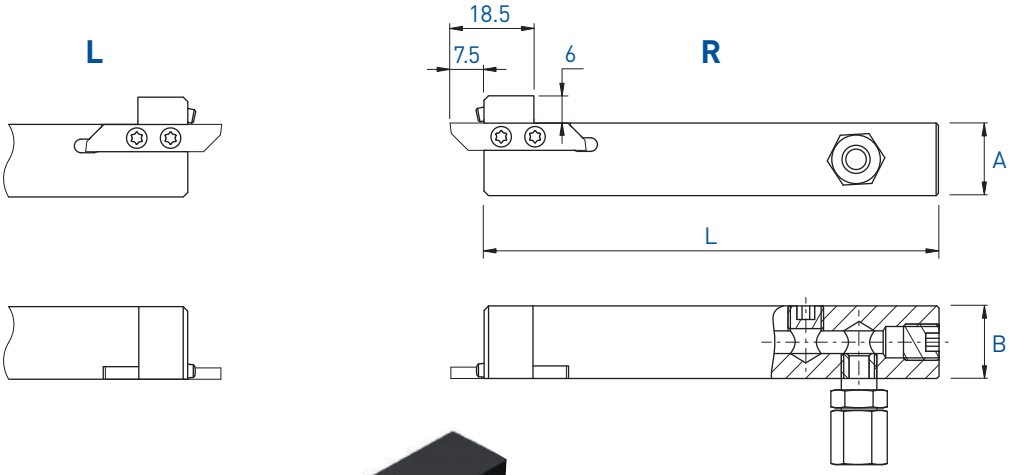


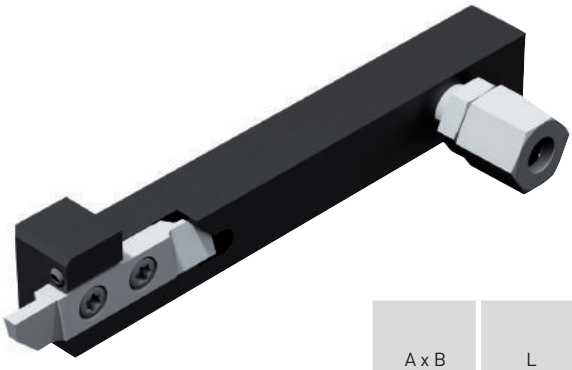


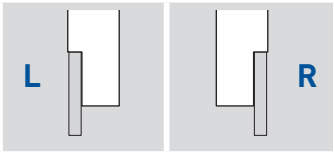
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

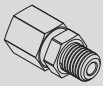
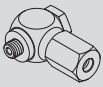
730-JET / 740-JET

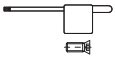






A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
8 x 10	100	A + B	-	740-0810-JET
10 x 12	100	A + B	730-1012-JET	740-1012-JET
10 x 12	80	A + B	-	740-1012-80-JET new
12 x 12	100	A + B	730-12-JET	740-12-JET
12.7 x 12.7	100	A + B	730-12.7-JET	740-12.7-JET
16 x 16	100	A + B	730-16-JET	740-16-JET
20 x 20	100	A + B	730-20-JET	740-20-JET

Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 	Option 
	Art. N°	Art. N°	Art. N°	Art. N°
740-0810-JET	J-M5-D5	JB-M5	–	JC-M5-D5
730-JET / 740-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5	–

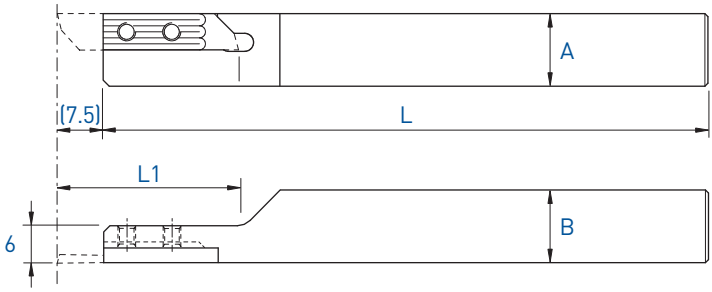


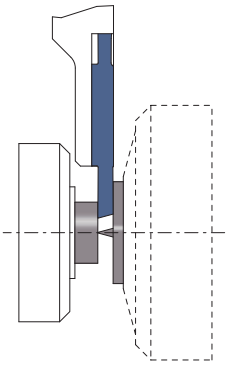
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

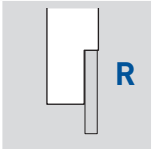
Porte-outils
Halter
Holders

740-C

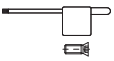
R







A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	**740-C-8**
10 x 10	115	24	A	**740-C-10**
12 x 12	130	30	A	**740-C-12**
16 x 16	130	40	A	**740-C-16**



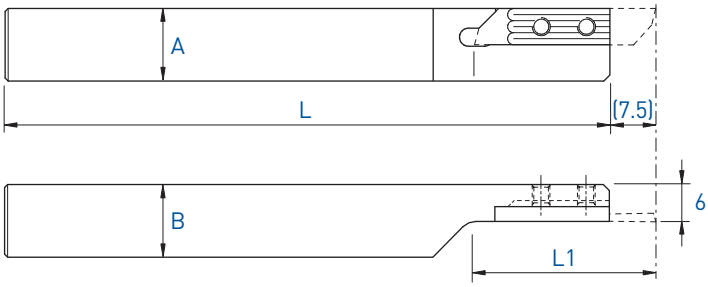
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

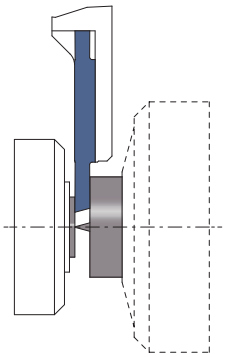
Porte-outils | **Coupe à droite déportée**
Halter | **Versetztes Rechtsschneiden**
Holders | **Right cut off line**

730RC

Utiliser des plaquettes type 731R
WSP Typ 731R verwenden
Use inserts type 731R

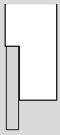
Voir pages 1.39 - 1.45
Siehe Seiten 1.39 - 1.45
See pages 1.39 - 1.45



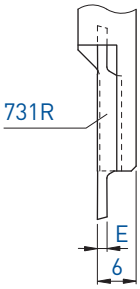


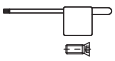
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



A x B	L	L1	Art. N°
8 x 8	115	24	**730RC-8**
10 x 10	115	24	**730RC-10**
12 x 12	130	30	**730RC-12**
16 x 16	130	40	**730RC-16**



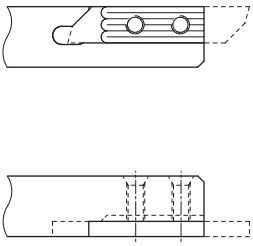


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

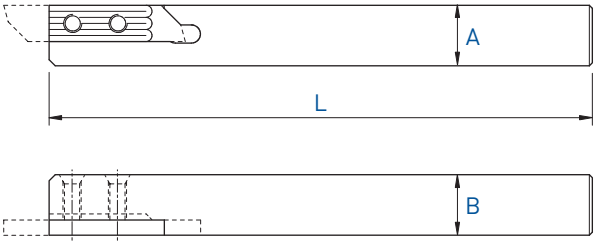
Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

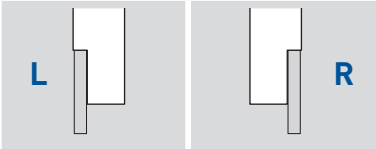
730-NOVIBRA
740-NOVIBRA

L

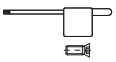


R



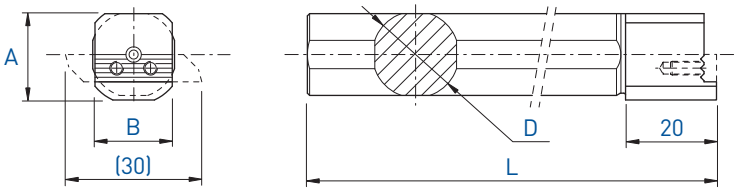


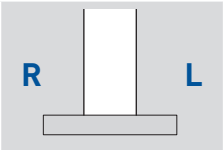
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	**730-7-NOVIBRA**	**740-7-NOVIBRA**
8 x 8	115	A + B	**730-8-NOVIBRA**	**740-8-NOVIBRA**
8 x 8	80	A + B	-	**740-8-80-NOVIBRA**
10 x 10	115	A + B	-	**740-10-NOVIBRA**
12 x 12	130	A + B	-	**740-12-NOVIBRA**



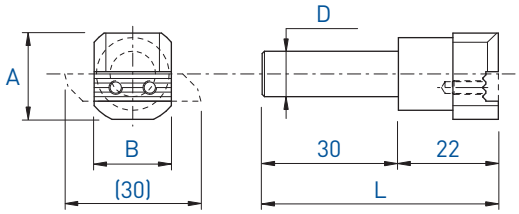
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

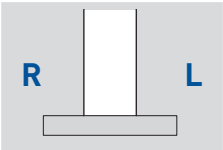
740 / 730-D



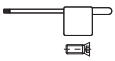


A x B	L	D	Art. N°
19 x 17	160	16	**740/730-D16**
19 x 17	160	19.05	**740/730-D19.05**
19 x 17	110	19.05	**740/730-D19.05-S**
19.5 x 17	160	20	**740/730-D20**
20 x 17	110	22	**740/730-D22**
22 x 17	200	25	**740/730-D25**
22 x 17	200	25.4	**740/730-D25.4**





A x B	L	D	Art. N°
19 x 17	52	10	**740/730-D10**

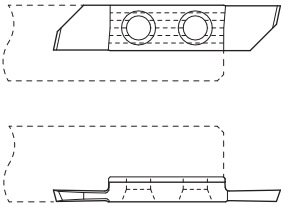


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

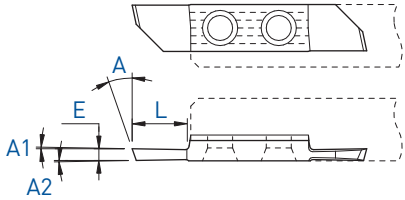
Tronçonnage
Abstechen
Parting off

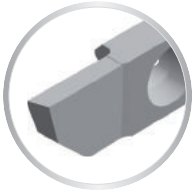
731 / 741

L



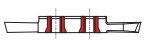
R





E	A	A1	A2	L	L Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	R Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.6	18°	2.5°	0.5°	3	**731-0.6**	■		■	■		■	**741-0.6**	■	■		■	■		■
0.8	20°	0.3°	0.3°	5	**731-0.8**	■	■	■	■	□	■	**741-0.8**	■	■	■	■	■	■	■
1.0	20°	0.3°	0.3°	5	**731-1.0**	■	■	■	■	■	■	**741-1.0**	■	■	■	■	■	■	■
1.2	20°	0.3°	0.3°	5	**731-1.2**	■	■	■	■	□	■	**741-1.2**	■	■	■	■	■	■	■
1.5	20°	0.3°	0.3°	7	**731-1.5**	■	■	■	■	■	■	**741-1.5**	■	■	■	■	■	■	■
1.8	20°	0.3°	0.3°	7	**731-1.8**	■	■	■	■	□	■	**741-1.8**	■	■	■	■	■	□	■
2.0	20°	0.3°	0.3°	7	**731-2.0**	■	■	■	■	□	■	**741-2.0**	■	■	■	■	■	■	■
2.5	20°	0.3°	0.3°	7	**731-2.5**	■	■	■				**741-2.5**	■	■	■	■	■	□	■

7XX-XX-B

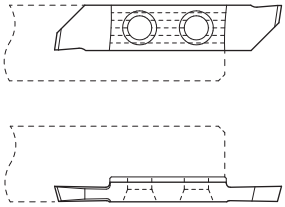


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

731X4 / 741X4

L



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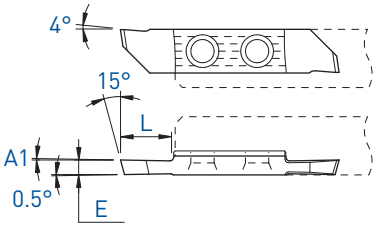
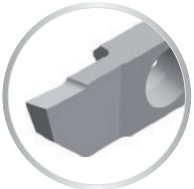
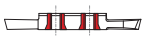




			L						R						
E	A1	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.6	2.5°	3	**731X4-0.6**	■		■	■		■	**741X4-0.6**	■	■		■	■		■
0.8	0.5°	4	-							**741X4-0.8**					■		■
1.0	0.5°	5	**731X4-1.0**	■	■	■				**741X4-1.0**	■	■	■	■	■	□	■
1.5	0.5°	7	**731X4-1.5**	■	■	■	■	□	■	**741X4-1.5**	■	■	■	■	■	□	■
2.0	0.5°	7	**731X4-2.0**	■	■	■				**741X4-2.0**	■	■	■	■			

7XX-XX-B

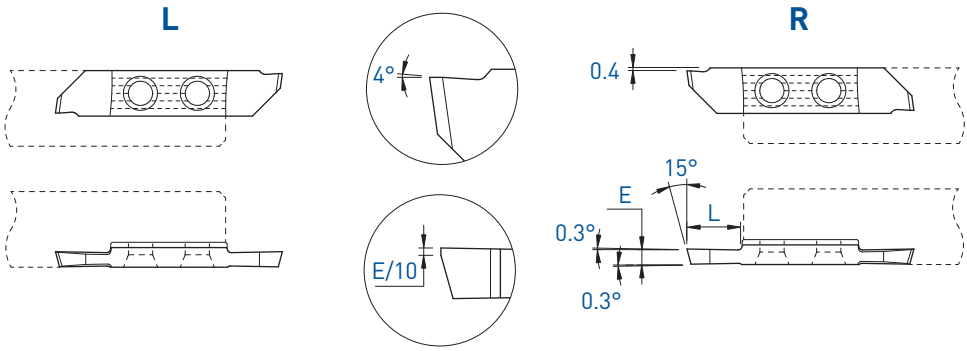


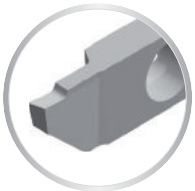
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

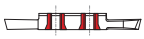
731XF / 741XF





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.2	5	-							741XF-1.2	■	□	■			
1.5	7	731XF-1.5	■	■	■	■	■	■	741XF-1.5	■	■	■	■	■	■
2.0	7	731XF-2.0	■	■	■				741XF-2.0	■	■	■	■	■	■
2.5	7	731XF-2.5	■	■	■				741XF-2.5	■	■	■			

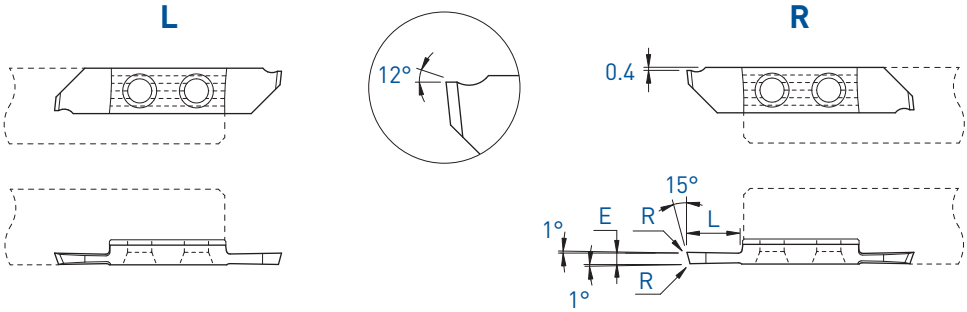
7XX-XX-B

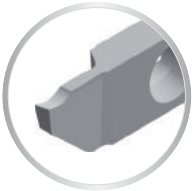


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

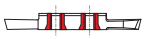
731X12 / 741X12





			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	3	0.03	-							741X12-0.5					■		■
1.0	5	0.03	731X12-1.0	■	■	■				741X12-1.0	■	■	■	■	■	□	■
1.5	7	0.03	731X12-1.5	■	■	■				741X12-1.5	■	■	■	■	■	■	■
2.0	7	0.03	731X12-2.0	■	■	■				741X12-2.0	■	■	■	■	■	□	■

7XX-XX-B

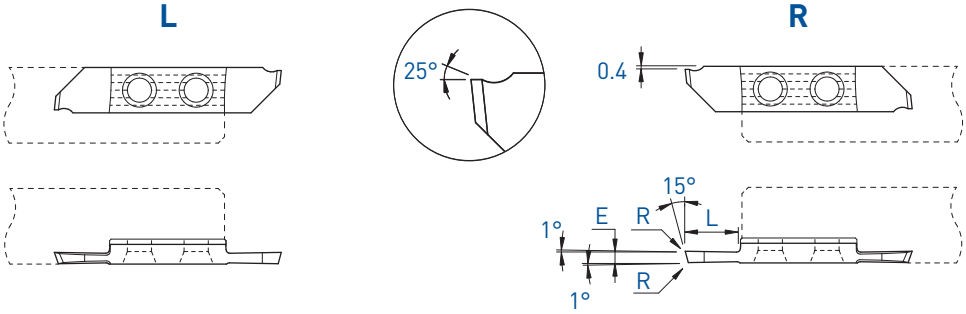


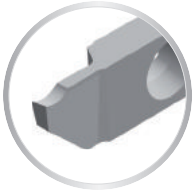
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

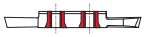
731X25 / 741X25





		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	731X25-1.0	■	■	■				741X25-1.0	■		■	■	■	□	■
1.5	7	731X25-1.5	■	■	■				741X25-1.5	■		■	■	■	□	■
2.0	7	731X25-2.0	■	■	■				741X25-2.0	■	■	■	■	■	□	■

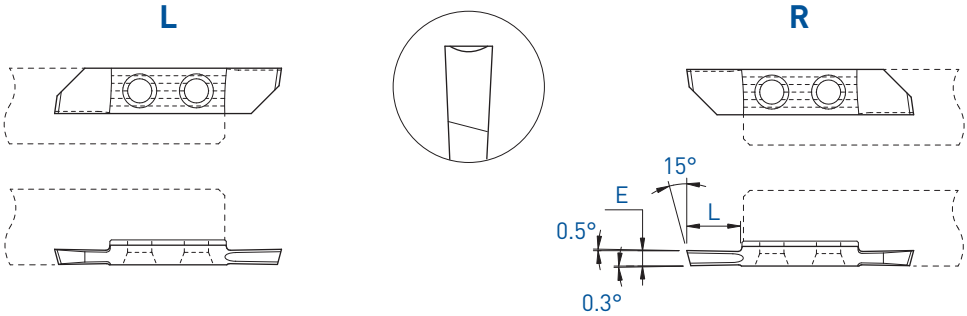
7XX-XX-B

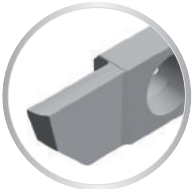


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

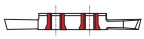
731U / 741U





		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7	**731U-1.5**	■	■	■	■	□	■	**741U-1.5**	■	■	■	■	■	■
2.0	7	**731U-2.0**	■	■	■	■	□	■	**741U-2.0**	■	■	■	■	□	■

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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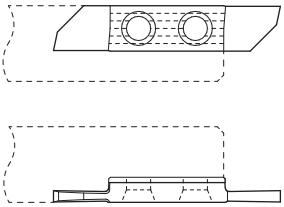
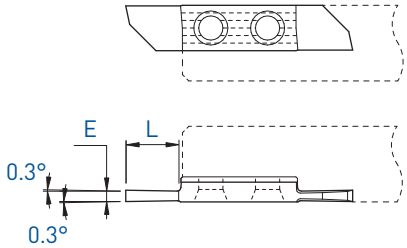
Tronçonnage
Abstechen
Parting off

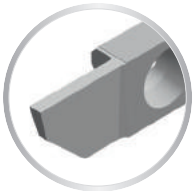
731N / 741N

L



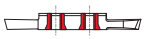
R





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**731N-1.0**	■	■	■	■	□	■	**741N-1.0**	■	■	■	■	□	■
1.5	7	**731N-1.5**	■	■	■	■	□	■	**741N-1.5**	■	■	■	■	□	■

7XX-XX-B

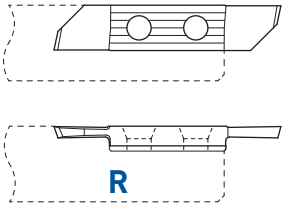


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

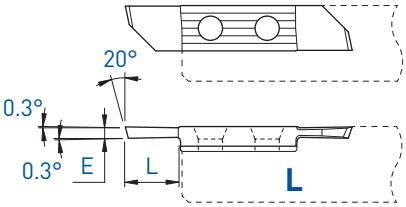
Tronçonnage | **Coupe déportée**
Abstechen | **Versetztes Schneiden**
Parting off | **Cut off line**

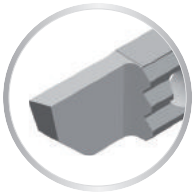
741L / 731R

Cut L

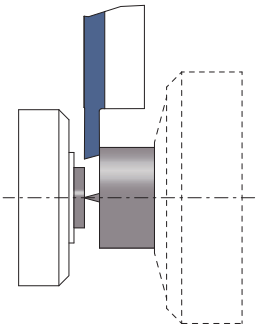


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	741L-1.0	■	■	■	■	□	■	731R-1.0	■	■	■	■	■	■
1.2	5	741L-1.2	■	■	■	■	□	■	731R-1.2	■	■	■	■	□	■
1.5	7	741L-1.5	■	■	■	■	■	■	731R-1.5	■	■	■	■	■	■
2.0	7	741L-2.0	■	■	■	■	□	■	731R-2.0	■	■	■	■	□	■
2.5	7	741L-2.5	■	■	■				731R-2.5	■	■	■			



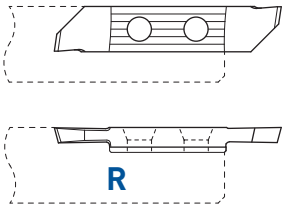
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage / Abstechen / Parting off

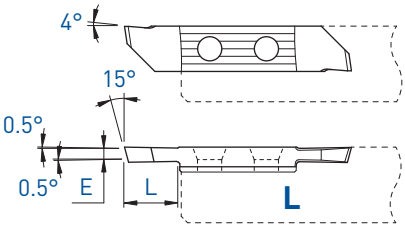
Coupe déportée / Versetztes Schneiden / Cut off line

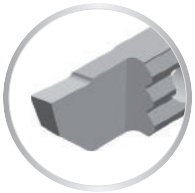
741LX4 / 731RX4

Cut L

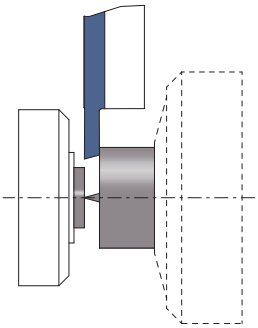


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	5	741LX4-1.5	■	■	■				731RX4-1.5	■	■	■	■	■	■

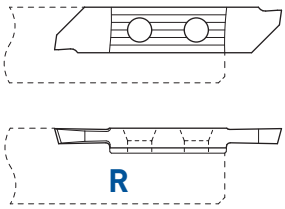


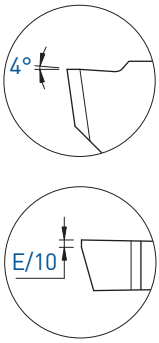
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

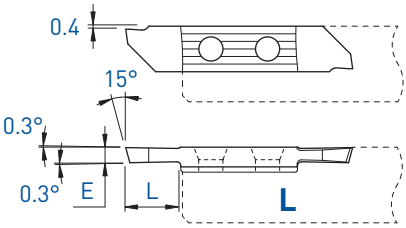
741LXF / 731RXF

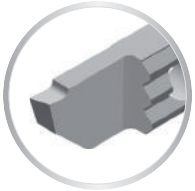
Cut L



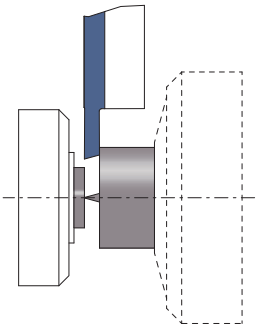


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7	**741LXF-1.5**	■	■	■				**731RXF-1.5**	■	■	■	■	■	■
2.0	7	**741LXF-2.0**	■	■	■				**731RXF-2.0**	■	■	■	■	□	■
2.5	7	**741LXF-2.5**	■	■	■				**731RXF-2.5**	■	■	■			



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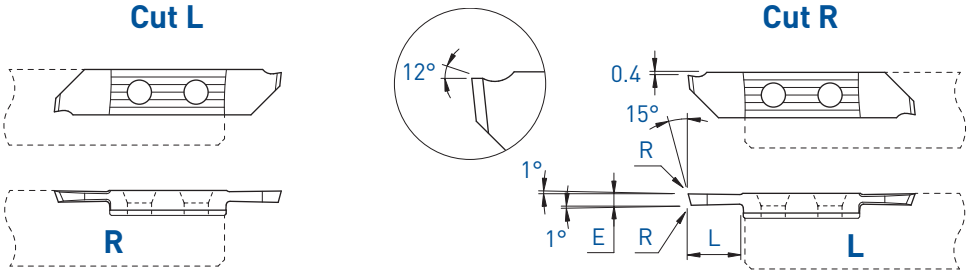
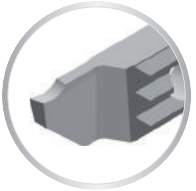
Tronçonnage / Abstechen / Parting off

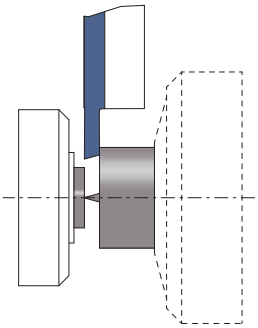
Coupe déportée / Versetztes Schneiden / Cut off line

741LX12 / 731RX12





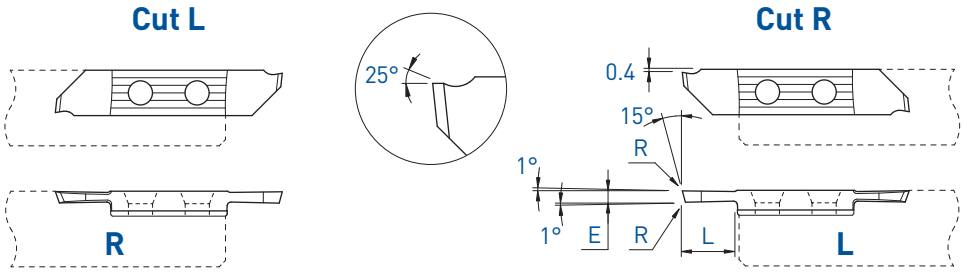
	R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line								L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	0.03	-							731RX12-1.0	■	□	■			
1.5	7	0.03	741LX12-1.5	■	■	■				731RX12-1.5	■	■	■	■	■	■



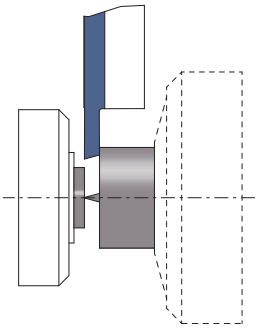
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

741LX25 / 731RX25



			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	7	0.03	**741LX25-1.5**	■	■	■	**731RX25-1.5**	■	■	■



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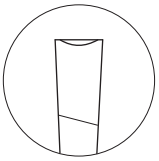
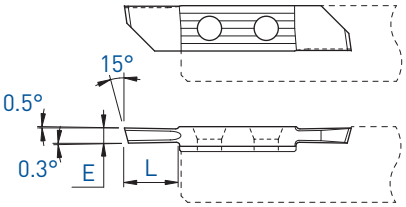
Tronçonnage / Abstechen / Parting off

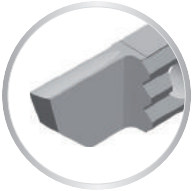
Coupe déportée / Versetztes Schneiden / Cut off line

731RU

Cut R



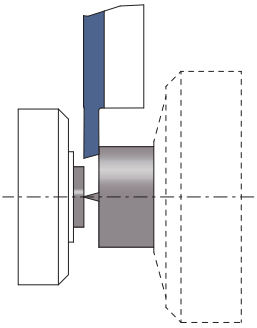




L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

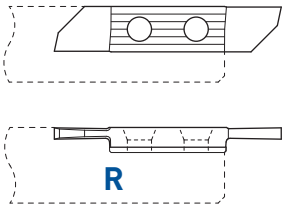
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	731RU-1.0	■	□	■			
1.2	5	731RU-1.2	■	□	■			
1.5	7	731RU-1.5	■	□	■	■	□	■
2.0	7	731RU-2.0	■	□	■			



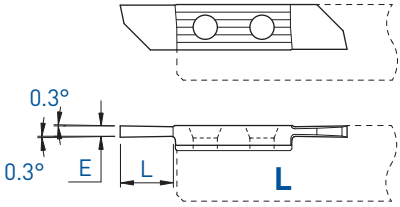
Tronçonnage | **Coupe déportée**
Abstechen | **Versetztes Schneiden**
Parting off | **Cut off line**

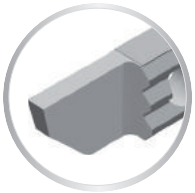
741N / 731N

Cut L

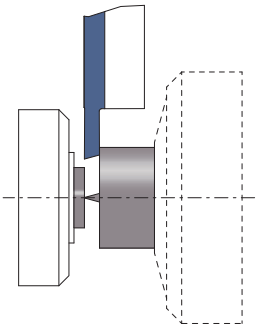


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**741N-1.0**	■	■	■	■	□	■	**731N-1.0**	■	■	■	■	□	■
1.5	7	**741N-1.5**	■	■	■	■	□	■	**731N-1.5**	■	■	■	■	□	■

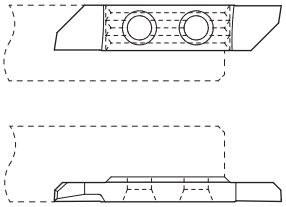


■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

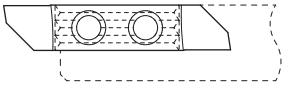
Tournage avant
Vorwärts drehen
Front turning

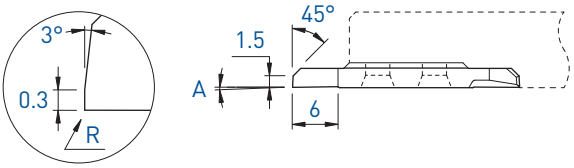
732 / 742

L



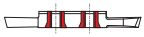
R





		L							R						
A	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	732	■	■	■	■	■	■	742	■	■	■	■	■	■	■
2°	0	732-2°	■	■	■	■	□	■	742-2°	■	■	■	■	■	■	■

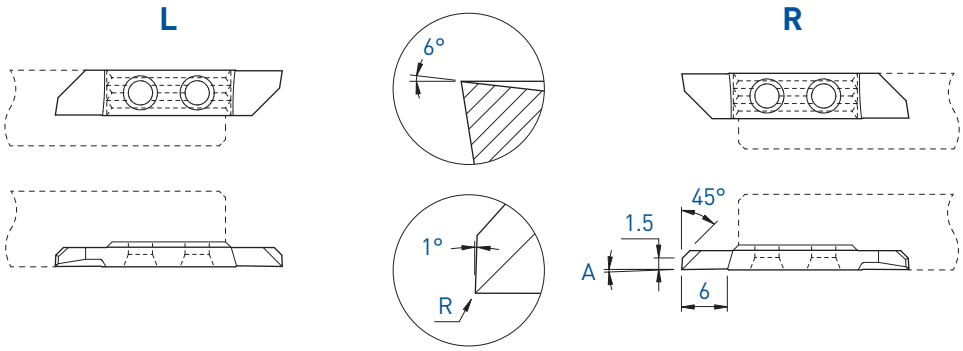
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage avant
Vorwärts drehen
Front turning

732PX / 742PX



		L				R			
A	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0°	0	732PX	■	■	■	742PX	■	■	■

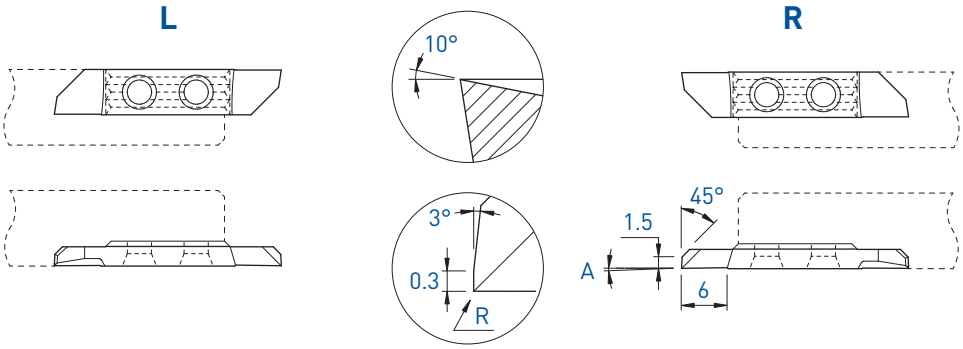
7XX-XX-B

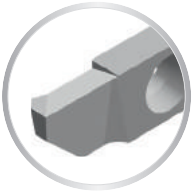
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage avant
Vorwärts drehen
Front turning

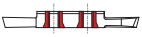
732X / 742X





		L							R						
A	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	732X	■	■	■	■	■	■	742X	■	■	■	■	■	■	■

7XX-XX-B

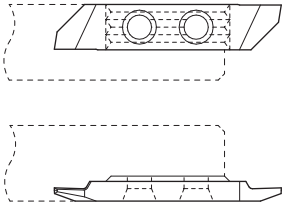


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

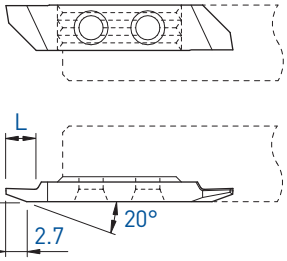
Tournage arrière
Rückwärts drehen
Back turning

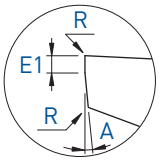
733 / 743

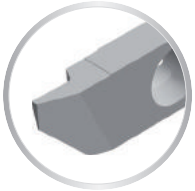
L

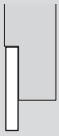


R









E	E1	A	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	0.25	3°	3	0	**733-0.5**	■	■	■	■	□	■	**743-0.5**	■	■	■	■	■	■	■
0.5	-	2°	3	0.08	**733-0.5-R08**	■	■	■	■	□	■	**743-0.5-R08**	■		■	■	■	□	■
0.8	0.30	3°	4	0	**733-0.8**	■	■	■				**743-0.8**	■	■	■	■	■	□	■
1.0	0.40	3°	4	0	**733-1.0**	■	■	■	■	□	■	**743-1.0**	■		■	■	■	□	■
1.2	0.50	3°	5	0	**733-1.2**	■	■	■	■	□	■	**743-1.2**	■		■	■	■	□	■
1.5	0.50	3°	6	0	**733-1.5**	■	■	■	■	□	■	**743-1.5**	■		■	■	■	□	■

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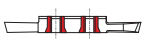
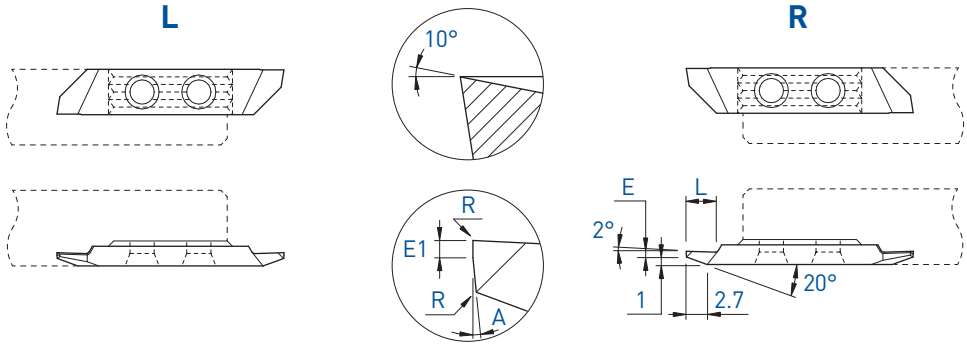


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

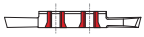
Tournage arrière
Rückwärts drehen
Back turning

733X / 743X



E	E1	A	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX new	HTiN	HN (µk10)
0.5	0.25	3°	3	0	**733X-0.5**	■	■	■	■	□	■	**743X-0.5**	■	■	■	■	■	□	□	■
0.5	-	2°	3	0.08	**733X-0.5-R08**	■	■	■				**743X-0.5-R08**	■	■	■	■	■	□	□	■
0.8	0.30	3°	4	0	**733X-0.8**	■	■	■				**743X-0.8**	■		■	■	■		□	■
1.0	0.40	3°	4	0	**733X-1.0**	■	■	■				**743X-1.0**	■		■	■	■		□	■
1.2	0.50	3°	5	0	**733X-1.2**	■	■	■				**743X-1.2**	■		■	■	■		□	■
1.5	0.50	3°	6	0	**733X-1.5**	■	■	■				**743X-1.5**	■		■	■	■		□	■

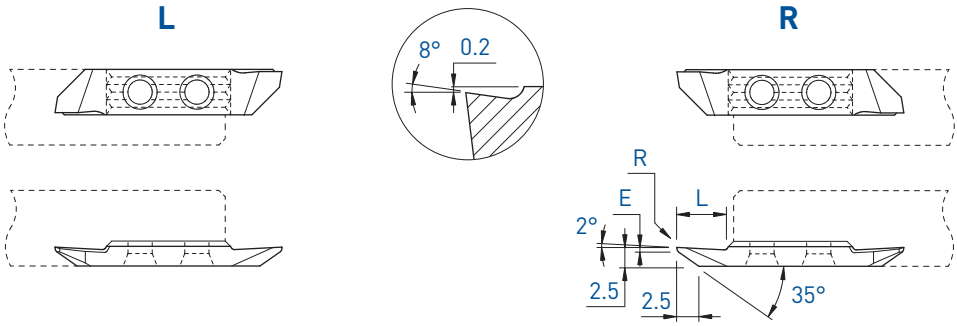
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

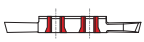
Tournage arrière
Rückwärts drehen
Back turning

733VX-8° / 743VX-8°



E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
			L							R						
1.0	6.5	0	**733VX-8°**	■	■	■	■	■	■	**743VX-8°**	■	■	■	■	■	■
1.0	6.5	0.08	**733VX-8°-R08**	■	■	■	■	□	■	**743VX-8°-R08**	■	■	■	■	□	■

7XX-XX-B

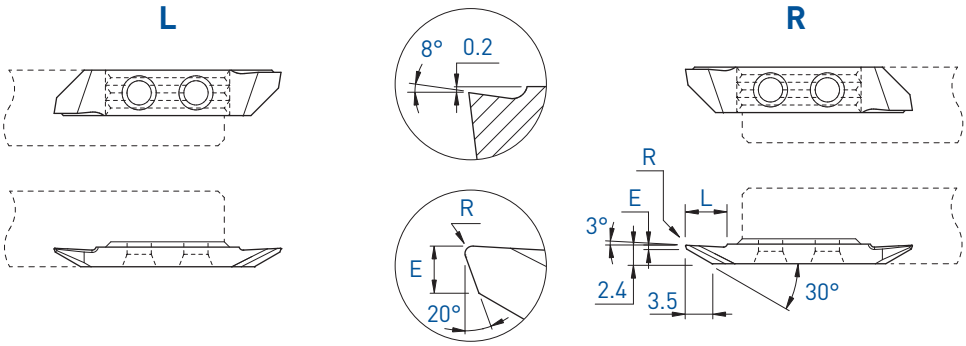


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

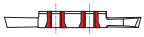
Tournage arrière
Rückwärts drehen
Back turning

733VX-805 / 743VX-805



			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	6	0.08	733VX-805-R08	■	□	■	■	□	■	743VX-805-R08	■	■	■	■	□	■

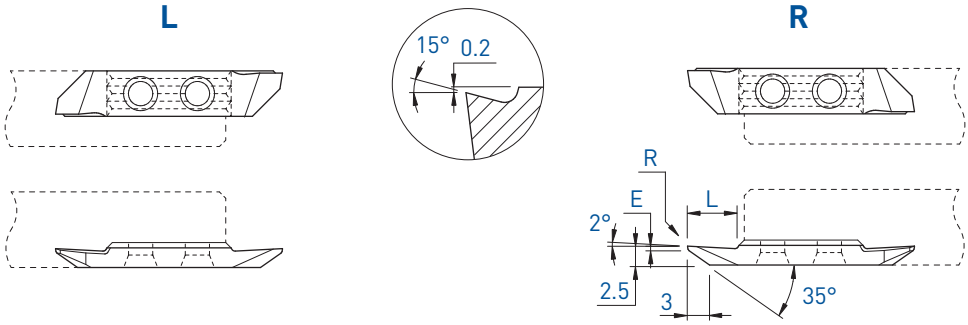
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

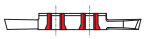
Tournage arrière
Rückwärts drehen
Back turning

733VX-15° / 743VX-15°



L									R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	6.5	0	**733VX-15°**	■	■	■	■	□	■	**743VX-15°**	■	■	■	■	□	■
0.5	6.5	0.08	**733VX-15°-R08**	■	■	■				**743VX-15°-R08**	■	■	■	■	□	■

7XX-XX-B

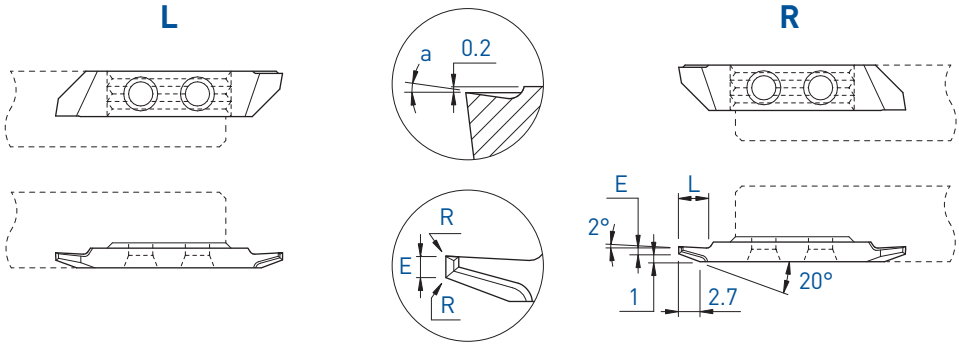


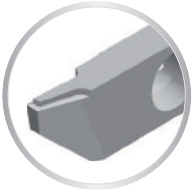
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

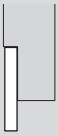
Tournage arrière
Rückwärts drehen
Back turning

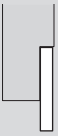
733ZX / 743ZX



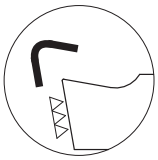


Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control





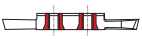
				L							R						
a	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
10°	1.0	4	0.01	**733ZX10-1.0**	■	□					**743ZX10-1.0**	■	□		■	□	
	1.0	4	0.08	**733ZX10-1.0-R08**	■	□					**743ZX10-1.0-R08**	■	□		■	□	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

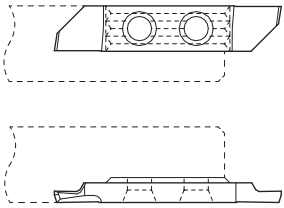


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

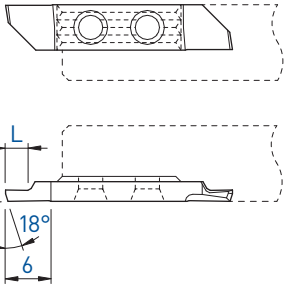
Tournage arrière / pré-coupe
Rückwärts drehen / vorstechen
Back turning / pre-parting off

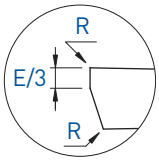
733P / 743P

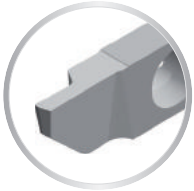
L



R

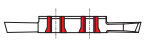






			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	2	0	**733P-0.8**	■	■	■				**743P-0.8**	■	■	■	■	□	■
1.0	2	0	**733P-1.0**	■	■	■				**743P-1.0**	■	■	■			
1.2	2.5	0	**733P-1.2**	■	■	■				**743P-1.2**	■	■	■			
1.5	3	0	**733P-1.5**	■	■	■				**743P-1.5**	■	■	■			

7XX-XX-B



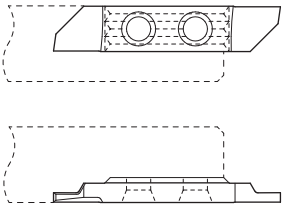
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

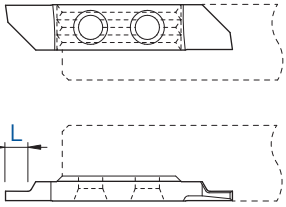
Fonçage-tournage
Einstechen und drehen
Grooving and turning

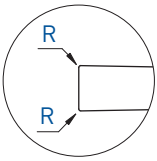
734 / 744

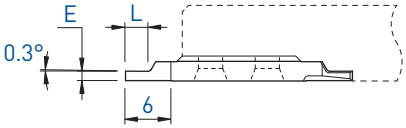
L

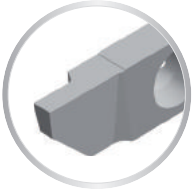


R









			L							R							
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)
0.5	1.5	0	734-0.5	■	■	■	■	□	■	744-0.5	■	■	■	■	■	■	■	■
0.6	1.8	0	734-0.6	■	■	■	■	□	■	744-0.6	■	■	■	■	■	■	□	■
0.75	2	0	734-0.75	■	■	■				744-0.75	■	■	■	■	■	■	■	■
0.8	2	0	734-0.8	■	■	■	■	□	■	744-0.8	■	■	■	■	■	■	□	■
0.8	2	0.08	-							744-0.8-R08	■	■	■	■	■	■	□	■
0.9	2.5	0	-							744-0.9	■	■	■	■	■	■	□	■
0.95	3	0	734-0.95	■	■	■				744-0.95	■	■	■	■	■	■	□	■
1.0	2.5	0	734-1.0	■	■	■	■	■	■	744-1.0	■	■	■	■	■	■	■	■
1.0	2.5	0.08	734-1.0-R08	■	■	■	■	■	■	744-1.0-R08	■	■	■	■	■	■	□	■
1.2	3	0	734-1.2	■	■	■	■	□	■	744-1.2	■	■	■	■	■	■	■	■
1.5	3	0	734-1.5	■	■	■	■	■	■	744-1.5	■	■	■	■	■	■	■	■
1.5	3	0.08	734-1.5-R08	■	■	■	■	□	■	744-1.5-R08	■	■	■	■	■	■	□	■
1.5	3	0.15	-							744-1.5-R15	■	■	□	■	■	■	□	■
1.5	3	0.20	-							744-1.5-R20	■	■	■	■	■	■	□	■
1.8	4	0	734-1.8	■	■	■	■	□	■	744-1.8	■	■	■	■	■	■	□	■
2.0	4	0	734-2.0	■	■	■	■	□	■	744-2.0	■	■	■	■	■	■	□	■
2.0	4	0.08	734-2.0-R08	■	■	■	■	□	■	744-2.0-R08	■	■	■	■	■	■	□	■
2.0	4	0.15	-							744-2.0-R15	■	■	□	■	■	■	□	■
2.0	4	0.20	-							744-2.0-R20	■	■	■	■	■	■	□	■
2.5	6	0	734-2.5	■	■	■				744-2.5	■	■	■	■	■	■	□	■

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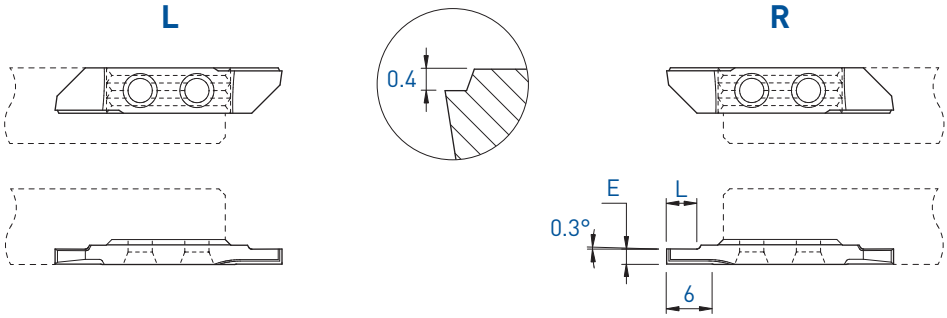
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

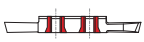
Fonçage-tournage
Einstechen und drehen
Grooving and turning

734VS / 744VS



		L 							R 					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	2	734VS-1.0	■	■	■	■	□	■	744VS-1.0	■	■	■	■	□	■
1.2	2.5	734VS-1.2	■	■	■	■	□	■	744VS-1.2	■	■	■	■	□	■
1.5	3	734VS-1.5	■	■	■	■	□	■	744VS-1.5	■	■	■	■	□	■
1.8	4	734VS-1.8	■	■	■				744VS-1.8	■	■	■			
2.0	4	734VS-2.0	■	■	■				744VS-2.0	■	■	■	■	□	■
2.5	6	734VS-2.5	■	■	■				744VS-2.5	■	■	■			

7XX-XX-B

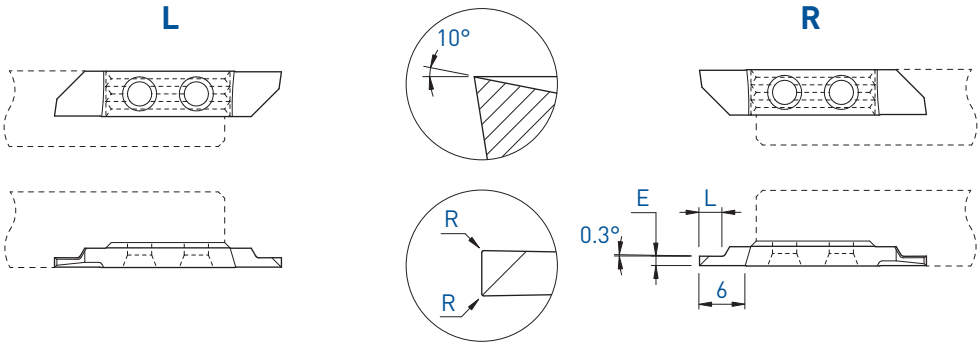


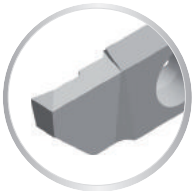
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Fonçage-tournage
Einstechen und drehen
Grooving and turning

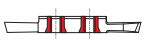
734X / 744X





			L						R								
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)
0.8	2	0	734X-0.8	■	■	■	■	□	■	744X-0.8	■	■		■	■	■	■	■	■
1.0	2.5	0	734X-1.0	■	■	■	■	□	■	744X-1.0	■	■		■	■	■	■	■	■
1.0	2.5	0.08	734X-1.0-R08	■	■	■	■	□	■	744X-1.0-R08	■	■	■	■	■	■	■	□	■
1.2	3	0	734X-1.2	■	■	■	■	□	■	744X-1.2	■	■		■	■	■	■	□	■
1.5	3	0	734X-1.5	■	■	■	■	■	■	744X-1.5	■	■		■	■	■	■	■	■
1.5	3	0.08	734X-1.5-R08	■	■	■	■	□	■	744X-1.5-R08	■	■	■	■	■	■	■	□	■
1.5	3	0.15	-							744X-1.5-R15	■	■	■	□	■	■	■	□	■
1.5	3	0.20	-							744X-1.5-R20	■	■	■	■	■	■	■	□	■
1.8	4	0	734X-1.8	■	■	■				744X-1.8	■	■		■	■	■	■	□	■
2.0	4	0	734X-2.0	■	■	■	■	□	■	744X-2.0	■	■		■	■	■	■	■	■
2.0	4	0.08	734X-2.0-R08	■	■	■	■	□	■	744X-2.0-R08	■	■	■	■	■	■	■	■	■
2.0	4	0.15	-							744X-2.0-R15	■	■	■	□	■	■	■	□	■
2.0	4	0.20	734X-2.0-R20	■	■	■	■	□	■	744X-2.0-R20	■	■	■	■	■	■	■	□	■
2.5	6	0	734X-2.5	■	■	■	■	□	■	744X-2.5	■	■		■	■	■	■	□	■

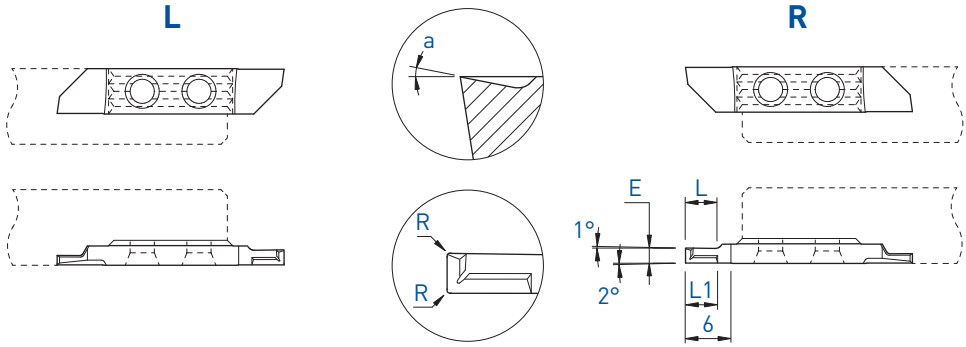
7XX-XX-B

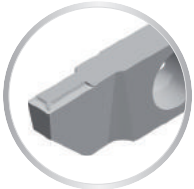


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage
Einstechen und drehen
Grooving and turning

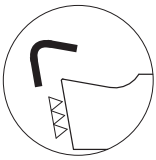
734ZX / 744ZX





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

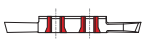
					L								R							
a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HAS	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HAS	HTiN	HN (µk10)
10°	1.0	2.5	3	0.01	**734ZX10-1.0**	■	■						**744ZX10-1.0**	■	■	■		■		□	
	1.5	4	4	0.01	**734ZX10-1.5**	■	■						**744ZX10-1.5**	■	■	□		■		■	
	1.5	4	4	0.08	**734ZX10-1.5-R08**	■	■						**744ZX10-1.5-R08**	■	■	■		■			
	2.0	4	4	0.01	**734ZX10-2.0**	■	■						**744ZX10-2.0**	■	■	□		■		□	
	2.0	4	4	0.08	**734ZX10-2.0-R08**	■	■						**744ZX10-2.0-R08**	■	■	□		■			
	2.5	6	4	0.01	**734ZX10-2.5**	■	■						**744ZX10-2.5**	■	■	□		■		□	
	2.5	6	4	0.08	-								**744ZX10-2.5-R08**	■	■	□		■			
17°	1.0	2.5	3	0.01	-								**744ZX17-1.0**					■	■		



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

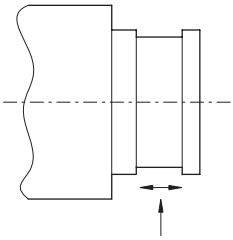


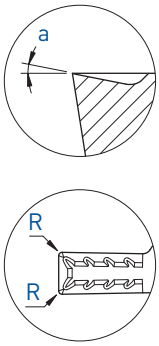
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

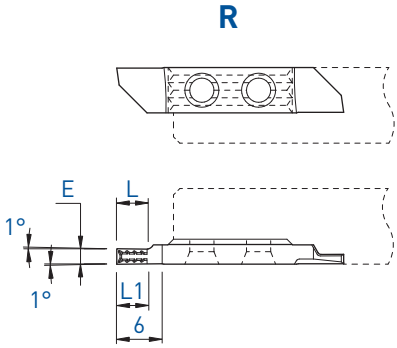
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

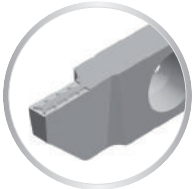
Fonçage-tournage
Einstechen und drehen
Grooving and turning

744ZXT

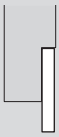






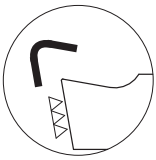


Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



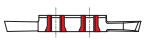
R

a	E	L	L1	R	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
10°	1.0	2.5	2.5	0.01	**744ZXT10-1.0**	■	■	■	■		■	□	
	1.5	4	4	0.01	**744ZXT10-1.5**	■	■	■	□		■	□	
	1.5	4	4	0.08	**744ZXT10-1.5-R08**	■	■	■	■		■	□	
	2.0	4	4	0.01	**744ZXT10-2.0**	■	■	■	□		■	□	
	2.0	4	4	0.08	**744ZXT10-2.0-R08**	■	■	■	□		■	□	
	2.5	5	5	0.01	**744ZXT10-2.5**	■	■	■	□		■	□	
	2.5	5	5	0.08	**744ZXT10-2.5-R08**	■	■	■	□		■	□	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

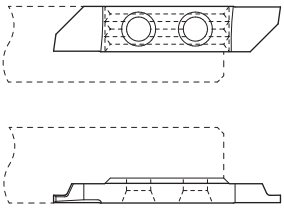


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

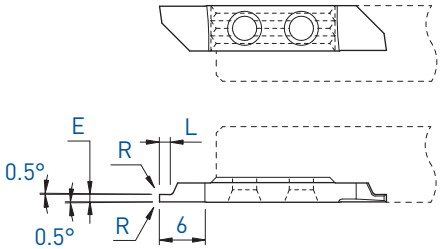
Gorges
Einstechen
Grooving

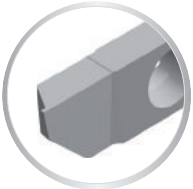
735 / 745

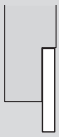
L



R





			L 							R 					
E ± 0.01	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.2	0.2	0	735-0202	■	■	■				745-0202	■	■	■	■	□	■
0.3	0.3	0	735-0303	■	■	■				745-0303	■	■	■	■	□	■
0.4	0.4	0	735-0404	■	■	■				745-0404	■	□	■	■	□	■

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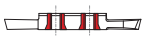
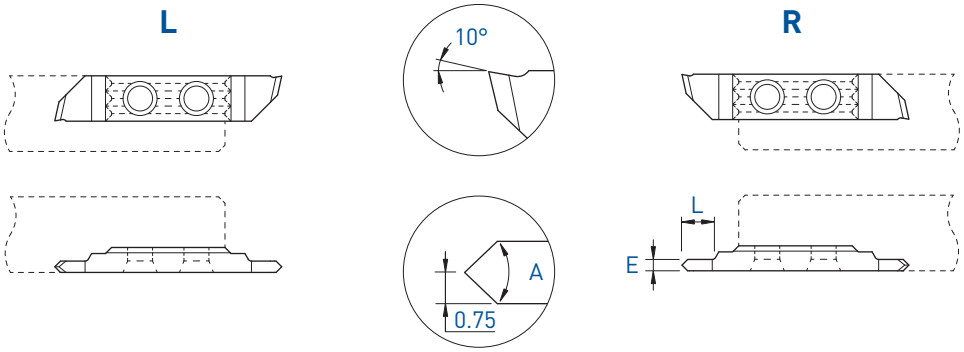


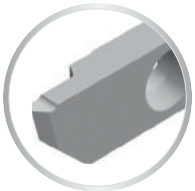
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Gorges
Einstechen
Grooving

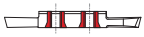
735X-90 / 745X-90





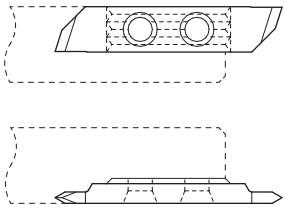
			L				R			
A	E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
90°	1.5	4	**735X-90-1.5**	□	□	□	**745X-90-1.5**	■	□	■

7XX-XX-B

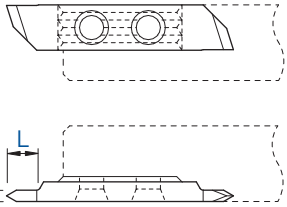


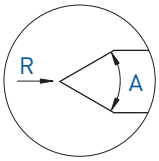
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

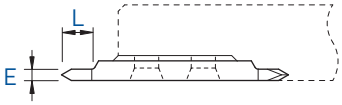
L



R



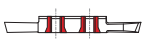




Profil partiel
Teilprofil
Partial profile

				L							R						
A	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
60°	1.5	4	0	**736-60-1.5**	■	■	■				**746-60-1.5**	■	■	■			
60°	1.5	4	0.02	**736-60-1.5-R02**	■	■	■	■	■	■	**746-60-1.5-R02**	■	■	■	■	□	■
60°	2.0	6	0	**736-60-2.0**	■	■	■				**746-60-2.0**	■	■	■			
60°	2.0	6	0.02	**736-60-2.0-R02**	■	■	■	■	■	■	**746-60-2.0-R02**	■	■	■	■	■	■
55°	1.5	4	0	**736-55-1.5**	■	■	■				**746-55-1.5**	■	■	■			
55°	1.5	4	0.02	**736-55-1.5-R02**	■	■	■				**746-55-1.5-R02**	■	■	■			
55°	2.0	6	0	**736-55-2.0**	■	■	■				**746-55-2.0**	■	■	■			
55°	2.0	6	0.02	**736-55-2.0-R02**	■	■	■				**746-55-2.0-R02**	■	■	■			

7XX-XX-B

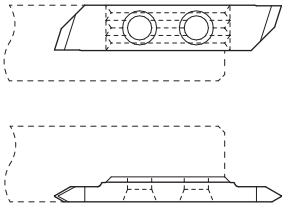


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

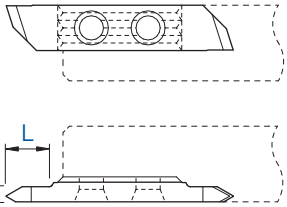
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

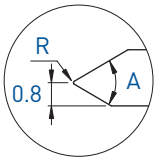
736-A60° / 746-A60°

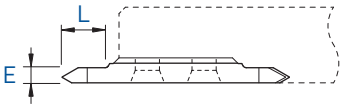
L



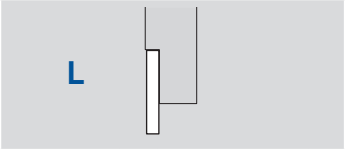
R

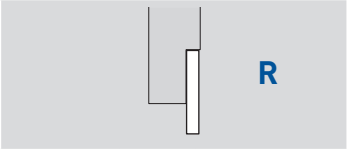






Profil partiel
Teilprofil
Partial profile

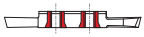




A	E	L	R	Pas Steigung Pitch P	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
60°	2.0	6	0.06	0.50-1.50	**736-A60°**	■	■	■				**746-A60°**	■	■	■	■	□	■

Plaquettes de filetage avec coupe positive 2°, voir page 1.126
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.126
Threading inserts with positive cut 2°, see page 1.126

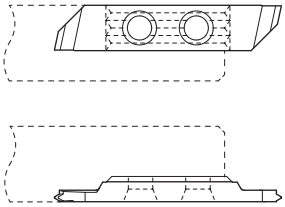
7XX-XX-B



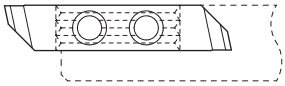
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

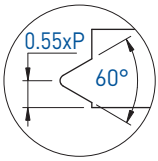
736-M / 746-M

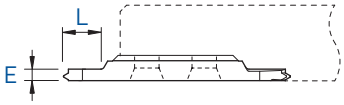
L

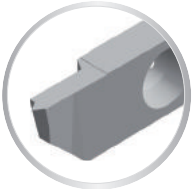


R

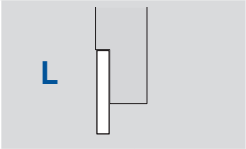


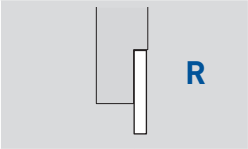






Profil complet métrique
Metrisches Vollprofil
Metric full profile





Pas Steigung Pitch P	E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0.25	1.0	3	**736-M-0.25**	■	■	■	**746-M-0.25**	■	■	■
0.30	1.0	3	**736-M-0.30**	■	■	■	**746-M-0.30**	■	■	■
0.35	1.0	3	**736-M-0.35**	■	■	■	**746-M-0.35**	■	■	■
0.40	1.0	3	**736-M-0.40**	■	■	■	**746-M-0.40**	■	■	■
0.45	1.0	3	**736-M-0.45**	■	■	■	**746-M-0.45**	■	■	■
0.50	1.0	3	**736-M-0.50**	■	■	■	**746-M-0.50**	■	■	■
0.60	1.0	3	**736-M-0.60**	■	■	■	**746-M-0.60**	■	■	■
0.70	1.0	3	**736-M-0.70**	■	■	■	**746-M-0.70**	■	■	■
0.75	1.0	3	**736-M-0.75**	■	■	■	**746-M-0.75**	■	■	■
0.80	1.5	4.5	**736-M-0.80**	■	■	■	**746-M-0.80**	■	■	■
1.00	1.5	4.5	**736-M-1.00**	■	■	■	**746-M-1.00**	■	■	■
1.25	1.5	4.5	**736-M-1.25**	■	■	■	**746-M-1.25**	■	■	■
1.50	2.0	6	**736-M-1.50**	■	■	■	**746-M-1.50**	■	■	■
1.75	2.0	6	**736-M-1.75**	■	■	■	**746-M-1.75**	■	■	■

Plaquettes de filetage avec coupe positive 2°, voir page 1.127
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.127
Threading inserts with positive cut 2°, see page 1.127

7XX-XX-B

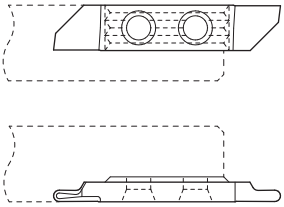
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

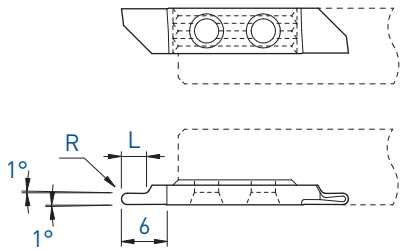
Plaquettes à rayon
Radius Wendeplatten
Radius inserts

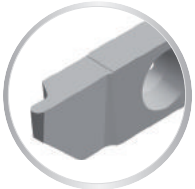
737 / 747

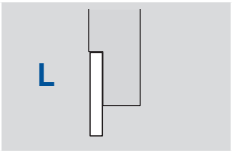
L

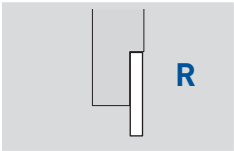


R



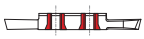






R	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0.25	1.5	-				**747-R0.25**	■	■	■
0.40	2	-				**747-R0.4**	■	■	■
0.50	2.5	**737-R0.5**	■	■	■	**747-R0.5**	■	■	■
0.60	2.5	**737-R0.6**	■	■	■	**747-R0.6**	■	■	■
0.75	3	**737-R0.75**	■	■	■	**747-R0.75**	■	■	■
0.80	3	**737-R0.8**	■	■	■	**747-R0.8**	■	■	■
1.00	4	**737-R1.0**	■	■	■	**747-R1.0**	■	■	■

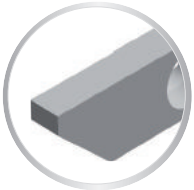
7XX-XX-B

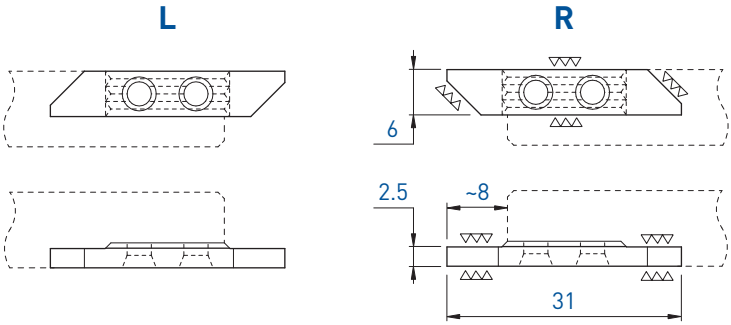


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

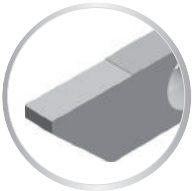
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

731-E / 741-E
731-EP / 741-EP

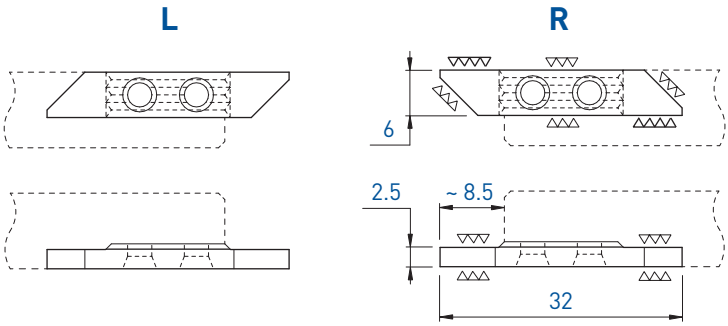




Art. N°	N (µk20)	HN (µk10)	Art. N°	N (µk20)	HN (µk10)
731-E	■	■	741-E	■	■

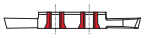


Face de coupe polie
Polierte Schneidfläche
Polished cutting face



Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
731-EP	■	■	■	■	■	■	741-EP	■	■	■	■	□	■

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Index

L

R

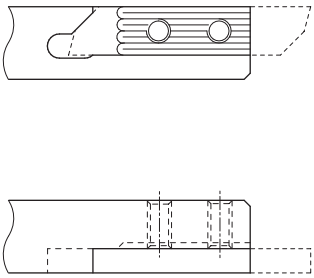
Index

750 / 760

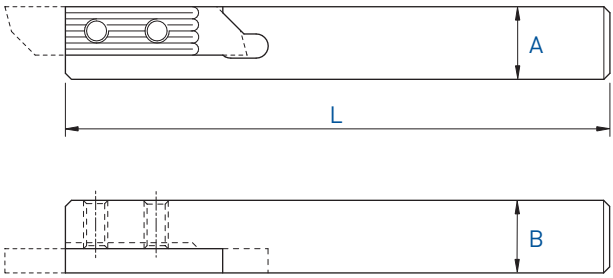
Porte-outils
Halter
Holders

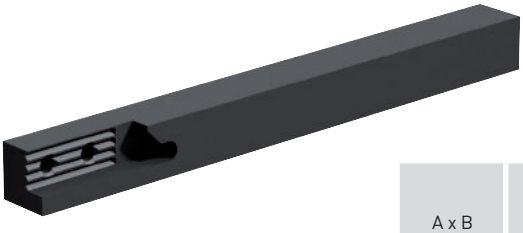
750 / 760

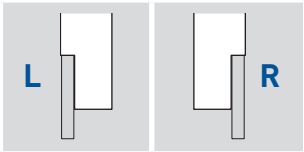
L



R

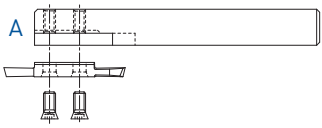




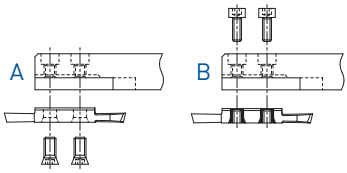


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
10 x 10	115	A	**750-10**	**760-10**
10 x 10	115	A + B	**750-10-AB**	**760-10-AB**
10 x 10	50	A	**750-10-50**	**760-10-50**
12 x 12	130	A	**750-12**	**760-12**
12 x 12	130	A + B	**750-12-AB**	**760-12-AB**
12 x 12	90	A	**750-12-90**	**760-12-90**
12 x 12	90	A + B	**750-12-90-AB**	**760-12-90-AB**
12.7 x 12.7	130	A + B	**750-12.7**	**760-12.7**
14 x 14	130	A + B	**750-14**	**760-14**
16 x 16	130	A + B	**750-16**	**760-16**
16 x 16	75	A + B	**750-16-75**	**760-16-75**
20 x 20	120	A + B	**750-20**	**760-20**
25 x 25	140	A	**760/750-25**	

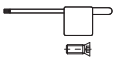
Serrage standard A
Standard Spannsystem A
Standard clamping system A



Serrage A + B
Spannsystem A + B
Clamping system A + B



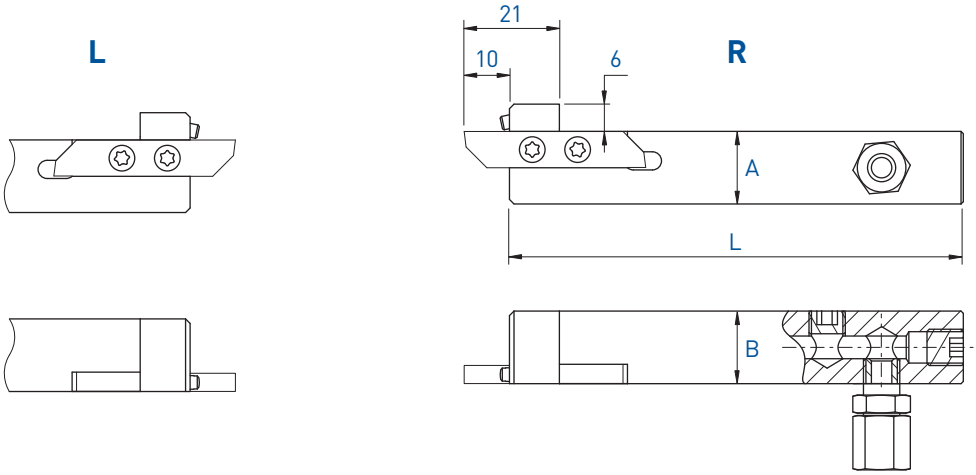
760/750-25
R + L

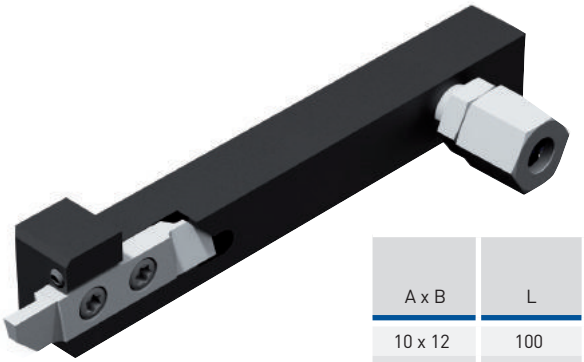


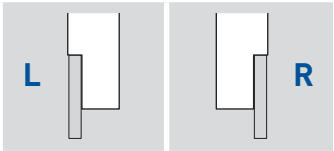
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

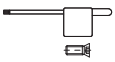
750-JET / 760-JET



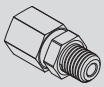




A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
10 x 12	100	A + B	**750-1012-JET**	**760-1012-JET**
10 x 12	80	A + B	**-**	**760-1012-80-JET** new
12 x 12	100	A + B	**750-12-JET**	**760-12-JET**
12.7 x 12.7	100	A + B	**750-12.7-JET**	**760-12.7-JET**
16 x 16	100	A + B	**750-16-JET**	**760-16-JET**
20 x 20	100	A + B	**750-20-JET**	**760-20-JET**



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	**Art. N°**	**Art. N°**
750-JET / 760-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

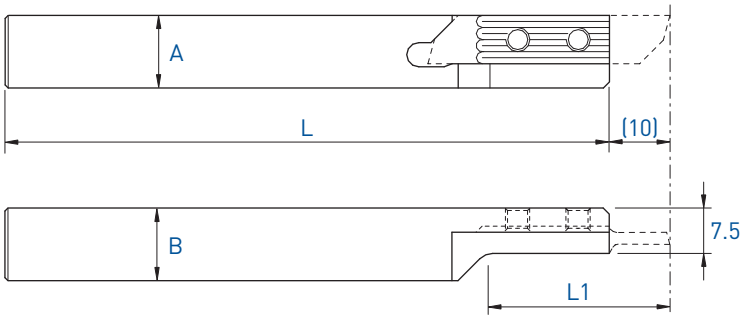
Porte-outils / Halter / Holders

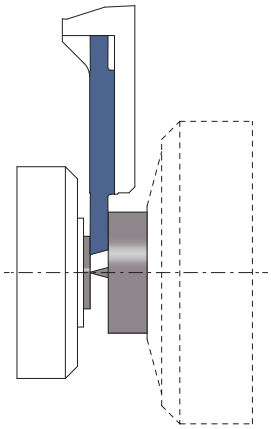
Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line

750RC

Utiliser des plaquettes type 751R
WSP Typ 751R verwenden
Use inserts type 751R

Voir pages 1.88 - 1.99
Siehe Seiten 1.88 - 1.99
See pages 1.88 - 1.99

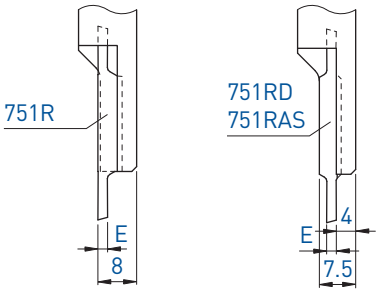




L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

A x B	L	L1	Art. N°
12 x 12	130	30	**750RC-12**
16 x 16	130	40	**750RC-16**



(p. 1.98 - 1.99)

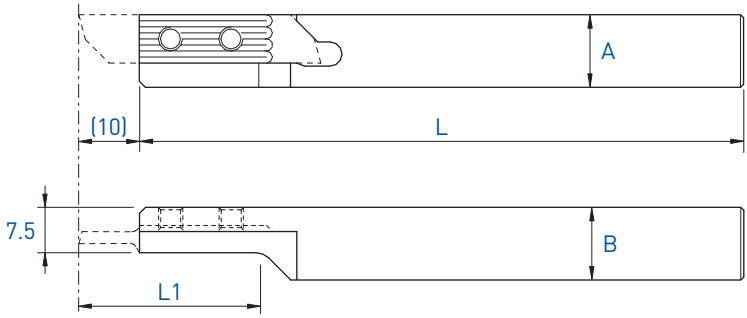
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

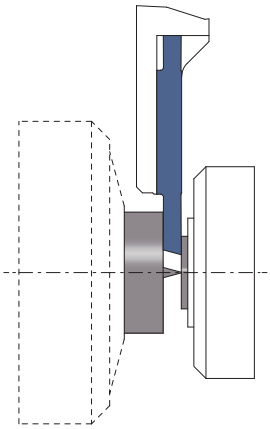
Porte-outils | **Coupe à gauche déportée**
Halter | **Versetztes Linksschneiden**
Holders | **Left cut off line**

760LC

Utiliser des plaquettes type 761L
WSP Typ 761L verwenden
Use insets type 761L

Voir pages 1.88 - 1.94 + 1.98
Siehe Seiten 1.88 - 1.94 + 1.98
See pages 1.88 - 1.94 + 1.98

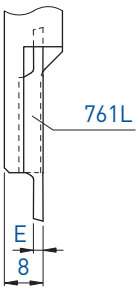


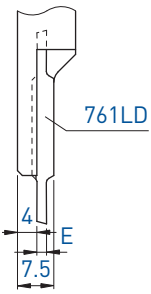


R (L)

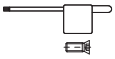
Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

A x B	L	L1	Art. N°
16 x 16	130	40	**760LC-16**





(p. 1.98)

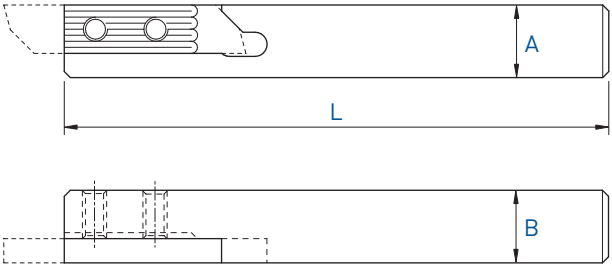


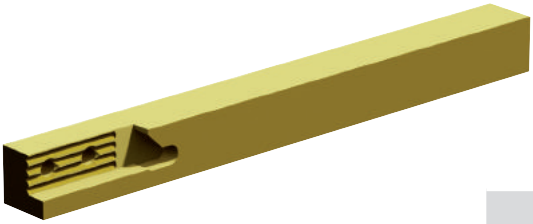
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

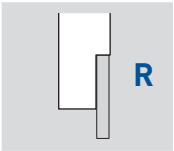
Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

760-NOVIBRA

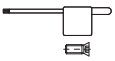
R







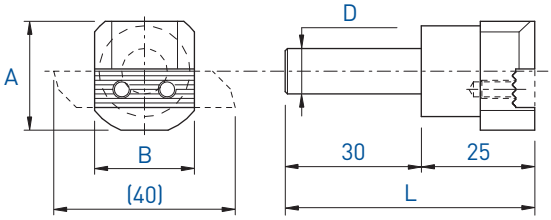
A x B	L	Serrage Spannsystem Clamping	Art. N°
10 x 10	115	A	**760-10-NOVIBRA**
12 x 12	130	A	**760-12-NOVIBRA**

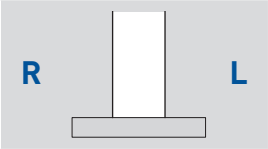


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

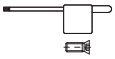
Porte-outils
Halter
Holders

760 / 750-D10





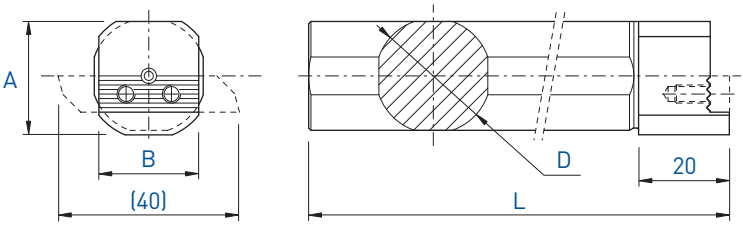
A x B	L	D	Art. N°
24 x 22	55	10	**760/750-D10**

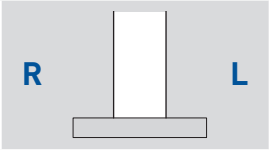


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

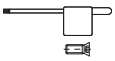
Porte-outils
Halter
Holders

760 / 750-D





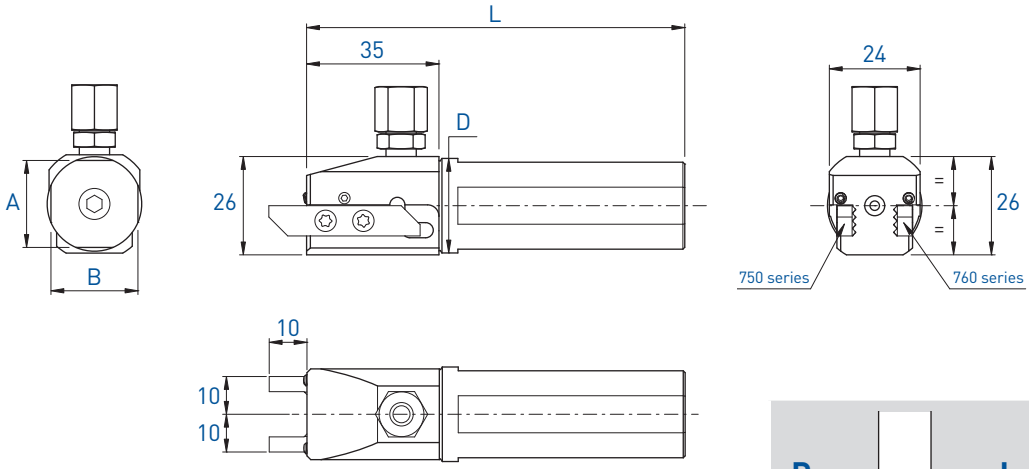
A x B	L	D	Art. N°
25 x 22	160	16	**760/750-D16**
25 x 22	160	19.05	**760/750-D19.05**
25 x 22	110	19.05	**760/750-D19.05-S**
25 x 22	160	20	**760/750-D20**
25 x 22	110	22	**760/750-D22**
25 x 22	200	25	**760/750-D25**
25 x 22	200	25.4	**760/750-D25.4**
25 x 22	125	25.4	**760/750-D25.4-S**

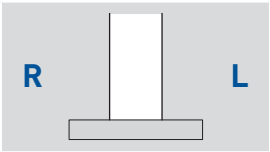


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

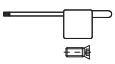
Porte-outils
Halter
Holders

760 / 750-AX

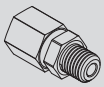




A x B	L	D	Art. N°
23 x 23	100	25	**760/750-AX-D25-JET**
23 x 23	100	25.4	**760/750-AX-D25.4-JET**



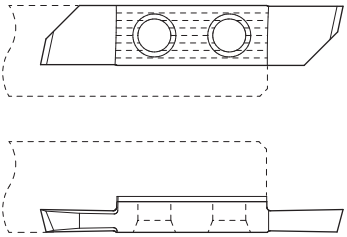
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	**Art. N°**	**Art. N°**
760/750-AX	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

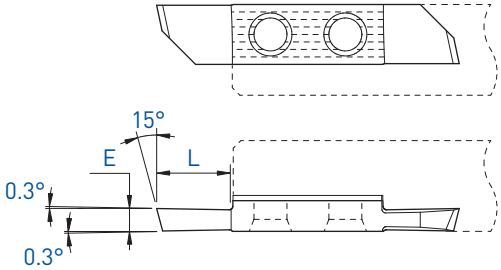
Tronçonnage
Abstechen
Parting off

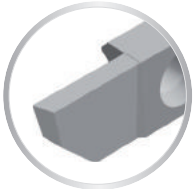
751 / 761

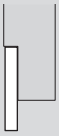
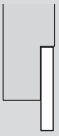
L



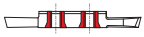
R





		L 							R 						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	**751-1.0**	■	■	■	■	□	■	**761-1.0**	■	■	■	■	■	■	■
1.2	5	**751-1.2**	■	■	■				**761-1.2**	■	■	■	■	■	□	■
1.5	7.5	**751-1.5**	■	■	■	■	□	■	**761-1.5**	■	■	■	■	■	■	■
1.8	7.5	**751-1.8**	■	■	■				**761-1.8**	■	■	■	■	■	□	■
2.0	10	**751-2.0**	■	■	■	■	□	■	**761-2.0**	■	■	■	■	■	■	■
2.2	10	**751-2.2**	■	■	■				**761-2.2**	■	■	■	■	■	□	■
2.5	10	**751-2.5**	■	■	■	■	□	■	**761-2.5**	■	■	■	■	■	■	■
3.0	10	**751-3.0**	■	■	■				**761-3.0**	■	■	■	■	■	□	■

7XX-XX-B

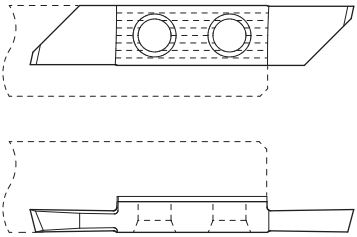


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

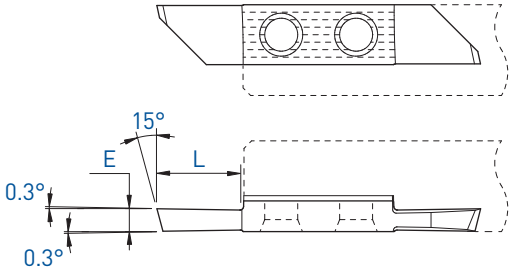
Tronçonnage
Abstechen
Parting off

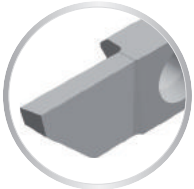
751S / 761S

L



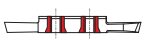
R





		L							R							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
2.0	11.5	**751S-2.0**	■	■	■	■	□	■	**761S-2.0**	■	■	■	■	■	□	■
2.2	11.5	**751S-2.2**	■	■	■				**761S-2.2**	■	■	■	■	■	□	■
2.5	11.5	**751S-2.5**	■	■	■	■	□	■	**761S-2.5**	■	■	■	■	■	□	■
3.0	11.5	**751S-3.0**	■	■	■				**761S-3.0**	■	■	■	■	■	□	■

7XX-XX-B



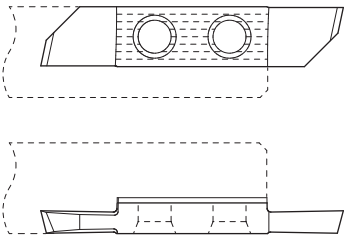
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

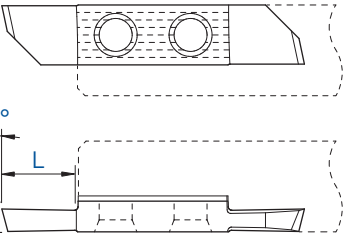
Tronçonnage
Abstechen
Parting off

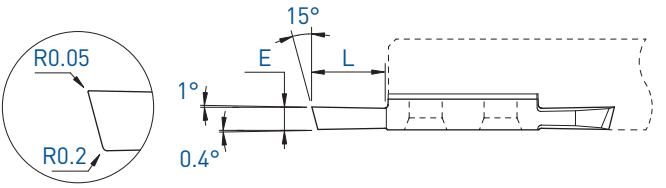
751-R05 / 761-R05

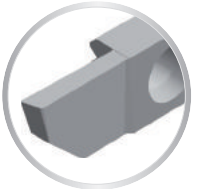
L



R







		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	**751-1.5-R05**	■	■	■				**761-1.5-R05**	■	■	■	■	■	□	■
2.0	10	**751-2.0-R05**	■	■	■				**761-2.0-R05**	■	■	■	■	■	□	■
2.5	10	**751-2.5-R05**	■	■	■				**761-2.5-R05**	■	■	■	■			

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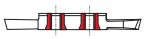
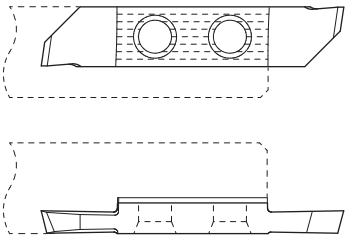


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

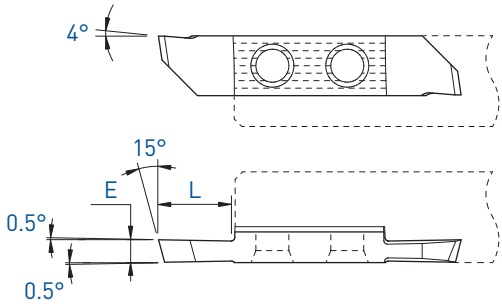
Tronçonnage
Abstechen
Parting off

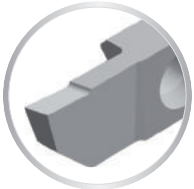
751X4 / 761X4

L



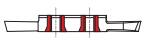
R





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							761X4-1.5	■	■	■			
2.0	10	751X4-2.0	■	■	■	■	□	■	761X4-2.0	■	■	■	■	□	■
2.5	10	-							761X4-2.5	■	■	■			

7XX-XX-B

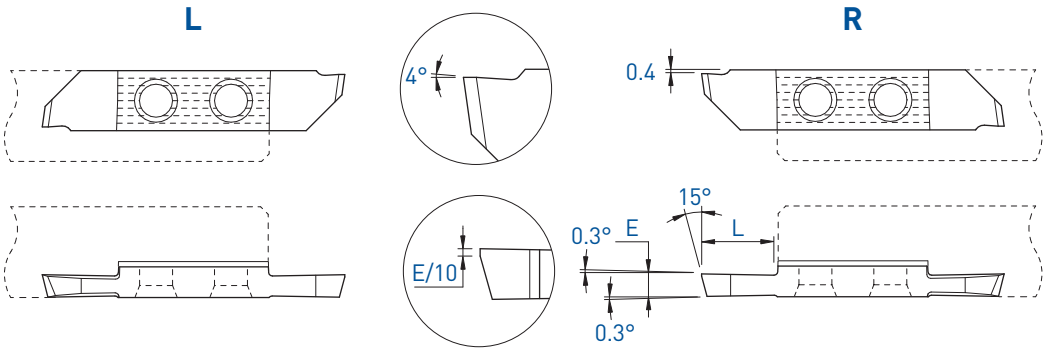


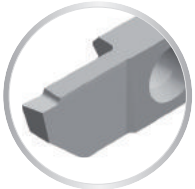
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

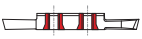
751XF / 761XF





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	**751XF-1.5**	■	■	■	■	□	■	**761XF-1.5**	■	■	■	■	□	■
2.0	10	**751XF-2.0**	■	■	■	■	■	■	**761XF-2.0**	■	■	■	■	■	■
2.2	10	**751XF-2.2**	■	■	■				**761XF-2.2**	■	■	■			
2.5	10	**751XF-2.5**	■	■	■	■	□	■	**761XF-2.5**	■	■	■			
3.0	10	**751XF-3.0**	■	■	■				**761XF-3.0**	■	■	■	■	□	■

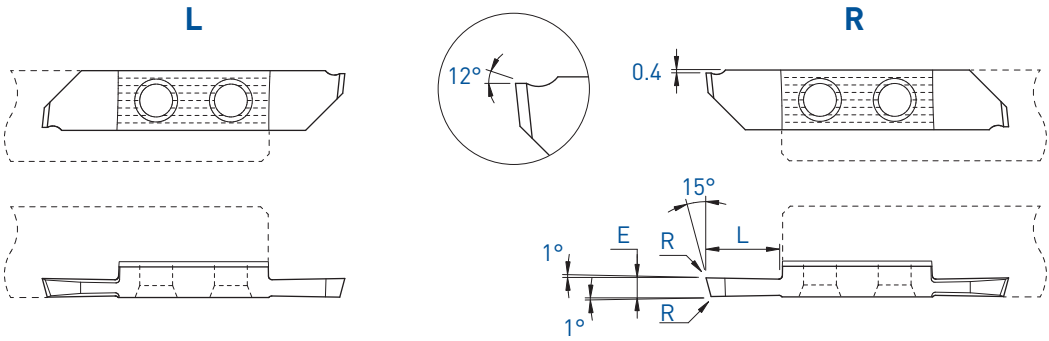
7XX-XX-B

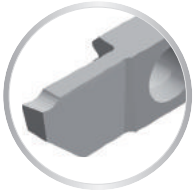


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

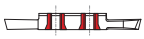
751X12 / 761X12





			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	0.03	**751X12-1.5**	■	■	■	■	□	■	**761X12-1.5**	■	■	■	■	□	■
2.0	10	0.03	**751X12-2.0**	■	■	■	■	□	■	**761X12-2.0**	■	■	■	■	□	■
2.5	10	0.03	**751X12-2.5**	■	■	■				**761X12-2.5**	■	■	■	■	□	■

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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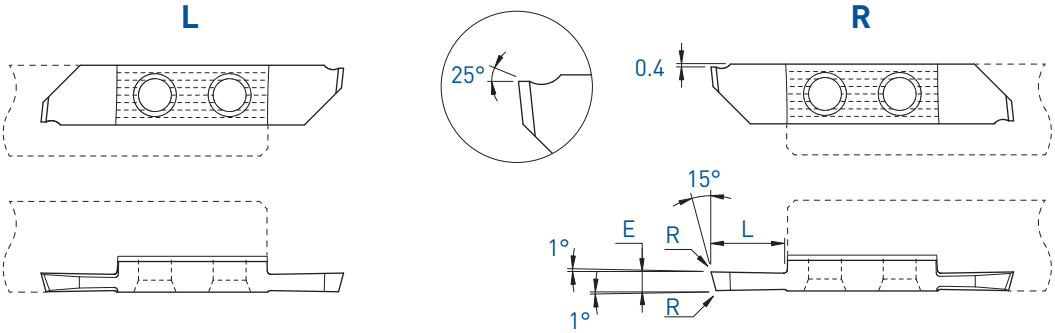
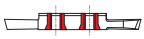
Tronçonnage
Abstechen
Parting off

751X25 / 761X25



			L							R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	0.03	**751X25-1.5**	■	■	■	■	□	■	**761X25-1.5**	■	■	■			
2.0	10	0.03	**751X25-2.0**	■	■	■				**761X25-2.0**	■	■	■	■	□	■
2.5	10	0.03	**751X25-2.5**	■	■	■				**761X25-2.5**	■	■	■	■	□	■

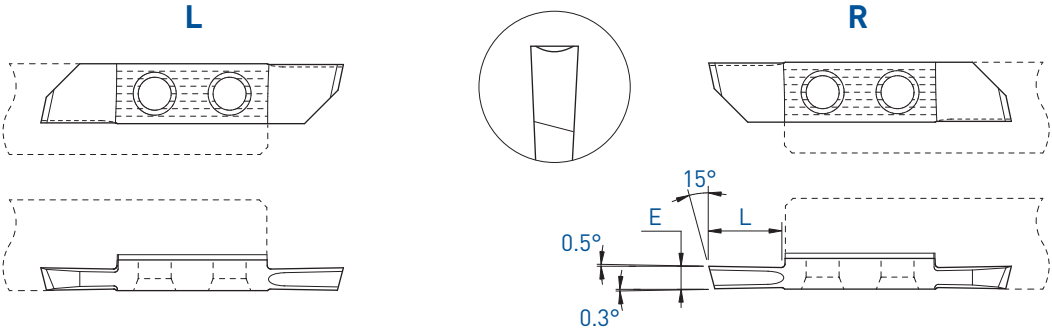
7XX-XX-B

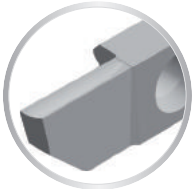


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

751U / 761U





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							761U-1.5	■	□	■	■	□	■
2.0	10	751U-2.0	■	■	■				761U-2.0	■	■	■	□	□	■

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Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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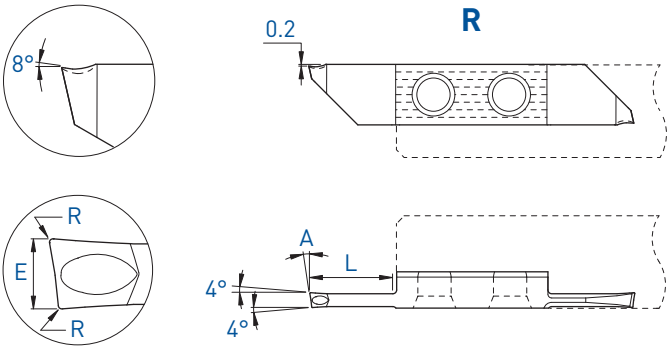
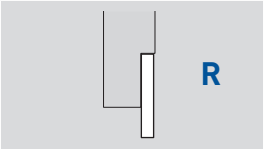
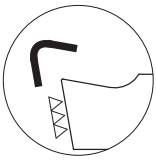
Tronçonnage
Abstechen
Parting off

761ZU





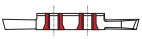
E	A	L	R	Art. N°	TiAlN N (µk20)
2.0	0°	11	0.10	**761ZU8-2.0-R10**	■
2.0	8°	11	0.10	**761ZU8-2.0-8°-R10**	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

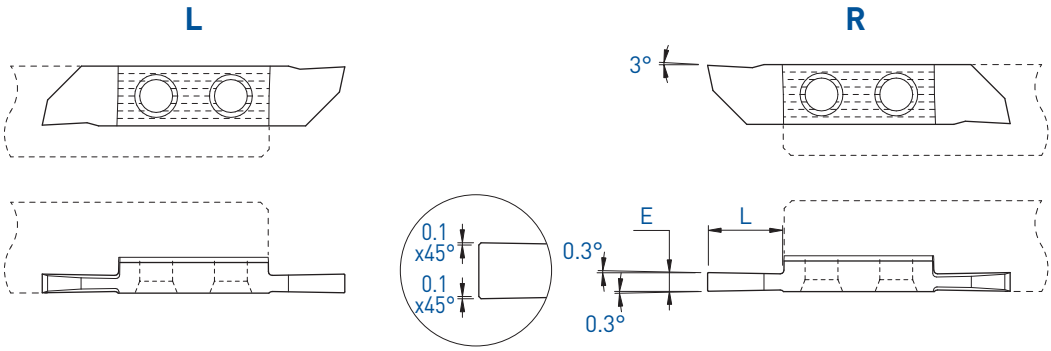
7XX-XX-B

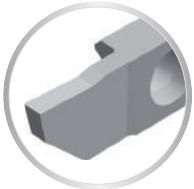


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tronçonnage
Abstechen
Parting off

751NXF / 761NXF





		L							R					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
2.0	10	**751NXF-2.0**	■	■	■	■	□	■	**761NXF-2.0**	■	■	■	■	□	■
2.5	10	**751NXF-2.5**	■	■	■				**761NXF-2.5**	■	■	■			
3.0	10	**751NXF-3.0**	■	■	■				**761NXF-3.0**	■	■	■			

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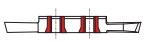

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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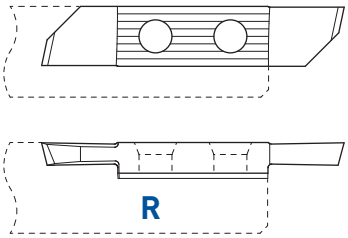
Tronçonnage / Abstechen / Parting off

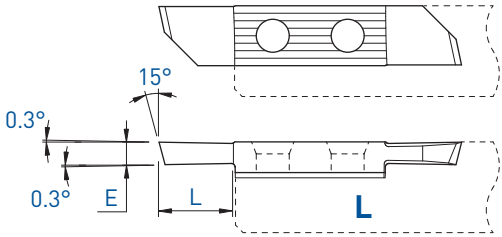
Coupe déportée / Versetztes Schneiden / Cut off line

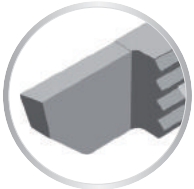
761L / 751R

Cut L

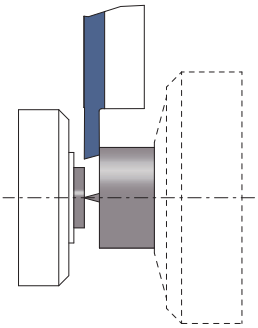


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	761L-1.0	■	■	■	■	□	■	751R-1.0	■	■	■	■	■	□	■
1.5	7.5	761L-1.5	■	■	■	■	□	■	751R-1.5	■	■	■	■	■	□	■
1.8	7.5	761L-1.8	■	■	■				751R-1.8	■	■	■	■	■	□	■
2.0	10	761L-2.0	■	■	■	■	□	■	751R-2.0	■	■	■	■	■	■	■
2.2	10	761L-2.2	■	■	■				751R-2.2	■	■	■	■			
2.5	10	761L-2.5	■	■	■	■	□	■	751R-2.5	■	■	■	■	■	■	■
3.0	10	761L-3.0	■	■	■				751R-3.0	■	■	■	■	■	□	■

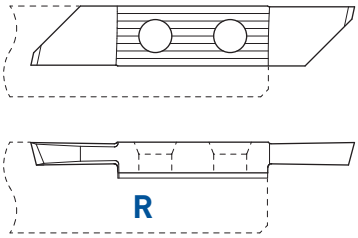


Tronçonnage / Abstechen / Parting off

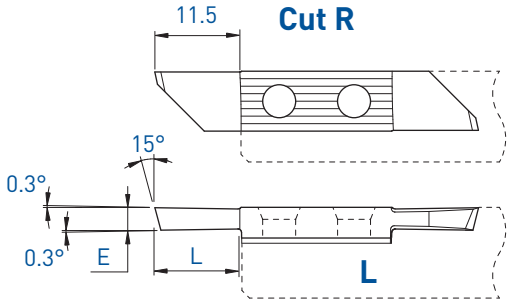
Coupe déportée / Versetztes Schneiden / Cut off line

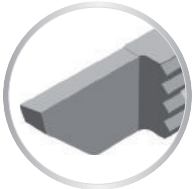
761LS / 751RS

Cut L

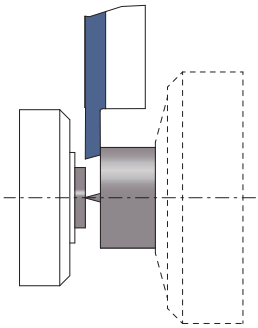


Cut R





		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5.5	761LS-1.0	■	■	■	■	□	■	751RS-1.0	■	■	■	■	■	□	■
1.5	8	761LS-1.5	■	■	■	■	□	■	751RS-1.5	■	■	■	■	■	□	■
2.0	11.5	761LS-2.0	■	■	■				751RS-2.0	■	■	■	■	■	■	■
2.2	11.5	761LS-2.2	■	■	■				751RS-2.2	■	■	■	■	■	□	■
2.5	11.5	761LS-2.5	■	■	■				751RS-2.5	■	■	■	■	■	□	■
3.0	11.5	761LS-3.0	■	■	■				751RS-3.0	■	■	■	■	■	□	■



■ = disponible / verfügbar / available
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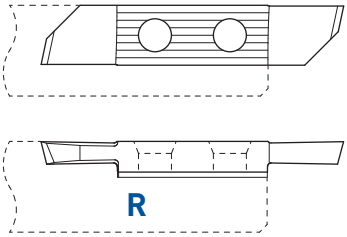
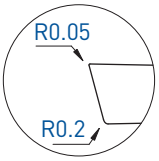
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

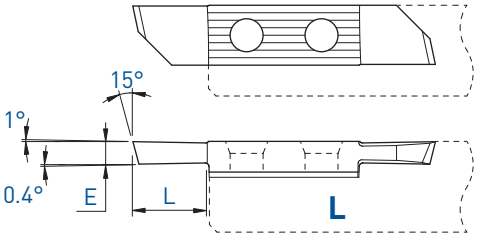
761L-R05 / 751R-R05

Cut L

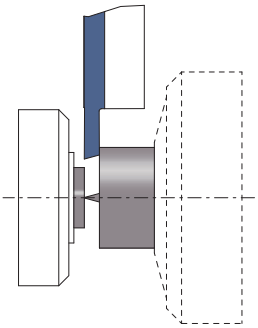




Cut R



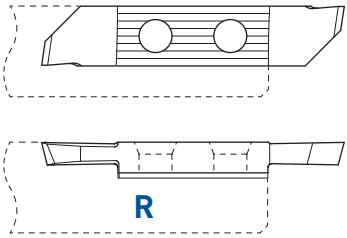
		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line						L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	761L-1.5-R05	■	■	■				751R-1.5-R05	■	■	■	■	■	□	■
2.0	10	761L-2.0-R05	■	■	■				751R-2.0-R05	■	■	■	■			



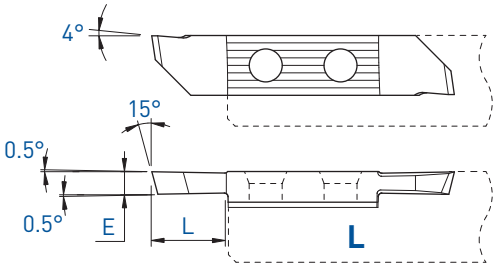
Tronçonnage | **Coupe déportée**
Abstechen | **Versetztes Schneiden**
Parting off | **Cut off line**

761LX4 / 751RX4

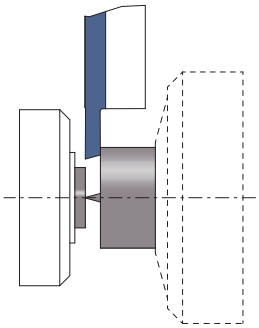
Cut L



Cut R



		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							751RX4-1.5	■	■	■	■	■	■
2.0	10	761LX4-2.0	■	■	■				751RX4-2.0	■	■	■	■	■	■
2.5	10	-							751RX4-2.5	■	■	■			

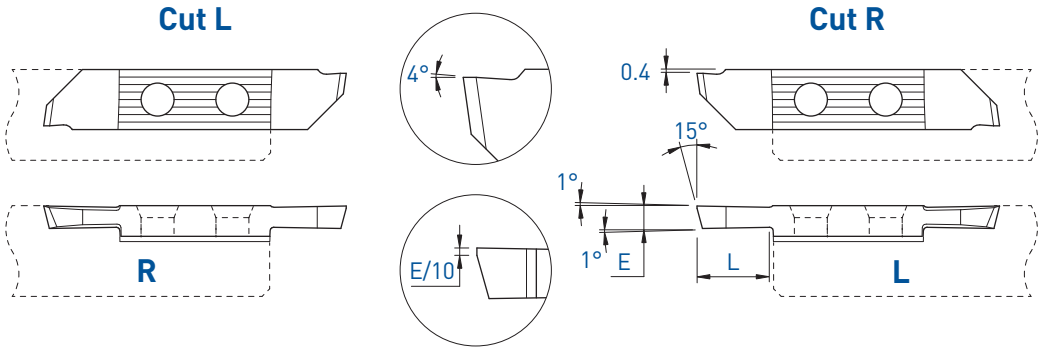


■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

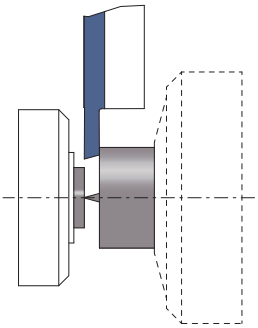
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

761LXF / 751RXF



	R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							751RXF-1.5	■	■	■	■	□	■
2.0	10	761LXF-2.0	■	■	■				751RXF-2.0	■	■	■	■	■	■
2.5	10	761LXF-2.5	■	■	■				751RXF-2.5	■	■	■	■	□	■
3.0	10	761LXF-3.0	■	■	■				751RXF-3.0	■	■	■	■	□	■

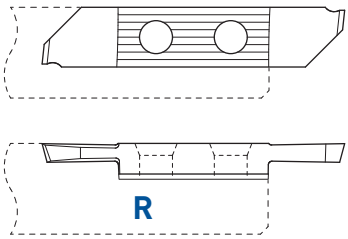


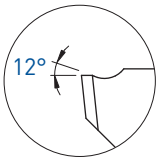
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

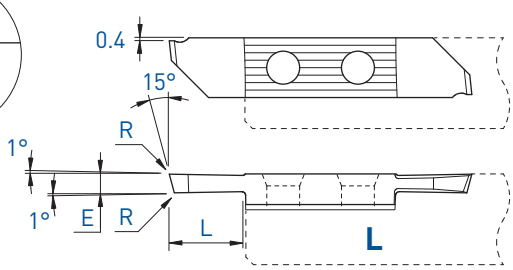
761LX12 / 751RX12

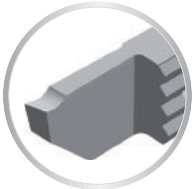
Cut L



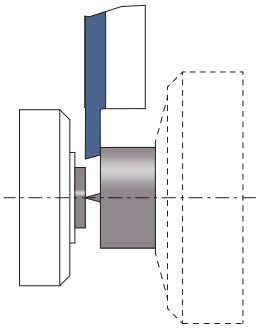


Cut R





	R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line								L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	0.03	-							751RX12-1.5	■	■	■			
2.0	10	0.03	761LX12-2.0	■	■	■				751RX12-2.0	■	■	■	■	■	■

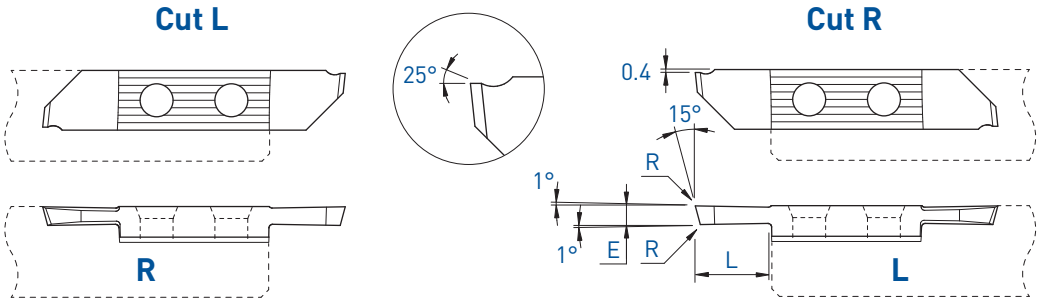


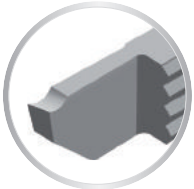
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

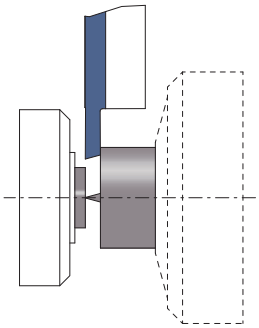
Coupe déportée
Versetztes Schneiden
Cut off line

761LX25 / 751RX25





			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	10	0.03	**761LX25-2.0**	■	■	■	**751RX25-2.0**	■	■	■

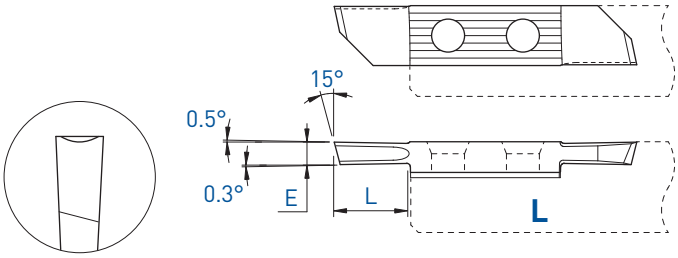


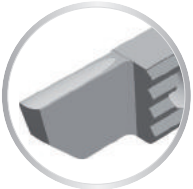
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

751RU

Cut R

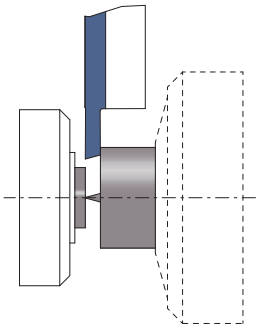




L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)
1.5	7.5	**751RU-1.5**	■	■	■
2.0	10	**751RU-2.0**	■	■	■



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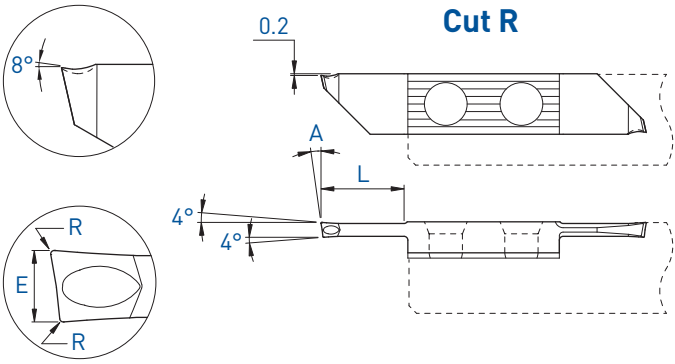
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

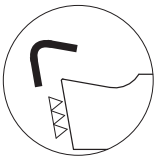
751RZU



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

E	A	L	R	Art. N°	TiAlN	TiN	N (µk20)
2.0	8°	11.0	0.10	**751RZU8-2.0-8°-R10**	■		



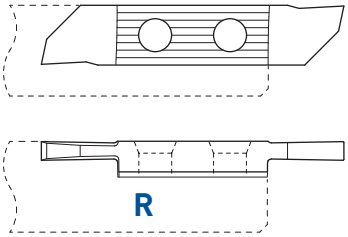
Arête de coupe honée
Gehonte Schneidkante
Honed edge

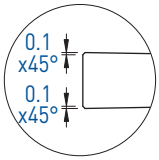
f min: 0.02 mm/U

Tronçonnage | **Coupe déportée**
Abstechen | **Versetztes Schneiden**
Parting off | **Cut off line**

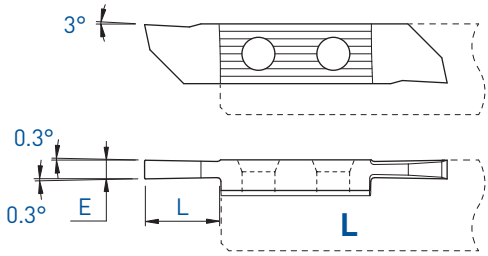
761NXF / 751NXF

Cut L

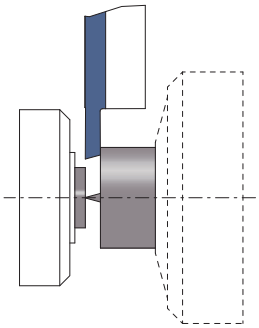




Cut R



		R (L) Coupe à gauche déportée / Versetztes Linksschneiden / Left cut off line							L (R) Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line					
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
2.0	10	**761NXF-2.0**	■	■	■	■	□	■	**751NXF-2.0**	■	■	■	■	□	■
2.5	10	**761NXF-2.5**	■	■	■				**751NXF-2.5**	■	■	■			
3.0	10	**761NXF-3.0**	■	■	■				**751NXF-3.0**	■	■	■			



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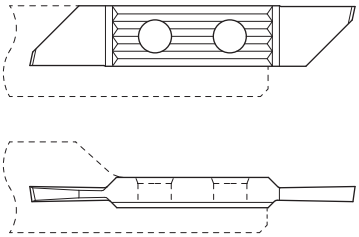
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

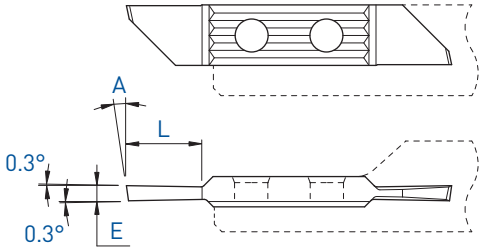
761LD / 751RD

Cut L

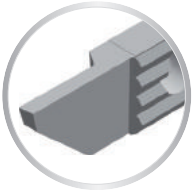


R

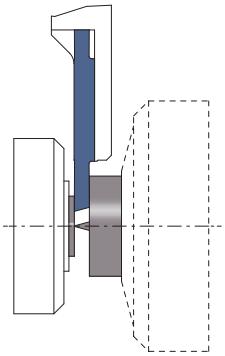
Cut R

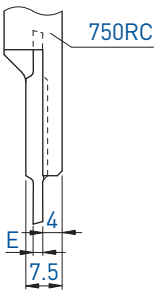


L



			R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line						L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line					
E	A	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	8°	5	761LD-1.0-8°	■	■	■	■	□	■	751RD-1.0-8°	■	■	■	■	□	■
1.0	15°	5	761LD-1.0-15°	■	■	■	■	□	■	751RD-1.0-15°	■	■	■	■	□	■
1.2	8°	5	761LD-1.2-8°	■	■	■				751RD-1.2-8°	■	■	■	■	□	■
1.5	8°	8	761LD-1.5-8°	■	■	■				751RD-1.5-8°	■	■	■	■	■	■
1.5	15°	8	761LD-1.5-15°	■	■	■				751RD-1.5-15°	■	■	■	■	□	■
1.6	8°	8	761LD-1.6-8°	■	■	■				751RD-1.6-8°	■	■	■			
1.8	8°	10	761LD-1.8-8°	■	■	■				751RD-1.8-8°	■	■	■	■	□	■
2.0	8°	10	761LD-2.0-8°	■	■	■				751RD-2.0-8°	■	■	■	■	□	■
2.0	15°	10	761LD-2.0-15°	■	■	■	■	□	■	751RD-2.0-15°	■	■	■	■	□	■
2.5	8°	10	-							751RD-2.5-8°	■	■	■	■	□	■



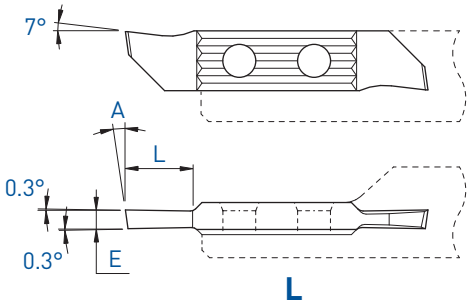


Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

751RAS

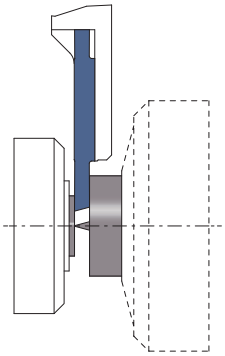
Cut R

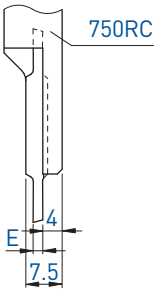


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.6	8°	7.5	**751RAS-1.6-8°**	■	■	■			
1.6	15°	7.5	**751RAS-1.6-15°**	■	■	■	■	□	■
2.0	8°	9	**751RAS-2.0-8°**	■	■	■	■	□	■
2.0	15°	9	**751RAS-2.0-15°**	■	■	■			
2.5	8°	9	**751RAS-2.5-8°**	■	■	■			
2.5	15°	9	**751RAS-2.5-15°**	■	■	■			



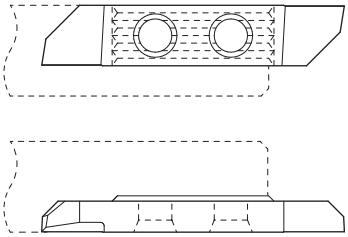


■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

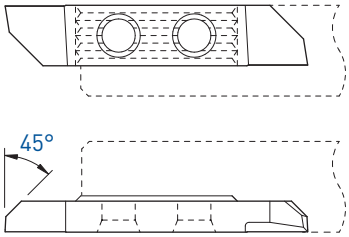
Tournage avant
Vorwärts drehen
Front turning

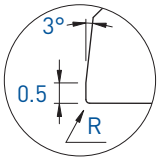
752 / 762

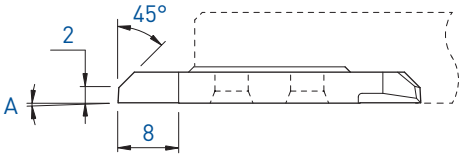
L

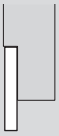


R

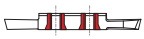






		L 							R 					
A	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	752	■	■	■	■	□	■	762	■	■	■	■	□	■
0°	0.20	-							762-R20	■	■	■	■	□	■
3°	0	752-3°	■	■	■	■	□	■	762-3°	■	■	■	■	□	■

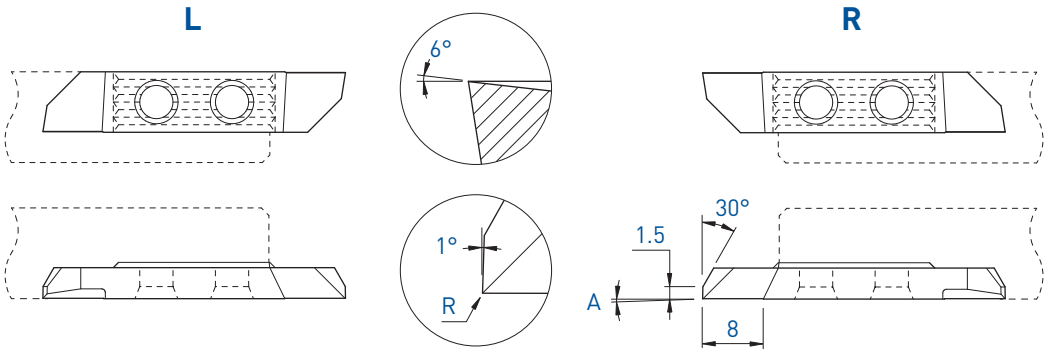
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage avant
Vorwärts drehen
Front turning

752PX / 762PX



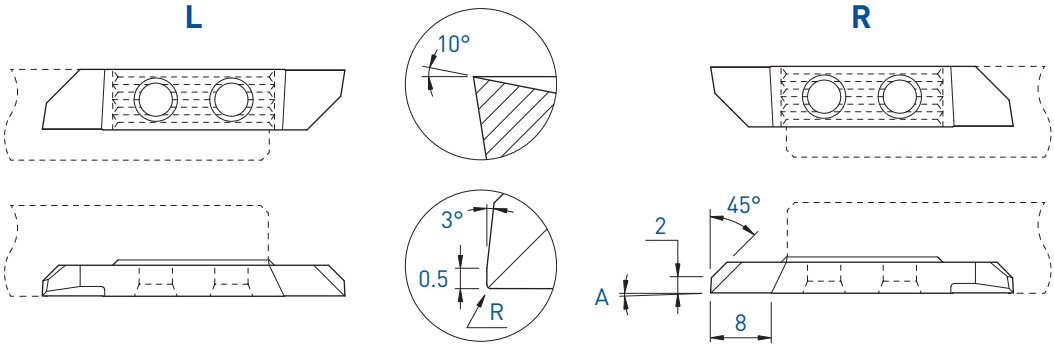
		L				R			
A	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0°	0	752PX	■	■	■	762PX	■	■	■

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

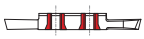
Tournage avant
Vorwärts drehen
Front turning

752X / 762X



		L							R						
A	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	**752X**	■	■	■	■	■	■	**762X**	■	■	■	■	■	■
0°	0.20	**752X-R20**	■	■	■				**762X-R20**	■	■	■	■	■	■

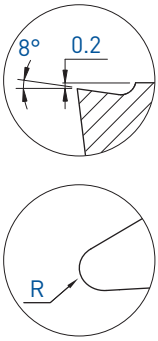
7XX-XX-B

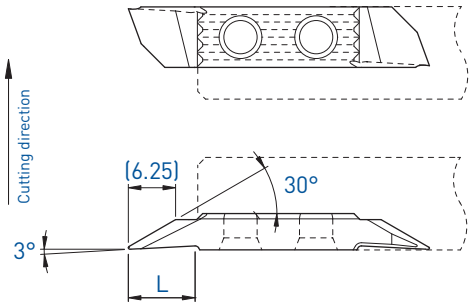


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage avant
Vorwärts drehen
Front turning

762VX-800





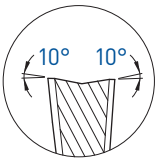
R

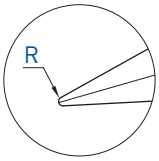
L	R	Art. N°	HTA	HTiN	HN (µk10)
9	0.15	**762VX-800-R15**	■		■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

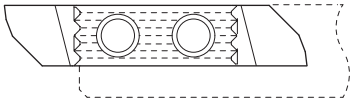
Tournage avant
Vorwärts drehen
Front turning

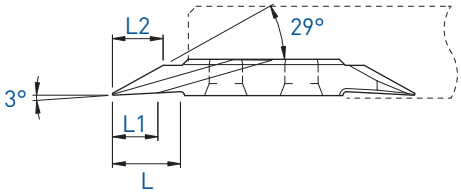
762VUX





R



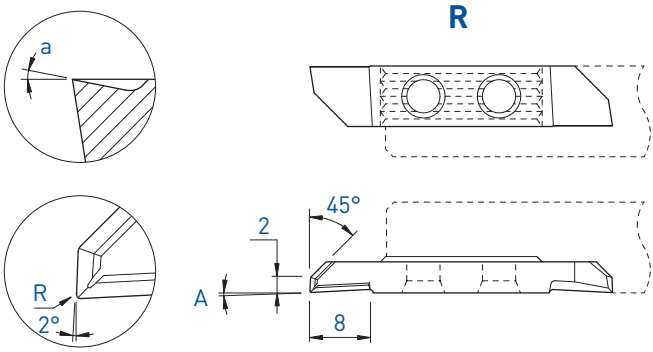


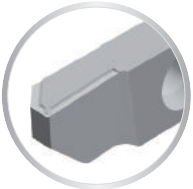
R

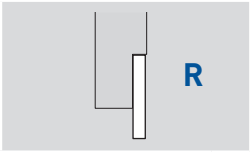
L	L1	L2	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
9	6	6.9	0.08	**762VUX10-29°-R08**	■	■	■	■
9	6	6.7	0.15	**762VUX10-29°-R15**	■	■	■	■
9	6	6.1	0.35	**762VUX10-29°-R35**	■	■	■	■
9	6	4.9	0.75	**762VUX10-29°-R75**	■	■	■	■

Tournage avant
Vorwärts drehen
Front turning

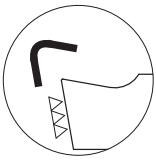
762ZX







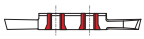
a	A	R	Art. N°	TiAlN	TiN	N (µk20)
10°	3°	0.08	**762ZX10-R08**	■	□	
	3°	0.20	**762ZX10-R20**	■	□	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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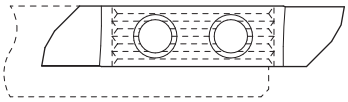
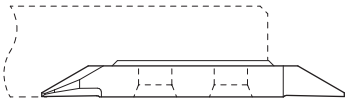
Tournage multifonction
Mehrzweck Drehen
Multifunction turning

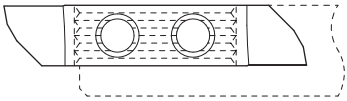
752S / 762S
753S / 763S

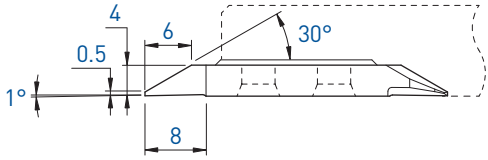
L





R

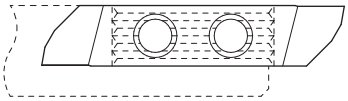


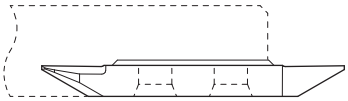


Tournage avant
Vorwärts drehen
Front turning

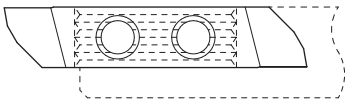
L							R						
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
752S05	■	■	■	■	□	■	762S05	■	■	■	■	■	■	■

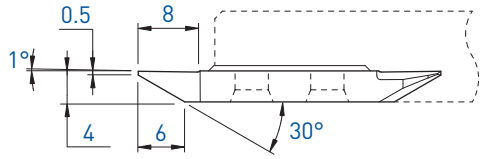
L





R





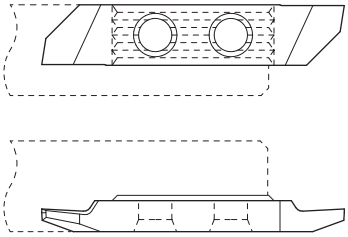
Tournage arrière
Rückwärts drehen
Back turning

L							R						
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
753S05	■	■	■	■	■	■	763S05	■	■	■	■	■	■	■

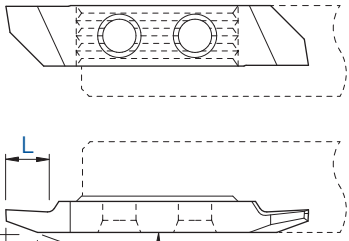
Tournage arrière
Rückwärts drehen
Back turning

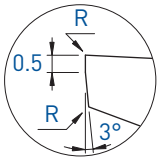
753 / 763

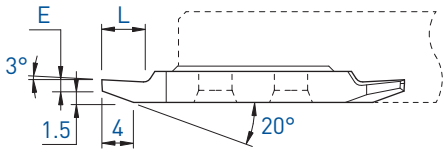
L

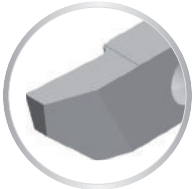


R



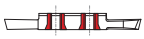






			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	0	**753-1.0**	■	■	■	■	□	■	**763-1.0**	■	■	■	■	■	■
1.0	5	0.08	**753-1.0-R08**	■	■	■				**763-1.0-R08**	■	■	■	■	□	■
1.5	6	0	**753-1.5**	■	■	■				**763-1.5**	■	■	■	■	□	■
2.0	7.5	0	**753-2.0**	■	■	■				**763-2.0**	■	■	■	■	□	■
2.5	9	0	**753-2.5**	■	■	■				**763-2.5**	■	■	■	■	□	■

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
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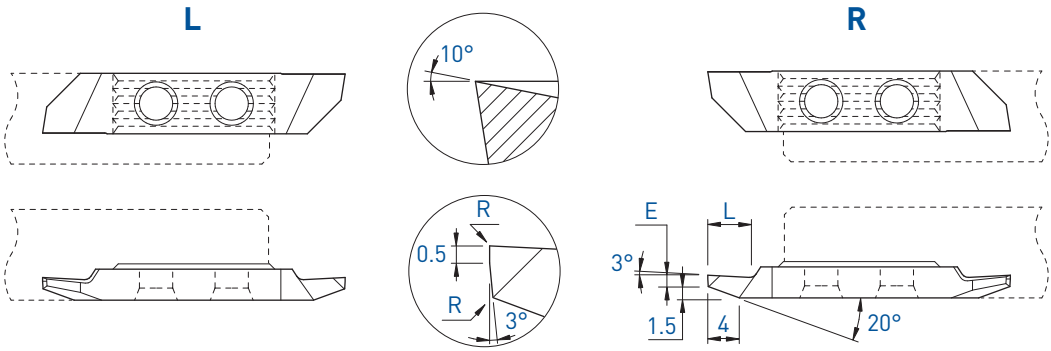
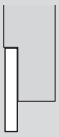
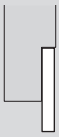
Tournage arrière
Rückwärts drehen
Back turning

753X / 763X







			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	0	753X-1.0	■	■	■				763X-1.0	■	■	■	■	□	■
1.0	5	0.08	753X-1.0-R08	■	■	■	■	□	■	763X-1.0-R08	■	■	■	■	□	■
1.0	5	0.20	753X-1.0-R20	■	■	■				763X-1.0-R20	■	■	■			
1.5	6	0	753X-1.5	■	■	■				763X-1.5	■	■	■	■	□	■
1.5	6	0.20	753X-1.5-R20	■	■	■				763X-1.5-R20	■	■	■			
2.0	7.5	0	753X-2.0	■	■	■				763X-2.0	■	■	■			
2.0	7.5	0.20	753X-2.0-R20	■	■	■				763X-2.0-R20	■	■	■			
2.5	9	0	753X-2.5	■	■	■				763X-2.5	■	■	■			
2.5	9	0.20	753X-2.5-R20	■	■	■				763X-2.5-R20	■	■	■			

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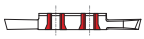
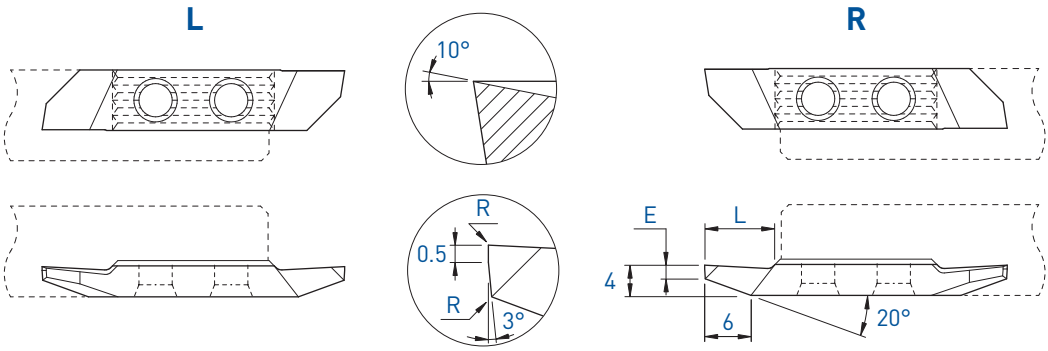


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

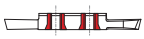
Tournage arrière
Rückwärts drehen
Back turning

753XS / 763XS



			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.8	9	0	**753XS-1.8**	■	■	■				**763XS-1.8**	■	■	■	■	□	■
1.8	9	0.20	**753XS-1.8-R20**	■	■	■				**763XS-1.8-R20**	■	■	■			

7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
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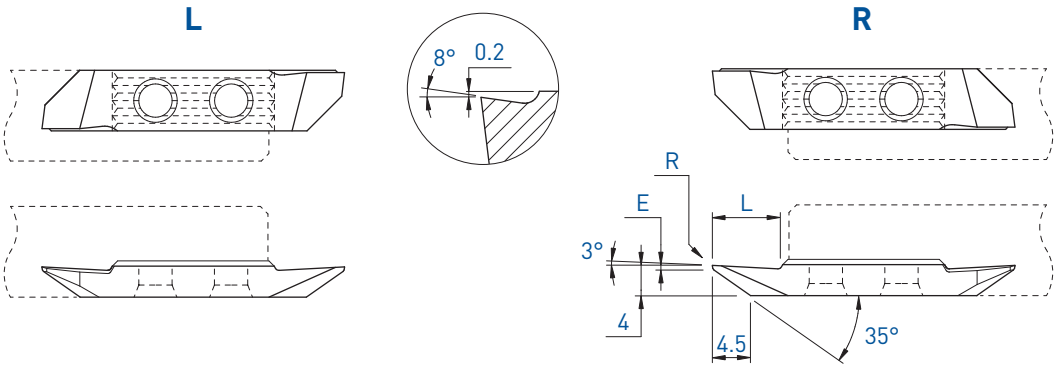
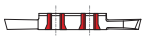
Tournage arrière
Rückwärts drehen
Back turning

753VX-8° / 763VX-8°



E	L	R	Art. N° (L)	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N° (R)	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	9	0	**753VX-8°**	■	■	■				**763VX-8°**	■	■	■	■	■	■
1.0	9	0.08	**753VX-8°-R08**	■	■	■				**763VX-8°-R08**	■	■	■	■	□	■
1.0	9	0.20	-							**763VX-8°-R20**	■	■	■			

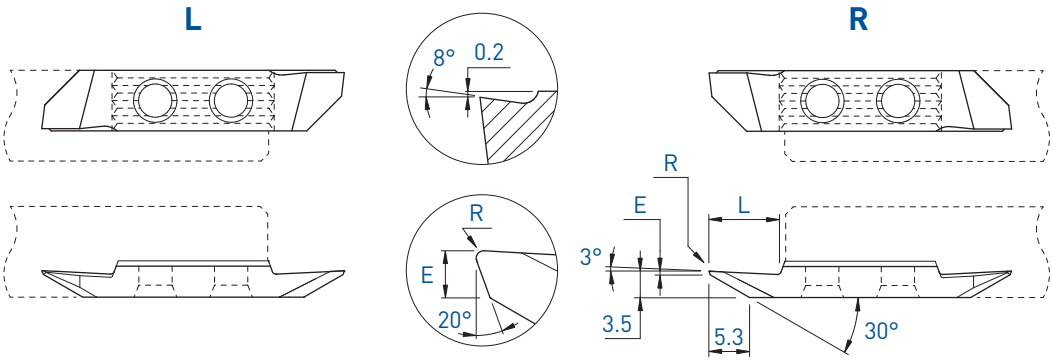
7XX-XX-B



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage arrière
Rückwärts drehen
Back turning

753VX-805 / 763VX-805



			L						R					
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	9	0.08	**753VX-805-R08**	■	■	■	■	□	■	**763VX-805-R08**	■	■	■	■	□	■

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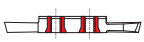
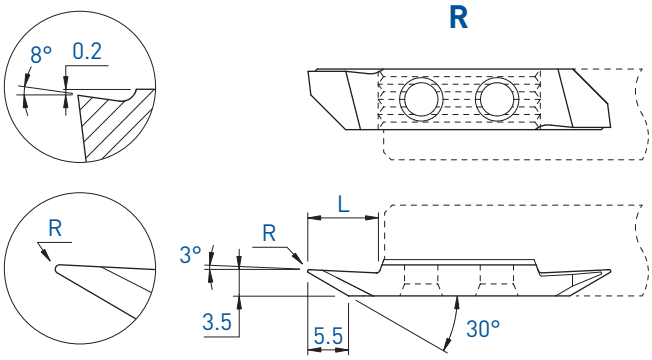


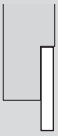
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

763VX-800





R

L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
9	0.08	**763VX-800-R08**	■	■	■	■	□	■
9	0.20	**763VX-800-R20**	■	■	■	■	□	■

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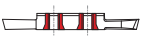
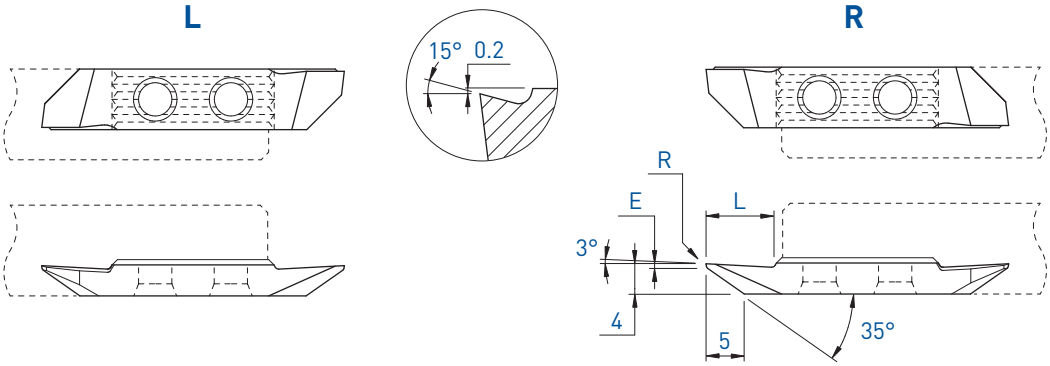


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage arrière
Rückwärts drehen
Back turning

753VX-15° / 763VX-15°



L									R						
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.6	9	0	**753VX-15°**	■	■	■				**763VX-15°**	■	■	■	■	□	■
0.6	9	0.08	**753VX-15°-R08**	■	■	■				**763VX-15°-R08**	■	■	■	■	□	■

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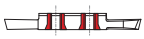

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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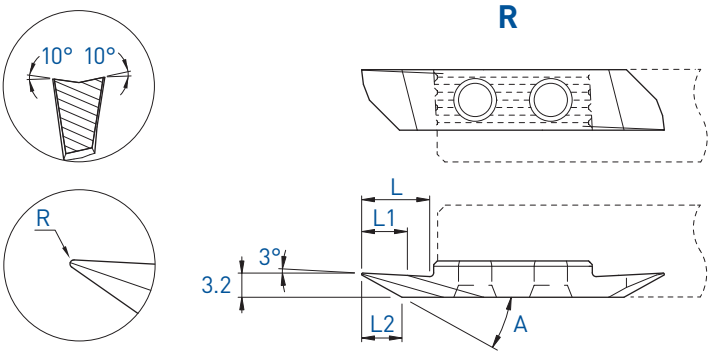
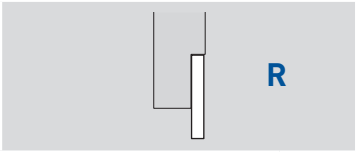
Tournage arrière
Rückwärts drehen
Back turning

763VUX





L	L1	L2	A	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
9	6	5.5	29	0.08	**763VUX10-29°-R08**	■	■	■	■
9	6	5.3	29	0.15	**763VUX10-29°-R15**	■	■	■	■
9	6	4.7	29	0.35	**763VUX10-29°-R35**	■	■	■	■
9	6	3.6	29	0.75	**763VUX10-29°-R75**	■	■	■	■
9	6	4.2	35	0.15	**763VUX10-35°-R15**	■	■	■	■
9	6	3.8	35	0.35	**763VUX10-35°-R35**	■	■	■	■

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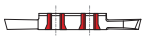
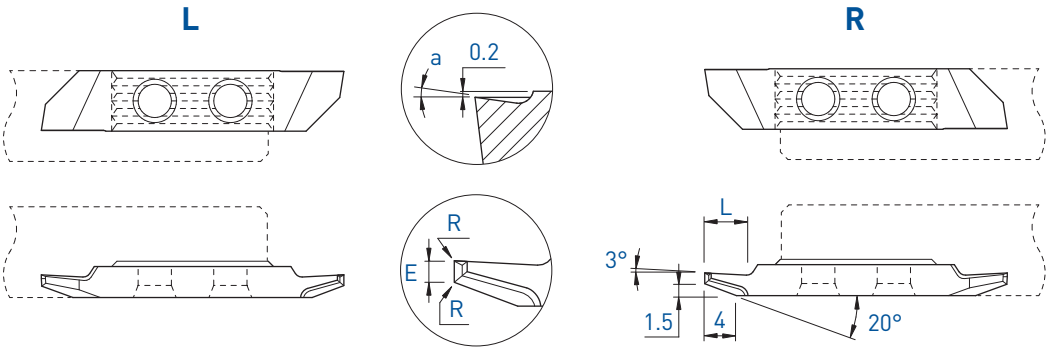


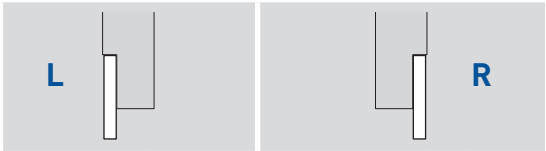
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Tournage arrière
Rückwärts drehen
Back turning

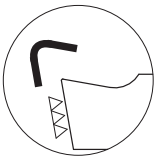
753ZX / 763ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

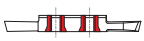


a	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
10°	1.0	5	0.01	**753ZX10-1.0**	■	□		**763ZX10-1.0**	■	■	
	1.0	5	0.08	-				**763ZX10-1.0-R08**	■	■	
	1.0	5	0.20	-				**763ZX10-1.0-R20**	■	■	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

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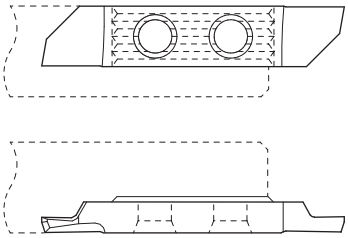
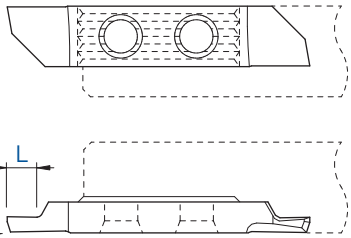
Tournage arrière / pré-coupe
Rückwärts drehen / vorstechen
Back turning / pre-parting off

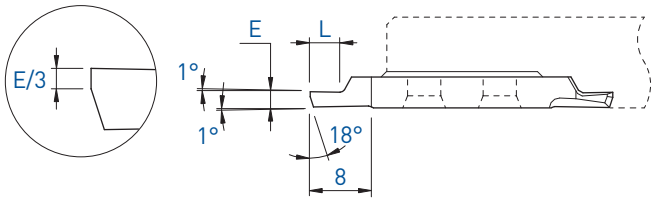
753P / 763P

L



R





E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	3	**753P-1.5**	■	■	■	**763P-1.5**	■	■	■
1.8	3.5	**753P-1.8**	■	■	■	**763P-1.8**	■	■	■
2.0	4	**753P-2.0**	■	■	■	**763P-2.0**	■	■	■
2.2	5	**753P-2.2**	■	■	■	**763P-2.2**	■	■	■
2.5	6	**753P-2.5**	■	■	■	**763P-2.5**	■	■	■
3.0	6	**753P-3.0**	■	■	■	**763P-3.0**	■	■	■

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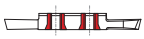
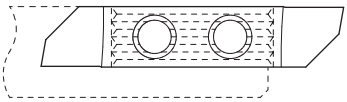


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

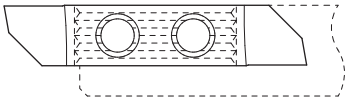
Fonçage-tournage
Einstechen und drehen
Grooving and turning

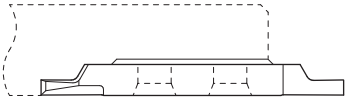
754 / 764

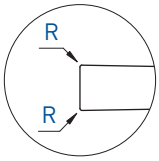
L

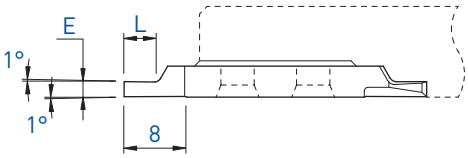


R









L

R

E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	1.5	0	**754-0.5**	■	■	■				**764-0.5**	■	■	■	■	■	■	■
0.75	2	0	**754-0.75**	■	■	■				**764-0.75**	■	■	■	■			
0.8	2	0	-							**764-0.8**	■	■	■	■	■	□	■
0.95	3	0	**754-0.95**	■	■	■	■	□	■	**764-0.95**	■	■	■	■			
1.0	2.5	0	**754-1.0**	■	■	■	■	□	■	**764-1.0**	■	■	■	■	■	■	■
1.0	2.5	0.08	**754-1.0-R08**	■	■	■				**764-1.0-R08**	■	■	■	■	■	□	■
1.2	3	0	**754-1.2**	■	■	■				**764-1.2**	■	■	■	■	■	□	■
1.5	3	0	**754-1.5**	■	■	■	■	□	■	**764-1.5**	■	■	■	■	■	■	■
1.5	3	0.08	**754-1.5-R08**	■	■	■	■	□	■	**764-1.5-R08**	■	■	■	■	■	□	■
1.5	3	0.15	-							**764-1.5-R15**	■	■	□	■	■		■
1.5	3	0.20	-							**764-1.5-R20**	■	■	■	■	■	□	■
1.8	4	0	**754-1.8**	■	■	■				**764-1.8**	■	■	■	■			
2.0	4	0	**754-2.0**	■	■	■	■	□	■	**764-2.0**	■	■	■	■	■	■	■
2.0	4	0.08	**754-2.0-R08**	■	■	■	■	□	■	**764-2.0-R08**	■	■	■	■	■	□	■
2.0	4	0.15	-							**764-2.0-R15**	■	■	□	■	■		■
2.0	4	0.20	**754-2.0-R20**	■	■	■				**764-2.0-R20**	■	■	■	■	■	□	■
2.5	6	0	**754-2.5**	■	■	■				**764-2.5**	■	■	■	■	■	□	■
2.5	6	0.15	-							**764-2.5-R15**	■	■	□	■	■		■
2.5	6	0.20	-							**764-2.5-R20**	■	■	■	■	■	□	■
3.0	6	0	**754-3.0**	■	■	■	■	□	■	**764-3.0**	■	■	■	■	■	□	■
3.0	6	0.08	**754-3.0-R08**	■	■	■				**764-3.0-R08**	■	■	■	■	■	□	■
3.0	6	0.15	-							**764-3.0-R15**	■	■	□	■	■		■
3.0	6	0.20	**754-3.0-R20**	■	■	■	■	□	■	**764-3.0-R20**	■	■	■	■			
4.0	8	0	**754-4.0**	■	■	■	■	■	■	**764-4.0**	■	■	■	■	■	□	■

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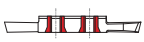

Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
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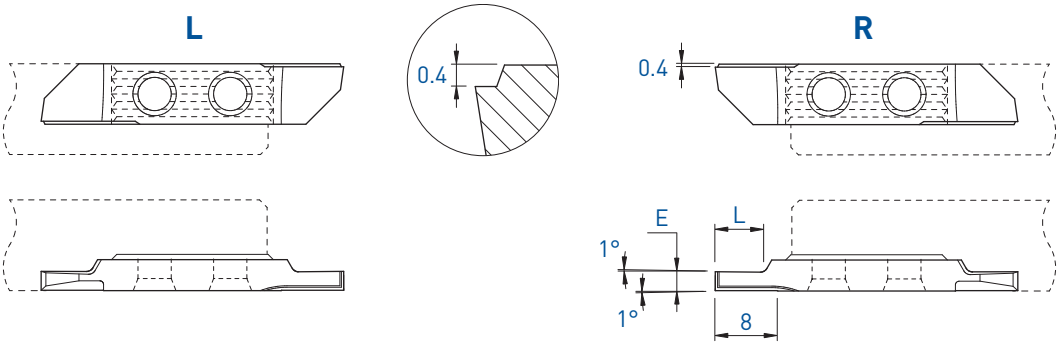
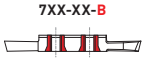
Fonçage-tournage
Einstechen und drehen
Grooving and turning

754VS / 764VS



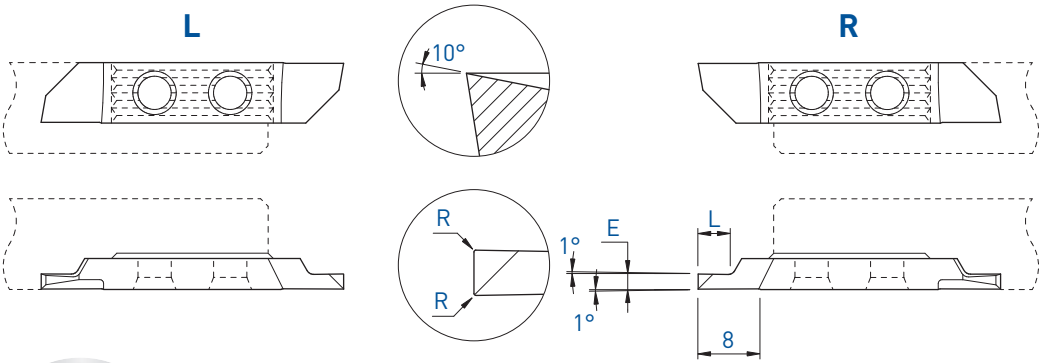
		L							R						
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	2	754VS-1.0	■	■	■				764VS-1.0	■	■	■			
1.2	2.5	754VS-1.2	■	■	■	■	□	■	764VS-1.2	■	■	■			
1.5	3	754VS-1.5	■	■	■				764VS-1.5	■	■	■			
2.0	4	754VS-2.0	■	■	■				764VS-2.0	■	■	■			
2.5	6	754VS-2.5	■	■	■				764VS-2.5	■	■	■	■	□	■
3.0	6	754VS-3.0	■	■	■				764VS-3.0	■	■	■			

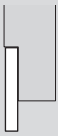


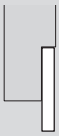
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage
Einstechen und drehen
Grooving and turning

754X / 764X

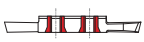






E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
			L							**R**								
1.0	2.5	0	**754X-1.0**	■	■	■	■	■	■	**764X-1.0**	■	■		■	■	■	□	■
1.0	2.5	0.08	**754X-1.0-R08**	■	■	■	■	□	■	**764X-1.0-R08**	■	■	■	■	■	■	□	■
1.0	2.5	0.20	-							**764X-1.0-R20**	■	■	■	■	■			
1.2	3	0	**754X-1.2**	■	■	■				**764X-1.2**	■	■		■	■	■	□	■
1.2	3	0.08	-							**764X-1.2-R08**	■	■	■	■	■			
1.5	3	0	**754X-1.5**	■	■	■	■	□	■	**764X-1.5**	■	■		■	■	■	■	■
1.5	3	0.08	**754X-1.5-R08**	■	■	■	■	□	■	**764X-1.5-R08**	■	■	■	■	■	■	□	■
1.5	3	0.15	-							**764X-1.5-R15**	■	■	■	□	■	■		■
1.5	3	0.20	**754X-1.5-R20**	■	■	■				**764X-1.5-R20**	■	■	■	■	■	■	■	■
1.8	4	0	**754X-1.8**	■	■	■				**764X-1.8**	■	■		■	■	■	□	■
1.8	4	0.20	-							**764X-1.8-R20**	■	■	■	■	■			
2.0	4	0	**754X-2.0**	■	■	■	■	□	■	**764X-2.0**	■	■		■	■	■	■	■
2.0	4	0.08	**754X-2.0-R08**	■	■	■	■	□	■	**764X-2.0-R08**	■	■	■	■	■	■	□	■
2.0	4	0.15	-							**764X-2.0-R15**	■	■	■	□	■	■		■
2.0	4	0.20	**754X-2.0-R20**	■	■	■	■	□	■	**764X-2.0-R20**	■	■	■	■	■	■	□	■
2.0	4	0.35	-							**764X-2.0-R35**	■	■	■	□	■	■		■
2.5	6	0	**754X-2.5**	■	■	■	■	■	■	**764X-2.5**	■	■		■	■	■	■	■
2.5	6	0.15	-							**764X-2.5-R15**	■	■	■	□	■	■		■
2.5	6	0.20	**754X-2.5-R20**	■	■	■	■	□	■	**764X-2.5-R20**	■	■	■	■	■	■	□	■
2.5	6	0.35	-							**764X-2.5-R35**	■	■	■	□	■	■		■
3.0	6	0	**754X-3.0**	■	■	■				**764X-3.0**	■	■		■	■	■	□	■
3.0	6	0.08	**754X-3.0-R08**	■	■	■				**764X-3.0-R08**	■	■	■	■	■	■	□	■
3.0	6	0.15	-							**764X-3.0-R15**	■	■	■	□	■	■		■
3.0	6	0.20	**754X-3.0-R20**	■	■	■				**764X-3.0-R20**	■	■	■	■	■	■	□	■
3.0	6	0.35	-							**764X-3.0-R35**	■	■	■	□	■	■		■
4.0	8	0	**754X-4.0**	■	■	■				**764X-4.0**	■	■		■	■	■	□	■
4.0	8	0.20	**754X-4.0-R20**	■	■	■				**764X-4.0-R20**	■	■	■	■	■	■	□	■
4.0	8	0.35	-							**764X-4.0-R35**	■	■	■	□	■	■		■

7XX-XX-B

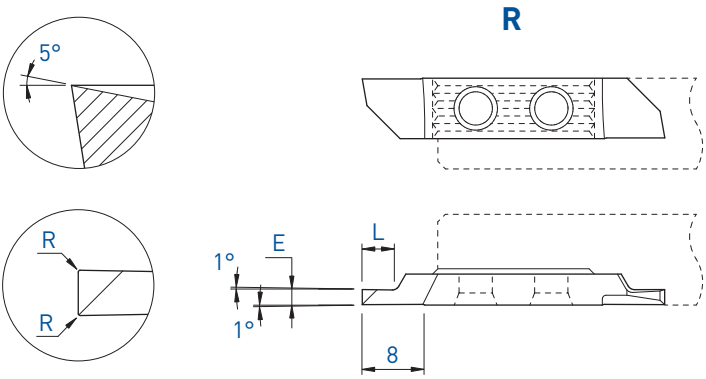


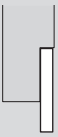
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Fonçage-tournage
Einstechen und drehen
Grooving and turning

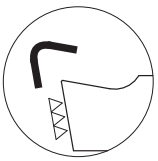
764X5-EP





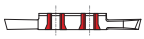
R

E	L	R	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)
1.5	3	0.08	**764X5-1.5-R08-EP**	■	■	■	■	■
2.0	4	0.08	**764X5-2.0-R08-EP**	■	■	■	■	■
2.5	6	0.08	**764X5-2.5-R08-EP**	■	■	■	■	■
2.5	6	0.15	**764X5-2.5-R15-EP**	■	■	■	■	■
3.0	6	0.08	**764X5-3.0-R08-EP**	■	■	■	■	■
3.0	6	0.15	**764X5-3.0-R15-EP**	■	■	■	■	■
4.0	8	0.15	**764X5-4.0-R15-EP**	■	■	■	■	■
4.0	8	0.35	**764X5-4.0-R35-EP**	■	■	■	■	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

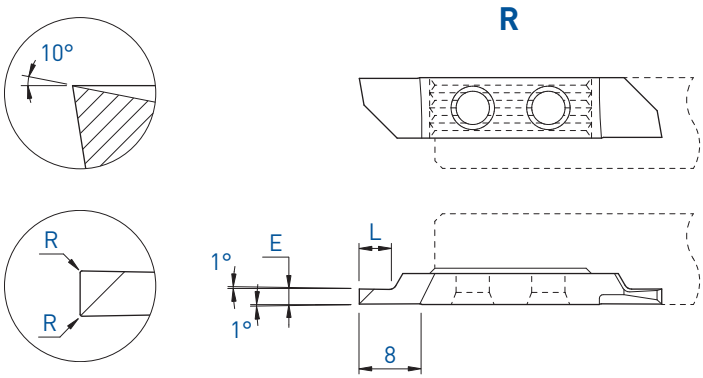
7XX-XX-B

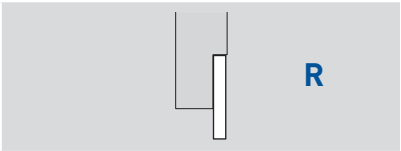


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

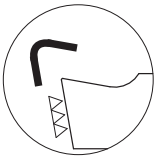
Fonçage-tournage
Einstechen und drehen
Grooving and turning

764X10-EP



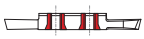


E	L	R	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µK20)
1.5	3	0.08	**764X10-1.5-R08-EP**	■	■	■	■	■
2.0	4	0.08	**764X10-2.0-R08-EP**	■	■	■	■	■
2.5	6	0.08	**764X10-2.5-R08-EP**	■	■	■	■	■
2.5	6	0.15	**764X10-2.5-R15-EP**	■	■	■	■	■
3.0	6	0.08	**764X10-3.0-R08-EP**	■	■	■	■	■
3.0	6	0.15	**764X10-3.0-R15-EP**	■	■	■	■	■
4.0	8	0.15	**764X10-4.0-R15-EP**	■	■	■	■	■
4.0	8	0.35	**764X10-4.0-R35-EP**	■	■	■	■	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

7XX-XX-B

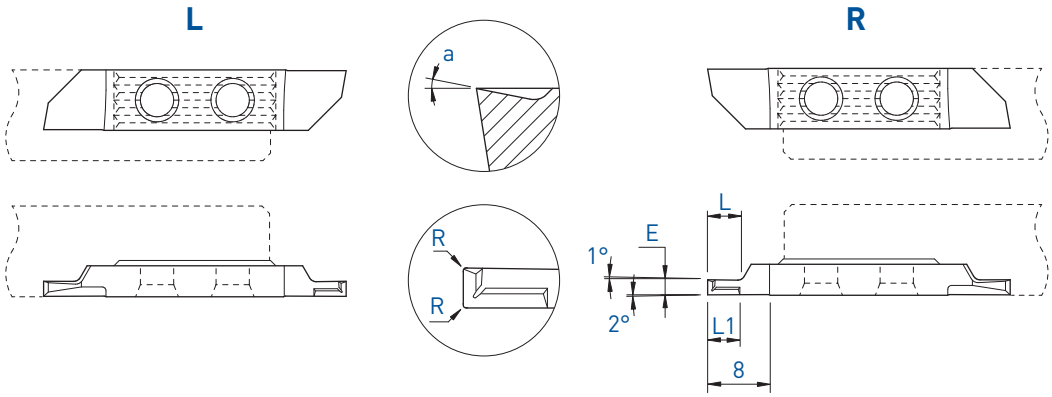


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

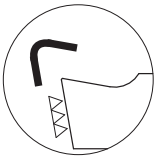
Fonçage-tournage
Einstechen und drehen
Grooving and turning

754ZX / 764ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HAS	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HAS	HTiN	HN (µk10)
10°	1.5	4	4	0.03	**754ZX10-1.5-R03**	■	□						**764ZX10-1.5-R03**	■	■	■					
	1.5	4	4	0.08	**754ZX10-1.5-R08**	■	□						**764ZX10-1.5-R08**	■	■	■					
	2.0	4	4	0.08	**754ZX10-2.0-R08**	■	□						**764ZX10-2.0-R08**	■	■	■					
	2.0	4	4	0.20	-								**764ZX10-2.0-R20**	■	■	□					
	2.5	5	5	0.08	**754ZX10-2.5-R08**	■	■						**764ZX10-2.5-R08**	■	■	■					
	2.5	5	5	0.20	-								**764ZX10-2.5-R20**	■	■	■					
	3.0	6	6	0.08	**754ZX10-3.0-R08**	■	□						**764ZX10-3.0-R08**	■	■	■					
	3.0	6	6	0.20	-								**764ZX10-3.0-R20**	■	■	■					
	4.0	6	6	0.20	-								**764ZX10-4.0-R20**	■	■	□					
25°	2.0	4	4	0.08	-								**764ZX25-2.0-R08**					■	■	□	
	2.0	4	4	0.20	-								**764ZX25-2.0-R20**					■	■	□	
	2.5	5	5	0.08	-								**764ZX25-2.5-R08**					■	■	□	
	2.5	5	5	0.20	-								**764ZX25-2.5-R20**					■	■	□	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

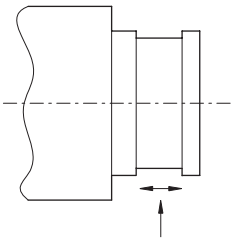
f min: 0.02 mm/U

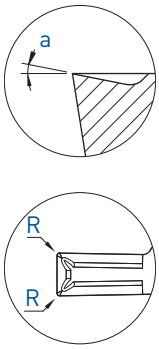
7XX-XX-B

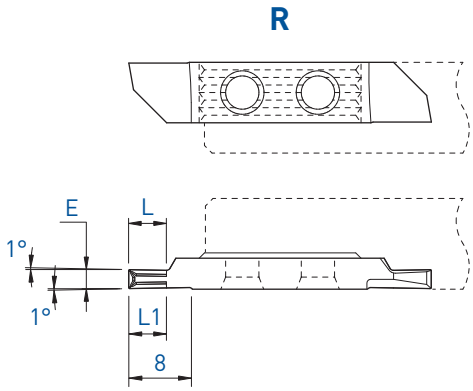
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

Fonçage-tournage
Einstechen und drehen
Grooving and turning

764ZXB

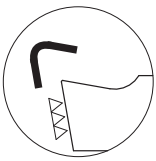






R

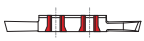
a	E	L	L1	R	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)
10°	1.5	4	4	0.08	**764ZXB10-1.5-R08**	■	■	■	□	
	2.0	4	4	0.08	**764ZXB10-2.0-R08**	■	■	■	□	
	2.0	4	4	0.15	**764ZXB10-2.0-R15**	■	■	■	□	
	2.0	4	4	0.35	**764ZXB10-2.0-R35**	■	■	■	□	
	2.5	5	5	0.08	**764ZXB10-2.5-R08**	■	■	■	□	
	2.5	5	5	0.15	**764ZXB10-2.5-R15**	■	■	■	□	
	2.5	5	5	0.35	**764ZXB10-2.5-R35**	■	■	■	□	
	3.0	6	6	0.08	**764ZXB10-3.0-R08**	■	■	■	□	
	3.0	6	6	0.15	**764ZXB10-3.0-R15**	■	■	■	□	
	3.0	6	6	0.35	**764ZXB10-3.0-R35**	■	■	■	□	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

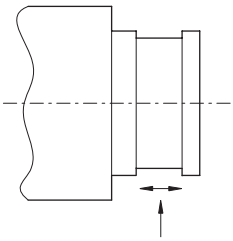


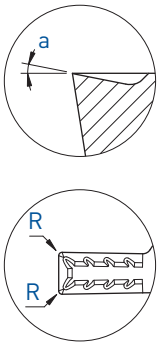
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

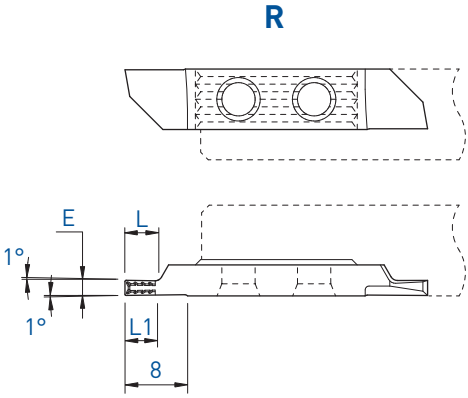
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

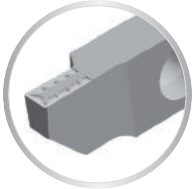
Fonçage-tournage
Einstechen und drehen
Grooving and turning

754ZXT / 764ZXT

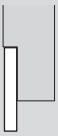


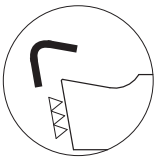






Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

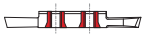
					L 				R 						
a	E	L	L1	R	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiAlX	LOX	TiN	N (µk20)	HTA HN (µk10)
10°	1.5	4	4	0.03	-				764ZXT10-1.5-R03	■	■	■	□		
	1.5	4	4	0.08	754ZXT10-1.5-R08	■	□		764ZXT10-1.5-R08	■	■	■	□		
	1.5	4	4	0.20	754ZXT10-1.5-R20	■			-						
	2.0	4	4	0.08	754ZXT10-2.0-R08	■	□		764ZXT10-2.0-R08	■	■	■	□		
	2.0	4	4	0.20	754ZXT10-2.0-R20	■			764ZXT10-2.0-R20	■	■	■	□		
	2.0	4	4	0.40	-				764ZXT10-2.0-R40	■	■	■			
	2.5	5	5	0.08	754ZXT10-2.5-R08	■	□		764ZXT10-2.5-R08	■	■	■	□		
	2.5	5	5	0.20	754ZXT10-2.5-R20	■			764ZXT10-2.5-R20	■	■	■	□		
	2.5	5	5	0.40	-				764ZXT10-2.5-R40	■	■	■			
	3.0	6	6	0.08	754ZXT10-3.0-R08	■	□		764ZXT10-3.0-R08	■	■	■	□		
	3.0	6	6	0.20	-				764ZXT10-3.0-R20	■	■	■	□		■
	3.0	6	6	0.40	-				764ZXT10-3.0-R40	■	■	■	□		
	4.0	8	8	0.20	-				764ZXT10-4.0-R20	■	■	■	□		
	4.0	8	8	0.40	-				764ZXT10-4.0-R40	■	■	■	□		
	4.0	8	8	0.80	-				764ZXT10-4.0-R80	■	■	■			



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

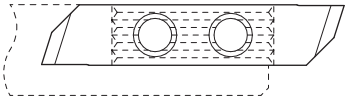


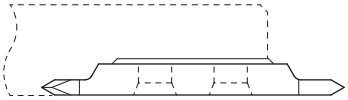
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

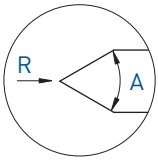
Filetage
Gewinde drehen
Threading

756 / 766

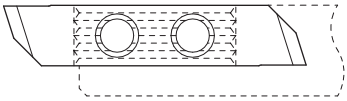
L

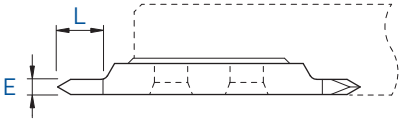


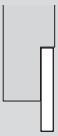




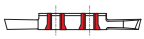
R





				L 							R 					
A	E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
60°	2.0	6	-	**756-60-2.0**	■	■	■				**766-60-2.0**	■	■	■			
60°	2.0	6	0.02	**756-60-2.0-R02**	■	■	■	■	□	■	**766-60-2.0-R02**	■	■	■	■	□	■
60°	3.0	8	-	**756-60-3.0**	■	■	■				**766-60-3.0**	■	■	■			
60°	3.0	8	0.02	**756-60-3.0-R02**	■	■	■	■	□	■	**766-60-3.0-R02**	■	■	■	■	□	■
55°	2.0	6	-	**756-55-2.0**	■	■	■				**766-55-2.0**	■	■	■			
55°	2.0	6	0.02	**756-55-2.0-R02**	■	■	■				**766-55-2.0-R02**	■	■	■			
55°	3.0	8	-	**756-55-3.0**	■	■	■				**766-55-3.0**	■	■	■			
55°	3.0	8	0.02	**756-55-3.0-R02**	■	■	■				**766-55-3.0-R02**	■	■	■			

7XX-XX-B

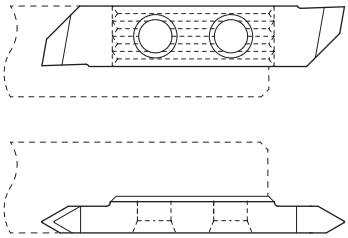


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

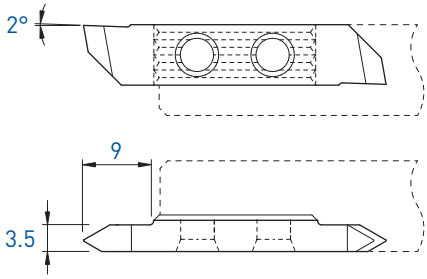
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

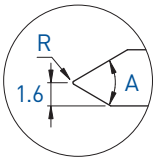
756-AG60° / 766-AG60°
756-G60° / 766-G60°

L



R

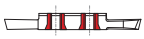




Profil partiel
Teilprofil
Partial profile

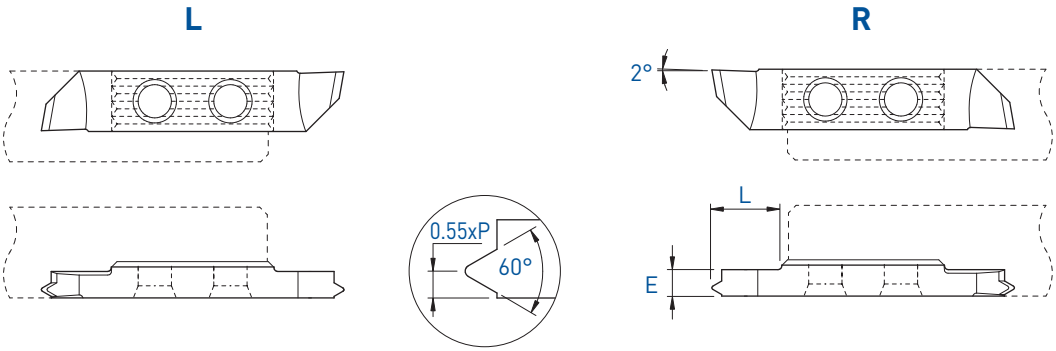
			L				R			
A	R	Pas Steigung Pitch P	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
60°	0.06	0.50-1.50	**756-AG60°**	■	■	■	**766-AG60°**	■	■	■
60°	0.20	1.75-3.00	**756-G60°**	■	■	■	**766-G60°**	■	■	■

7XX-XX-B

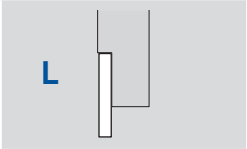


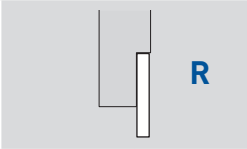
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

756-M / 766-M



Profil complet métrique
Metrisches Vollprofil
Metric full profile





E	L	Pas Steigung Pitch P	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.5	8	0.80	**756-M-0.80**	■	■	■	**766-M-0.80**	■	■	■
2.5	8	1.00	**756-M-1.00**	■	■	■	**766-M-1.00**	■	■	■
2.5	8	1.25	**756-M-1.25**	■	■	■	**766-M-1.25**	■	■	■
3.5	9	1.50	**756-M-1.50**	■	■	■	**766-M-1.50**	■	■	■
3.5	9	1.75	**756-M-1.75**	■	■	■	**766-M-1.75**	■	■	■
3.5	9	2.00	**756-M-2.00**	■	■	■	**766-M-2.00**	■	■	■

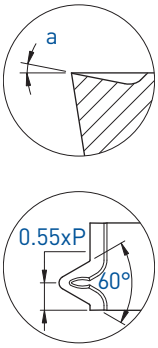
Pour de plus petits pas, voir page 1.65
Für kleinere Steigungen, siehe Seite 1.65
For smaller pitches, see page 1.65

7XX-XX-B

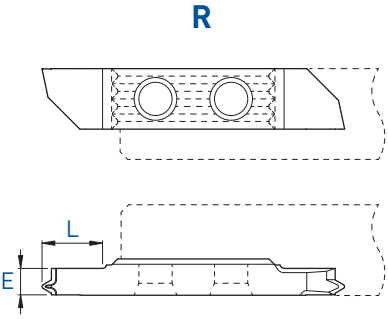
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

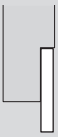
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

new



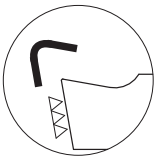
R





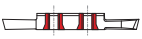
R

a	E	L	P	Art. N°	TiAlN	LOX
10°	2.5	8	0.80	**766ZX10-M-0.80**	■	□
	2.5	8	1.00	**766ZX10-M-1.00**	■	□
	2.5	8	1.25	**766ZX10-M-1.25**	■	□
	3.5	9	1.50	**766ZX10-M-1.50**	■	□
	3.5	9	1.75	**766ZX10-M-1.75**	■	□
	3.5	9	2.00	**766ZX10-M-2.00**	■	□



Arête de coupe honée
Gehonte Schneidkante
Honed edge

7XX-XX-B

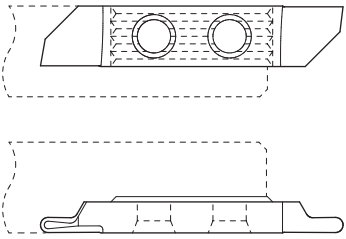


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

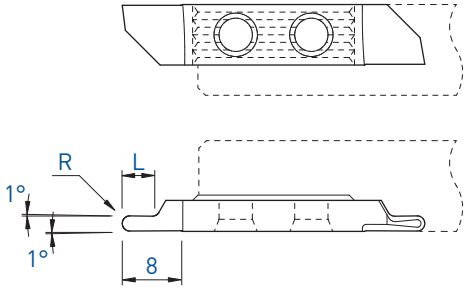
Plaquettes à rayon
Radius Wendeplatten
Radius inserts

757 / 767

L

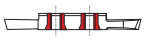


R



		L				R			
R	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
0.5	2.5	**757-R0.5**	■	■	■	**767-R0.5**	■	■	■
1.0	4	**757-R1.0**	■	■	■	**767-R1.0**	■	■	■
1.5	6	**757-R1.5**	■	■	■	**767-R1.5**	■	■	■
2.0	8	**757-R2.0**	■	■	■	**767-R2.0**	■	■	■

7XX-XX-B

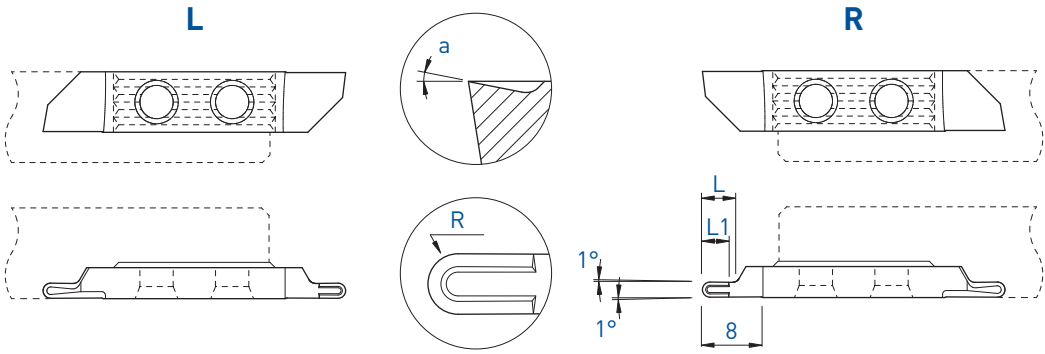


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

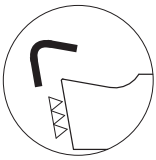
Plaquettes à rayon
Radius Wendeplatten
Radius inserts

757ZX / 767ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

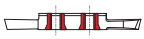
a	R	L	L1	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HN (µk10)
10°	1.0	4	3.5	**757ZX10-R1.0**	■	□		**767ZX10-R1.0**	■	□			
	1.5	6	4.0	**757ZX10-R1.5**	■	□		**767ZX10-R1.5**	■	□			
	2.0	8	4.5	**757ZX10-R2.0**	■	□		**767ZX10-R2.0**	■	□		■	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

7XX-XX-B

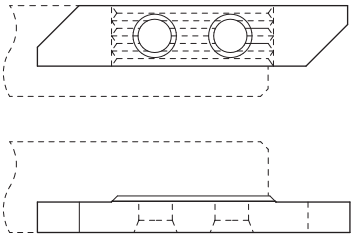


Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

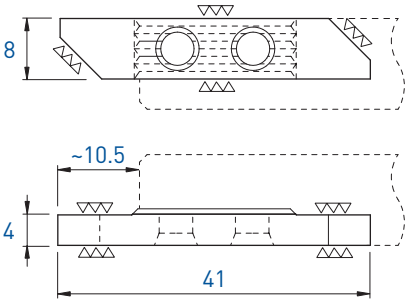
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

751-E / 761-E
751-EP / 761-EP

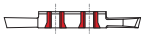
L



R



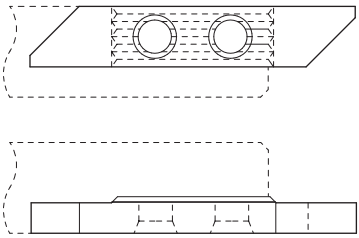
7XX-XX-B



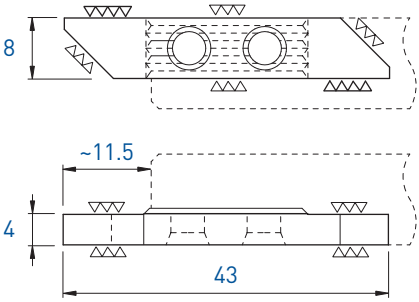
Sur demande pour serrage type B, voir page 1.03
Wahlweise mit B-Spannsystem, siehe Seite 1.03
On request for B clamping system, see page 1.03

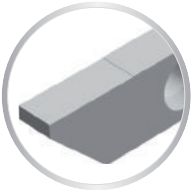
L			R		
Art. N°	N (µk20)	HN (µk10)	Art. N°	N (µk20)	HN (µk10)
751-E	■	■	761-E	■	■

L



R





Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L						R					
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
751-EP	■	■	■	□	□	■	761-EP	■	■	■	■	□	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Index

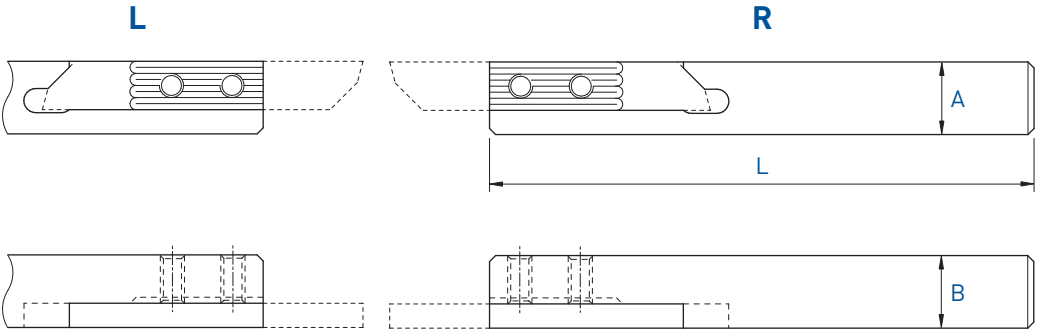
770 / 780
7050 / 7060
W750 / W760

Porte-outils spécifiques
Spezifische Werkzeughalter
Specific tool holders

Porte-outils spécifiques / Spezifische Werkzeughalter / Specific tool holders

Porte-outils
Halter
Holders

770 / 780

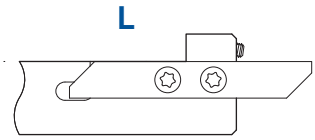


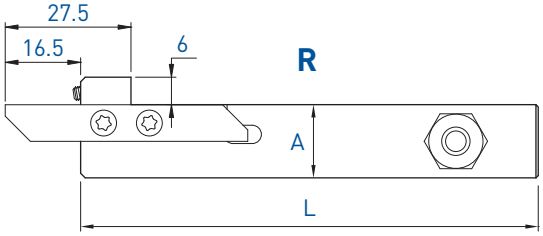
			L	R
A x B	L	Serrage Spannsystem Clamping	**Art. N°**	**Art. N°**
10 x 10	115	A	**770-10**	**780-10**
12 x 12	130	A	**770-12**	**780-12**
12 x 12	90	A	**770-12-90**	**780-12-90**
12.7 x 12.7	130	A	**770-12.7**	**780-12.7**
14 x 14	130	A	**770-14**	**780-14**
16 x 16	130	A	**770-16**	**780-16**
16 x 16	75	A	**770-16-75**	**780-16-75**
20 x 20	120	A	**770-20**	**780-20**
25 x 25	140	A	**770-25**	**780-25**

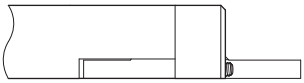
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

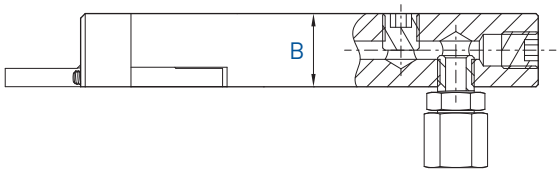
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

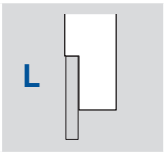
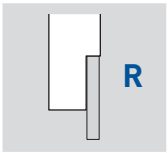
770-JET / 780-JET

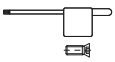




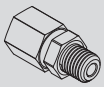




				
A x B	L	Serrage Spannsystem Clamping	**Art. N°**	**Art. N°**
16 x 16	100	A	**770-16-JET**	**780-16-JET**



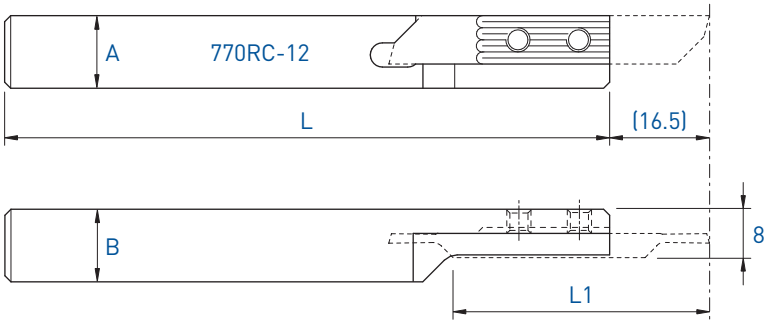
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

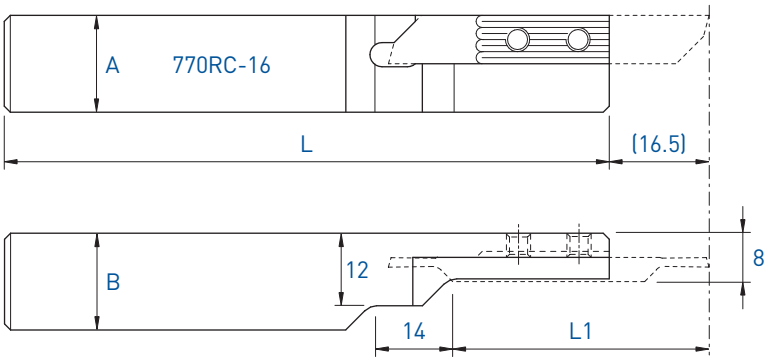
Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	**Art. N°**	**Art. N°**
770-JET / 780-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

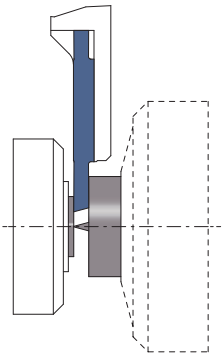
Porte-outils / Halter / Holders

Coupe déportée / Versetztes Schneiden / Cut off line

770RC







Utiliser des plaquettes type 771R
WSP Typ 771R verwenden
Use inserts type 771R

Voir pages 1.138 - 1.141
Siehe Seiten 1.138 - 1.141
See pages 1.138 - 1.141

L (R)

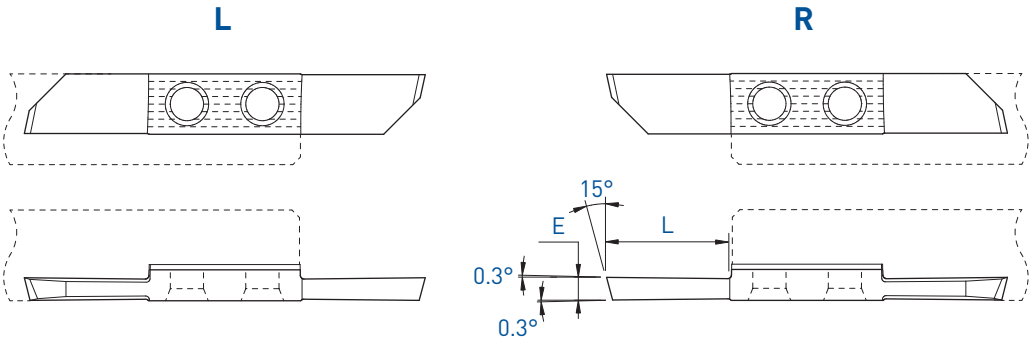
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

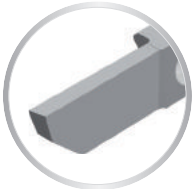
A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
12 x 12	130	42	A	**770RC-12**
16 x 16	130	42	A	**770RC-16**

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Tronçonnage
Abstechen
Parting off

771 / 781

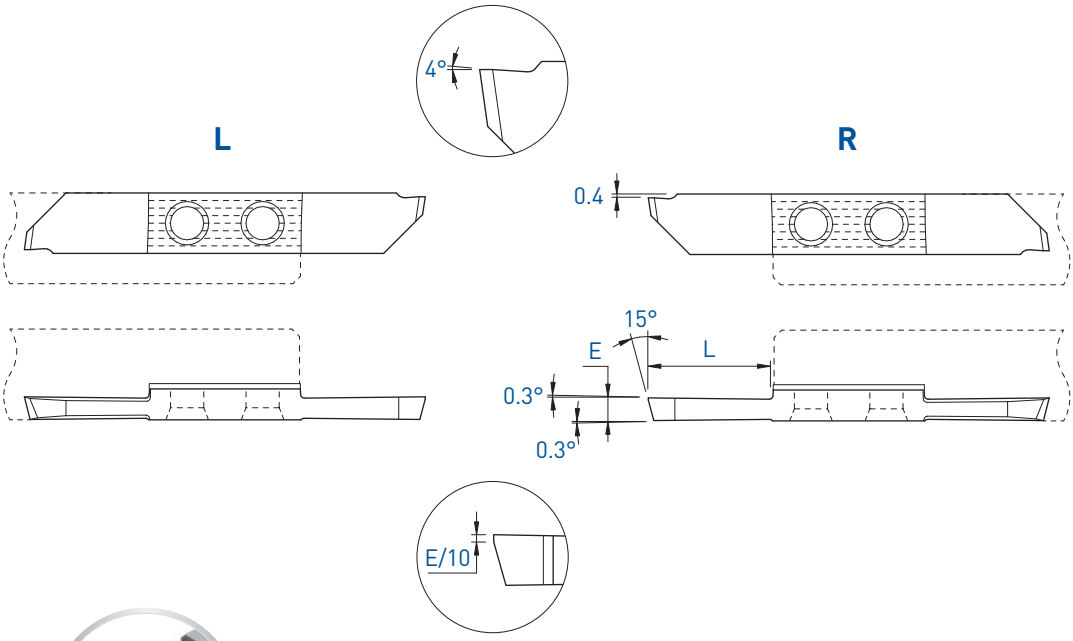


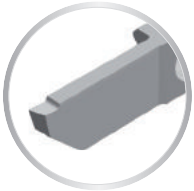


		L				R			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	16	-				781-1.5	■	■	■
2.0	16	771-2.0	■	■	■	781-2.0	■	■	■
2.5	16	771-2.5	■	■	■	781-2.5	■	■	■
3.0	16	771-3.0	■	■	■	781-3.0	■	■	■
3.5	16	771-3.5	■	■	■	781-3.5	■	■	■

Tronçonnage
Abstechen
Parting off

771XF / 781XF

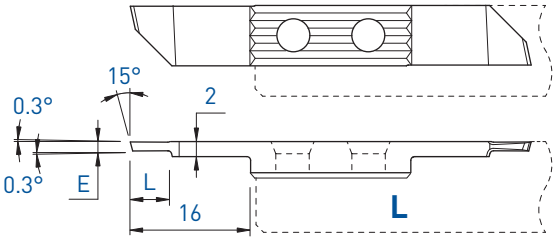




		L				R			
E	L	Art. N°	TiAlN	TiN	N (µK20)	Art. N°	TiAlN	TiN	N (µK20)
2.0	16	-				781XF-2.0	■	■	■
2.5	16	771XF-2.5	■	■	■	781XF-2.5	■	■	■
3.0	16	771XF-3.0	■	■	■	781XF-3.0	■	■	■
3.5	16	771XF-3.5	■	■	■	781XF-3.5	■	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Cut R

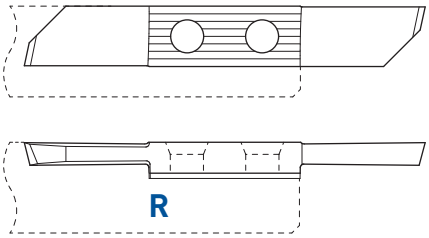


L (R)

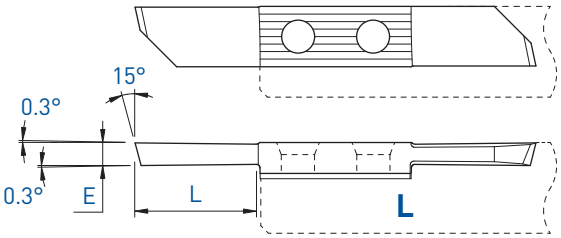
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

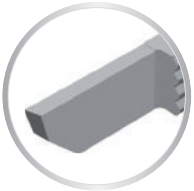
E	L	Art. N°	TiAlN	TiN	N (µk20)
1.0	5	**771R-1.0**	■	■	■
1.2	5	**771R-1.2**	■	■	■
1.5	8.5	**771R-1.5**	■	■	■

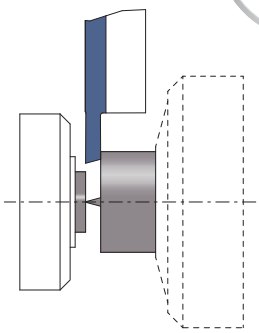
Cut L



Cut R







R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

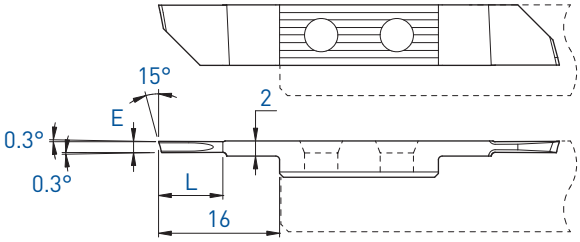
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	16	**781L-2.0**	■	■	■	**771R-2.0**	■	■	■
2.5	16	**781L-2.5**	■	■	■	**771R-2.5**	■	■	■
3.0	16	**781L-3.0**	■	■	■	**771R-3.0**	■	■	■
3.5	16	**781L-3.5**	■	■	■	**771R-3.5**	■	■	■

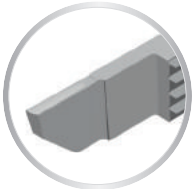
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

771RU

Cut R

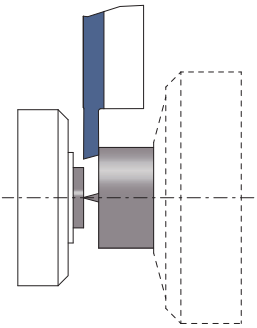




L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	TiAlN	TiN	N (µk20)
1.0	5	**771RU-1.0**	■	□	■
1.5	8.5	**771RU-1.5**	■	□	■

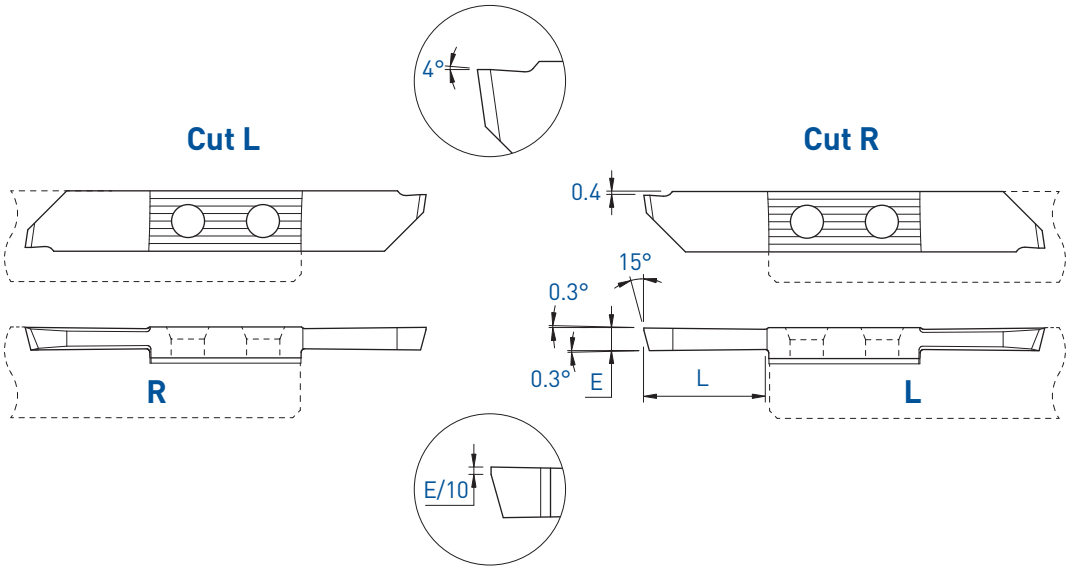


■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

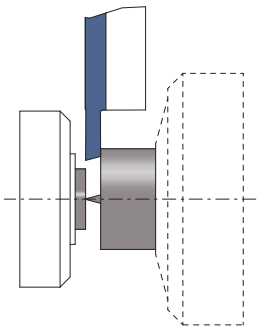
Tronçonnage / Abstechen / Parting off

Coupe déportée / Versetztes Schneiden / Cut off line

781LXF / 771RXF



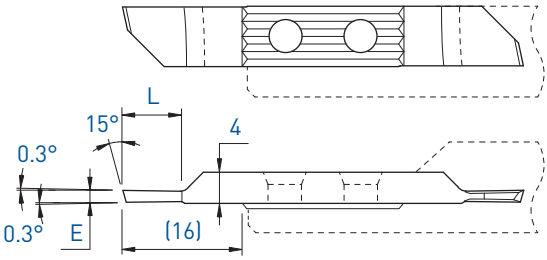
		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	16	-				771RXF-2.0	■	■	■
2.5	16	781LXF-2.5	■	■	■	771RXF-2.5	■	■	■
3.0	16	781LXF-3.0	■	■	■	771RXF-3.0	■	■	■
3.5	16	781LXF-3.5	■	■	■	771RXF-3.5	■	■	■

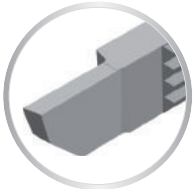


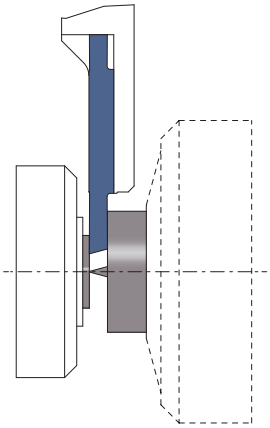
Tronçonnage | **Coupe déportée**
Abstechen | **Versetztes Schneiden**
Parting off | **Cut off line**

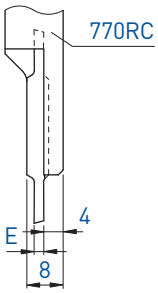
771RD

Cut R









L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

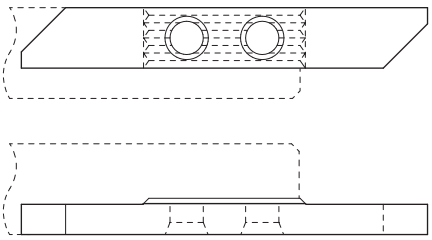
E	L	Art. N°	TiAlN	TiN	N (µk20)
1.2	5	**771RD-1.2**	■	■	■
1.5	7.5	**771RD-1.5**	■	■	■
2.0	10	**771RD-2.0**	■	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

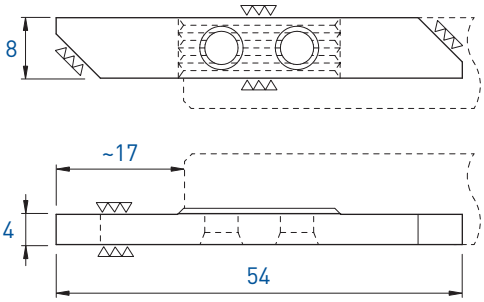
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

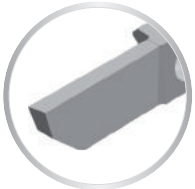
771-E / 781-E

L



R

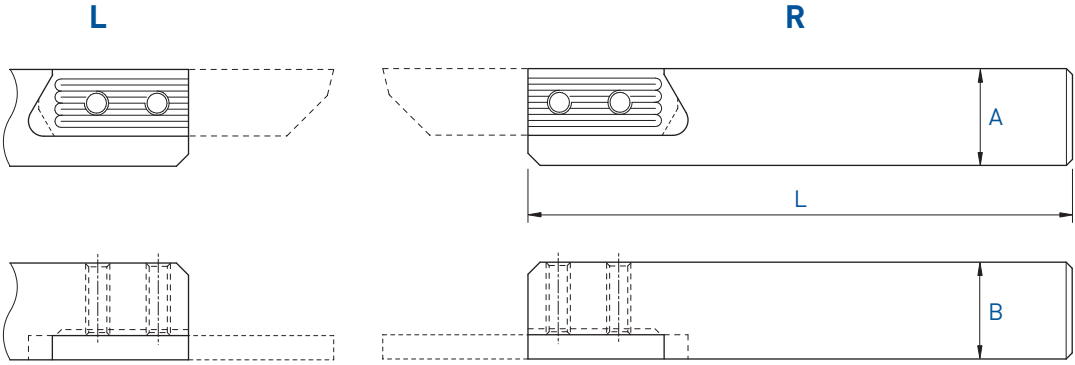




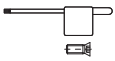
L		R	
Art. N°	N (µk20)	Art. N°	N (µk20)
771-E	■	781-E	■

Porte-outils
Halter
Holders

7050 / 7060



				
A x B	L	Serrage Spannsystem Clamping	**Art. N°**	**Art. N°**
16 x 16	130	A	**7050-16**	**7060-16**
16 x 16	75	A	**7050-16-75**	**7060-16-75**
20 x 20	120	A	**7050-20**	**7060-20**
25 x 25	140	A	**7050-25**	**7060-25**

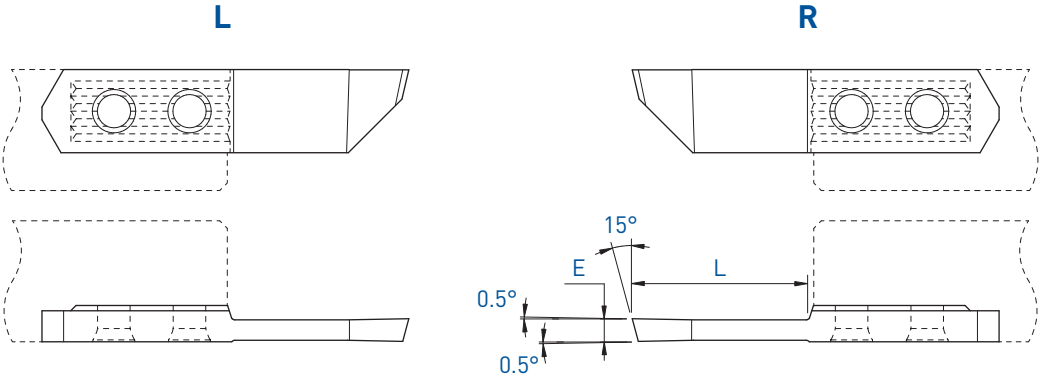


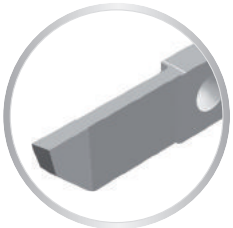
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

7051 / 7061

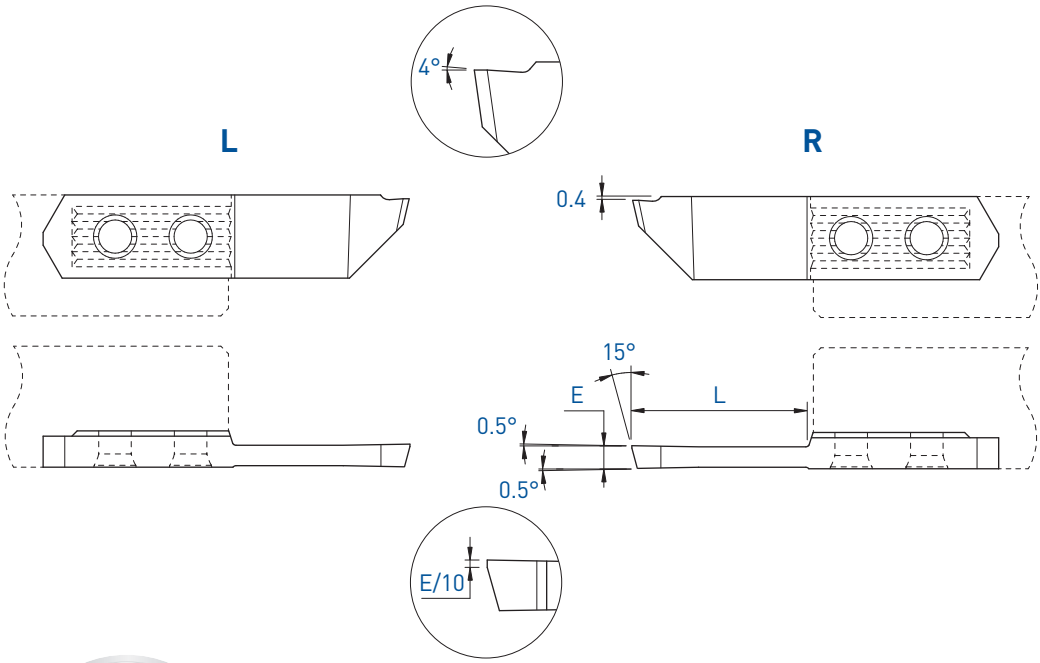


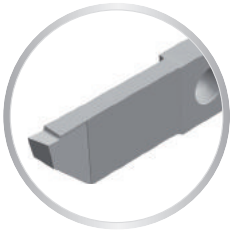


		L				R			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.5	22	-				7061-2.5	■	■	■
3.0	22	7051-3.0	■	■	■	7061-3.0	■	■	■
3.5	22	-				7061-3.5	■	■	■

Tronçonnage
Abstechen
Parting off

7051XF / 7061XF





		L				R			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
3.0	22	**7051XF-3.0**	■	■	■	**7061XF-3.0**	■	■	■

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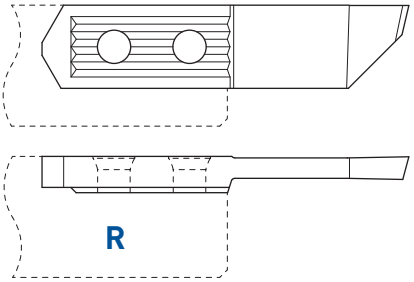
Tronçonnage
Abstechen
Parting off

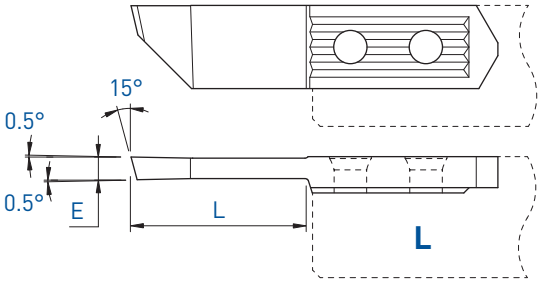
Coupe déportée
Versetztes Schneiden
Cut off line

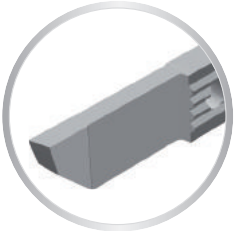
7061L / 7051R

Cut L

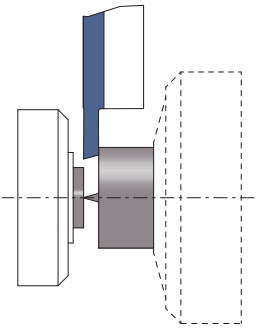


Cut R





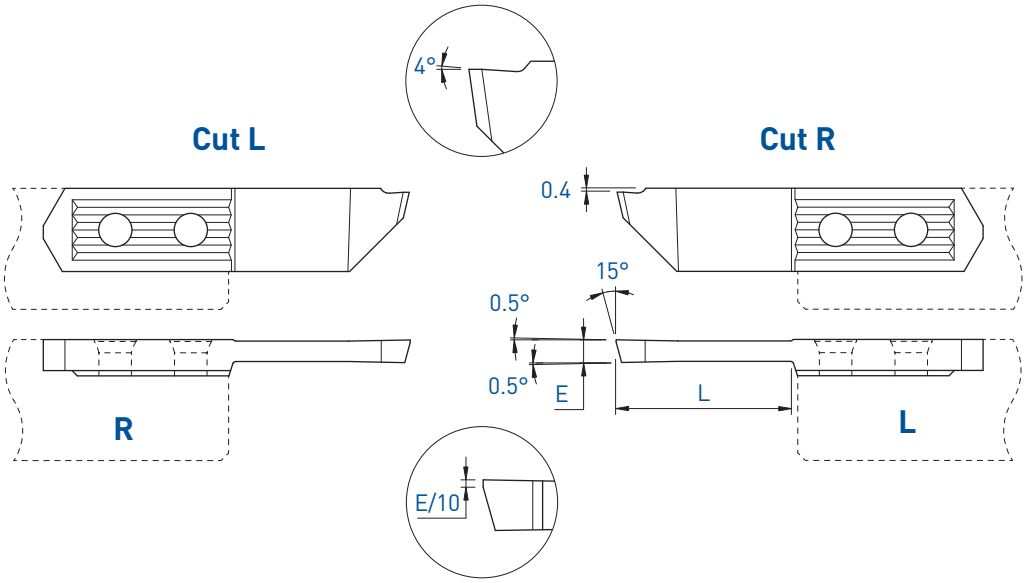
		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.5	22	-				7051R-2.5	■	■	■
3.0	22	7061L-3.0	■	■	■	7051R-3.0	■	■	■
3.5	22	-				7051R-3.5	■	■	■

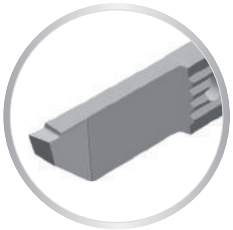


Tronçonnage
Abstechen
Parting off

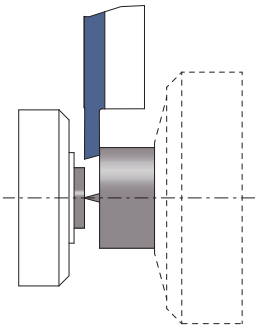
Coupe déportée
Versetztes Schneiden
Cut off line

7061LXF / 7051RXF





		R (L) Coupe à gauche déportée Versetztes Linksschneiden Left cut off line				L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
3.0	22	7061LXF-3.0	■	■	■	7051RXF-3.0	■	■	■



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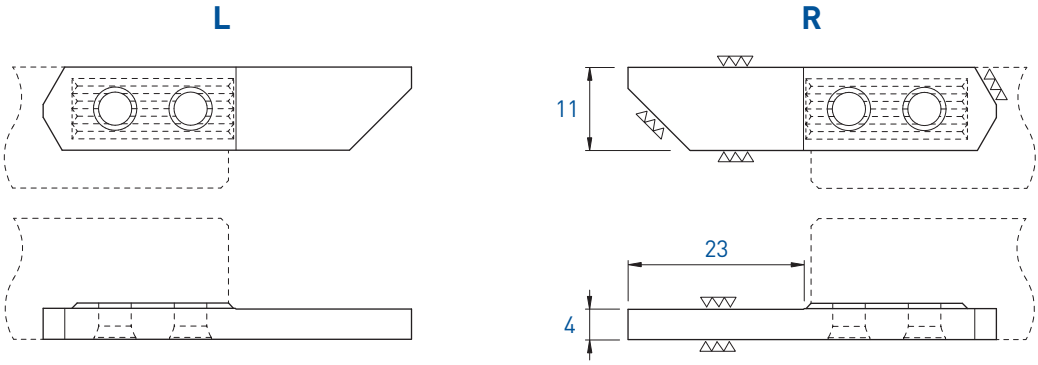
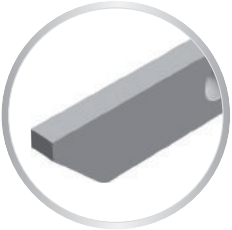
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

7051-E / 7061-E

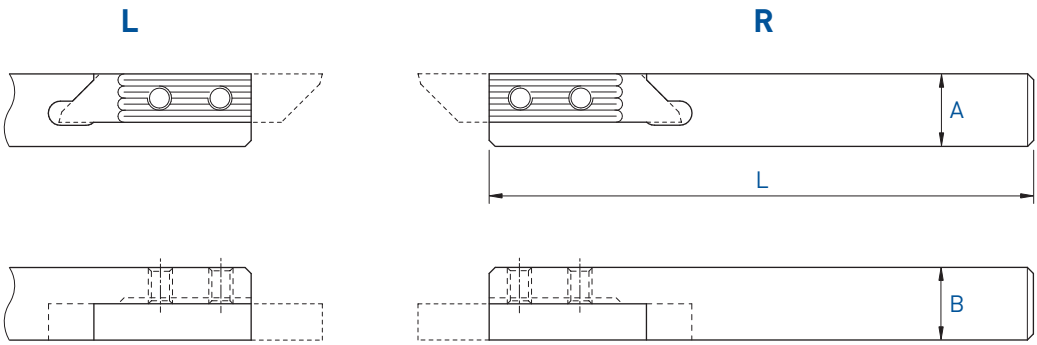




L		R	
Art. N°	N (µk20)	Art. N°	N (µk20)
7051-E	■	7061-E	■

Porte-outils
Halter
Holders

W750 / W760



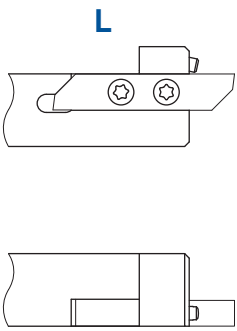
			L	R
A x B	L	Serrage Spannsystem Clamping	**Art. N°**	**Art. N°**
12 x 12	130	A	**W750-12**	**W760-12**
16 x 16	130	A	**W750-16**	**W760-16**
20 x 20	120	A	**W750-20**	**W760-20**

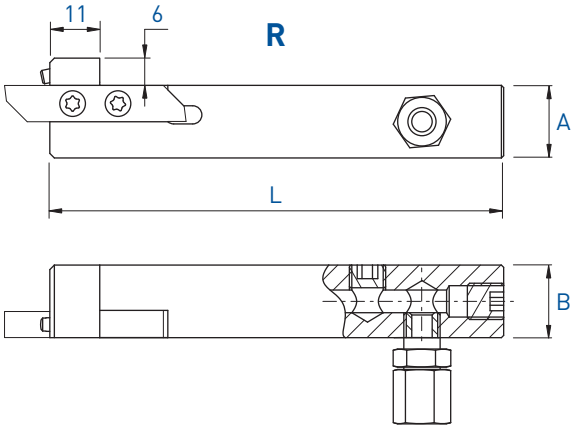
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

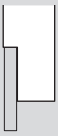
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

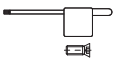
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

W750-JET / W760-JET

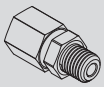




A x B	L	Serrage Spannsystem Clamping	L  Art. N°	R  Art. N°
16 x 16	100	A	**W750-16-JET**	**W760-16-JET**
20 x 20	100	A	**W750-20-JET**	**W760-20-JET**



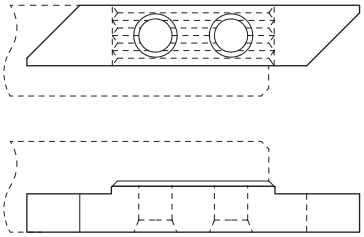
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

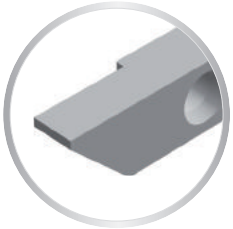
Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°	Buse Düse Nozzle  Art. N°
W750-JET / W760-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

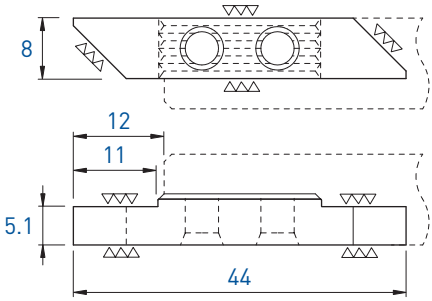
W751-E5 / W761-E5
W751-EP5 / W761-EP5

L

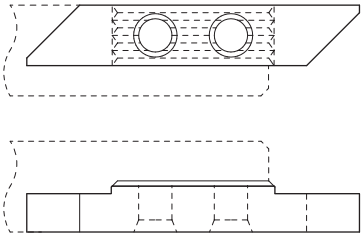


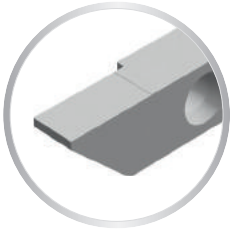


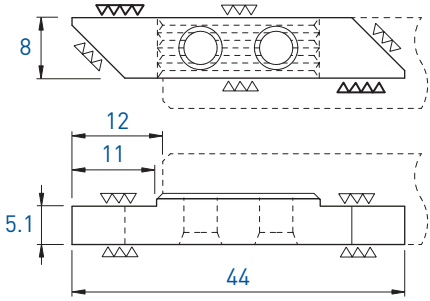
R



L	R
Art. N°	N (µk20)	Art. N°	N (µk20)
W751-E5	■	W761-E5	■







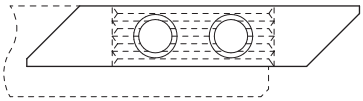
L	R
Art. N°	N (µk20)	Art. N°	N (µk20)
W751-EP5	■	W761-EP5	■

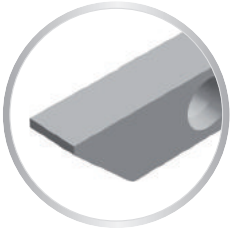
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

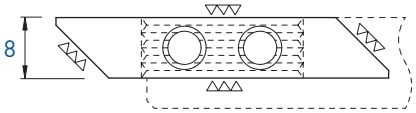
W751-E6 / W761-E6
W751-EP6 / W761-EP6

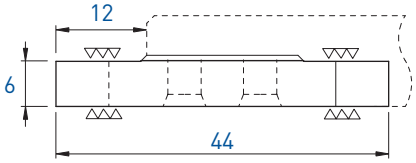
L



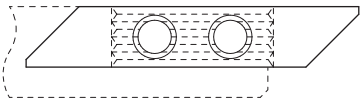


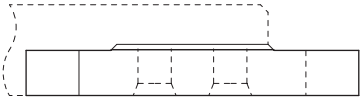
R

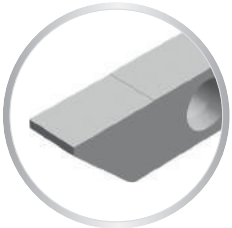


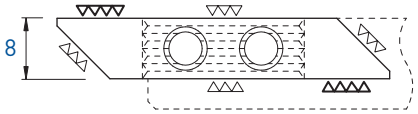


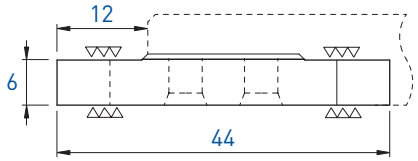
L		R	
Art. N°	N (µk20)	Art. N°	N (µk20)
W751-E6	■	W761-E6	■









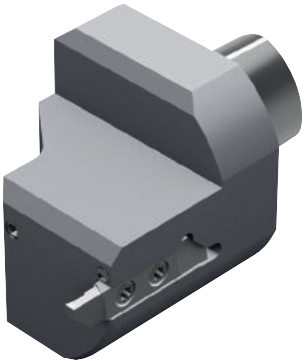


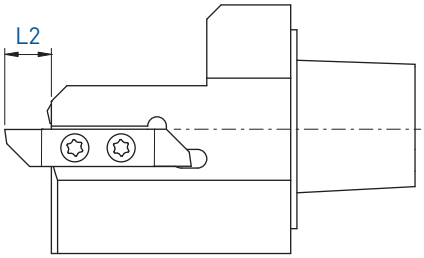
L		R	
Art. N°	N (µk20)	Art. N°	N (µk20)
W751-EP6	■	W761-EP6	■

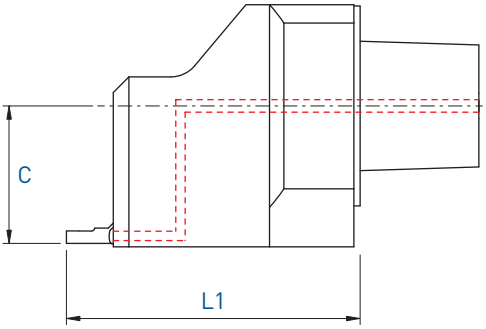
Interface polygonale PSC
Polygonal Schnittstelle PSC
Polygonal interface PSC

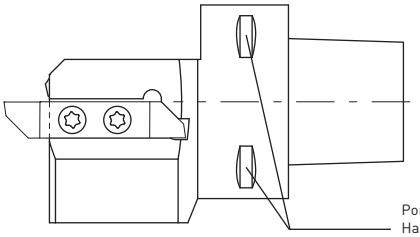
R

C3 / C4









Porte-outils pour changeur automatique sur demande.
Halter für Werkzeugwechsler auf Anfrage.
Holders for tool changer on request.

Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buse Düse Nozzle Art. N°
C3	740	> 1.32	47	22	7.5	**C3-740-22047**	**JJ-M3X6-D1.5**
C3	760	> 1.78	47	22	10	**C3-760-22047**	**JJ-M3X6-D1.5**
C4	760	> 1.78	62	27	10	**C4-760-27062**	**JJ-M3X6-D1.5**

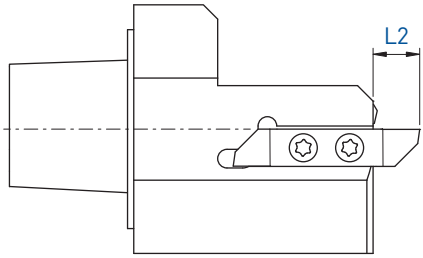
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

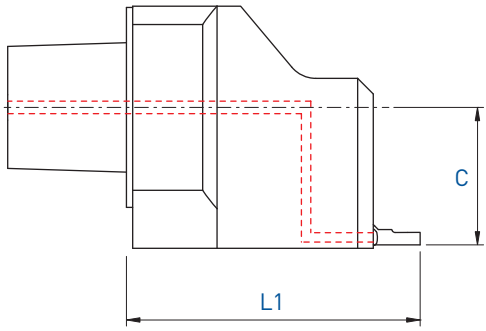
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Interface polygonale PSC
Polygonal Schnittstelle PSC
Polygonal interface PSC

L

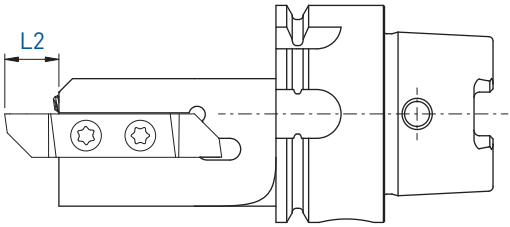
C4

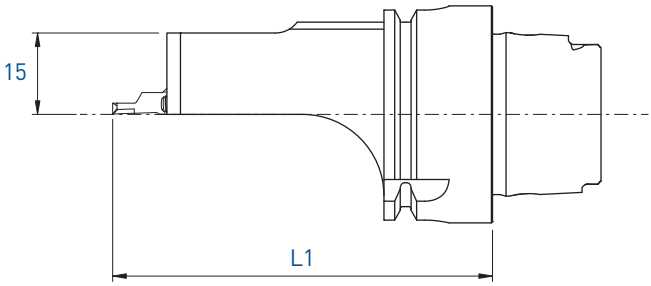




Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buse Düse Nozzle Art. N°
C4	750	> 1.78	62	27	10	**C4-750-27062**	**JJ-M3X6-D1.5**

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

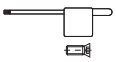




Utilisable sur toutes les machines avec broches HSK-T ou HSK-A
Auf allen Maschinen mit HSK-T oder HSK-A verwendbar
Applicable on all machines with HSK-T or HSK-A spindle

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	Art. N°	Buse Düse Nozzle Art. N°
740	> 1.32	65	7.5	**HSK-T40-740-0065-JET** **HSK-A40-S191-740-0065-JET***	**JJ-M3X6-D1.5**
760	> 1.78	70	10	**HSK-T40-760-0070-JET** **HSK-A40-S191-760-0070-JET***	**JJ-M3X6-D1.5**

* pour machines Bumotec
für Bumotec Maschinen
for Bumotec machines

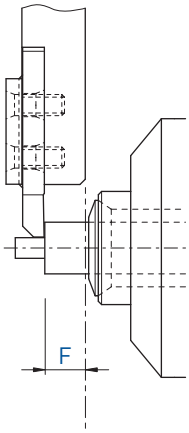


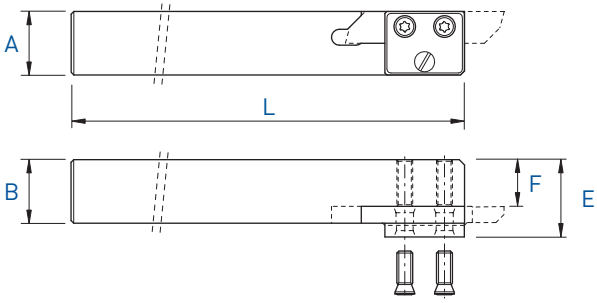
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour usinage déporté
Halter für versetzte Bearbeitung
Holders for shifted machining

R

740Z / 760Z



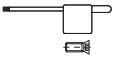


740 Series

A x B	L	F	E	**Art. N°**	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	9.5	14.5	**740Z-12**	741 - 747	> 1.32
16 x 16	130	13.5	18.5	**740Z-16**	741 - 747	> 1.32

760 Series

A x B	L	F	E	**Art. N°**	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	8	15	**760Z-12**	761 - 767	> 1.78
16 x 16	130	12	19	**760Z-16**	761 - 767	> 1.78



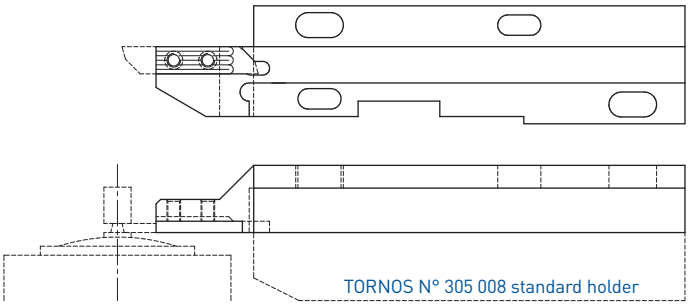
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

R

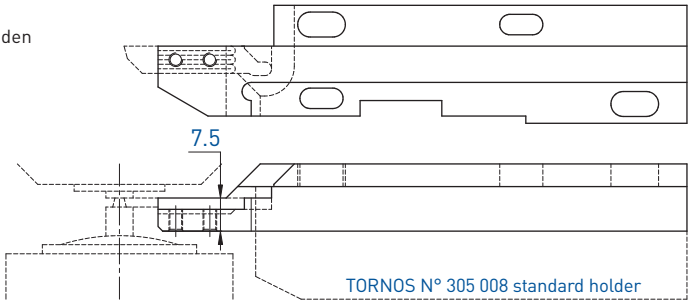
DECO 7/10
EvoDECO 10

Coupe à droite
Rechtsschneiden
Right hand cut

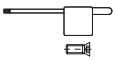


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-DECO10	741 - 747	> 1.32

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-DECO10	731R / 731N	1.39 - 1.45



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

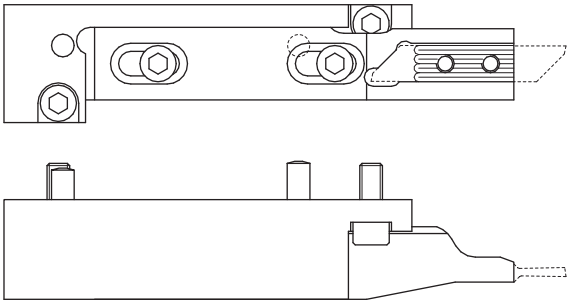
Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

R

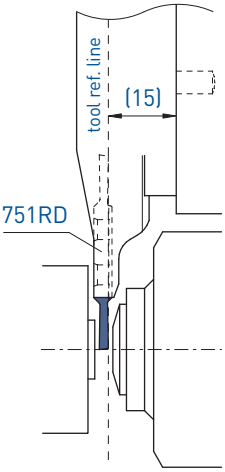
DECO 7/10
EvoDECO 10

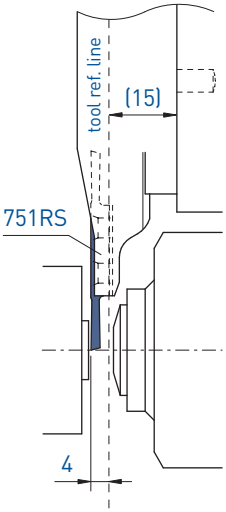
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

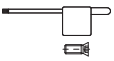
Réglable en longueur
Längseinstellbar
Adjustable length



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750R-DECO10	751R / 751N	1.88 - 1.99







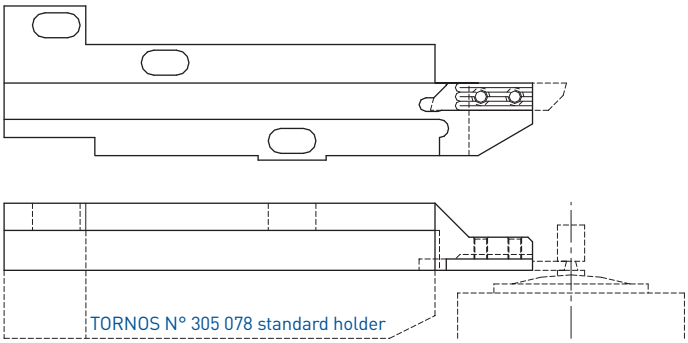
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

L

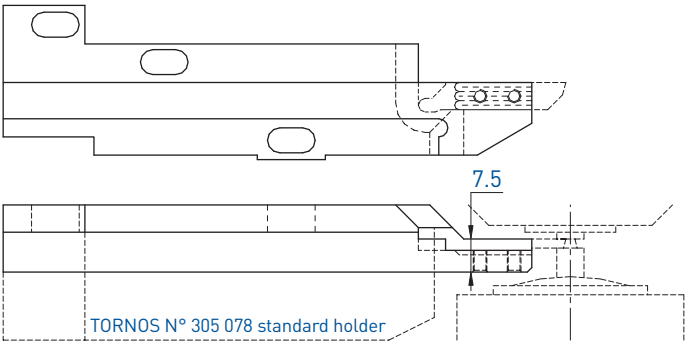
DECO 7/10
EvoDECO 10

Coupe à gauche
Linksschneiden
Left hand cut

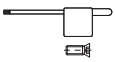


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730-DECO10	731 - 737	> 1.32

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740L-DECO10	741L / 741N	1.39 - 1.45



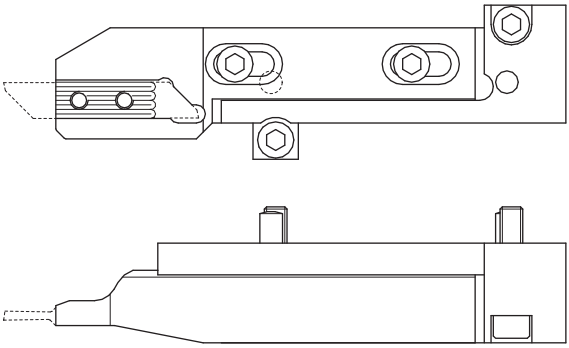
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

L

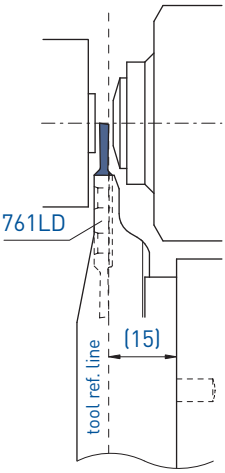
DECO 7/10
EvoDECO 10

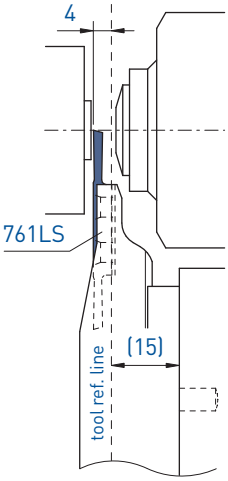
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

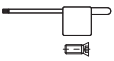


Réglable en longueur
Längseinstellbar
Adjustable length

Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
760L-DECO10	761L / 761N	1.88 - 1.98





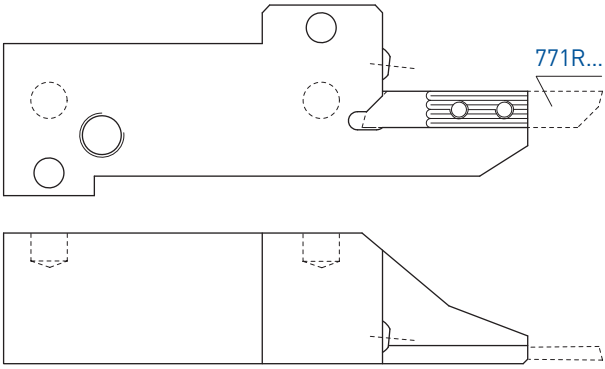


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

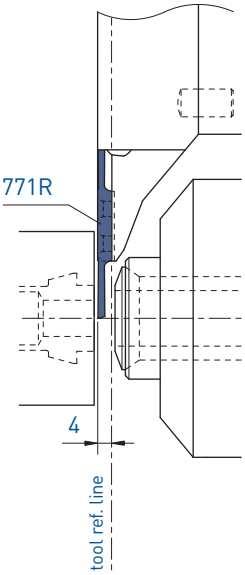
Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

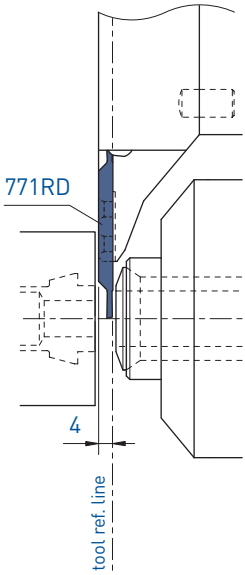
DECO 13
EvoDECO 16

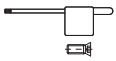
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DECO13	771R	1.138 - 1.141





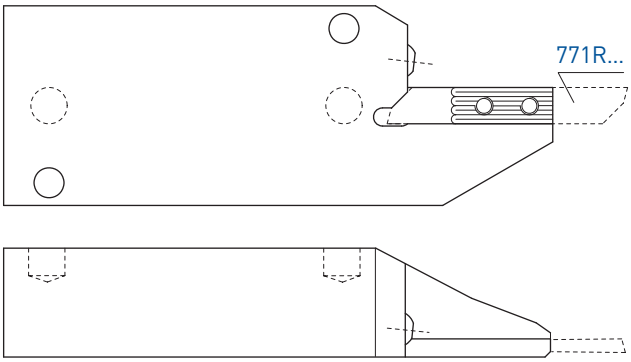


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

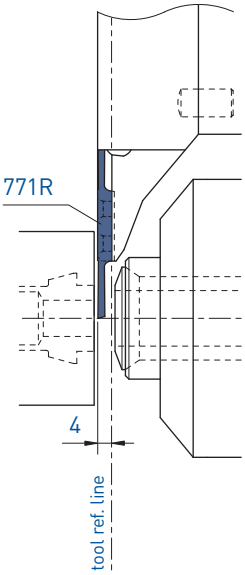
Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

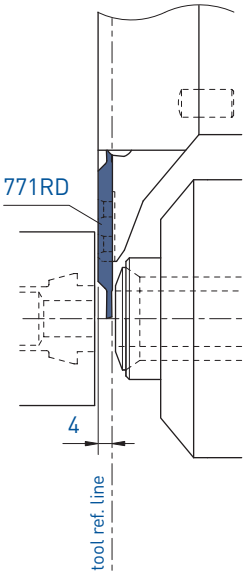
DECO 20
EvoDECO 20/32

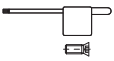
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DECO20	771R	1.138 - 1.141



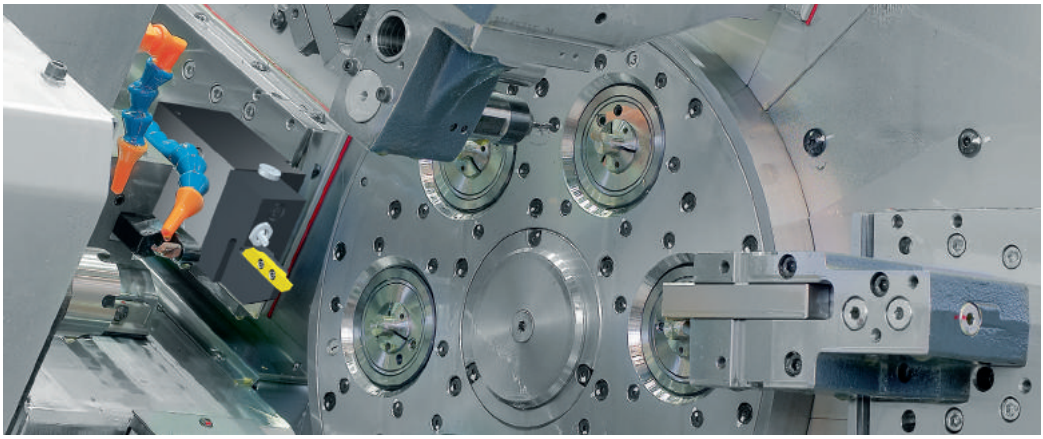


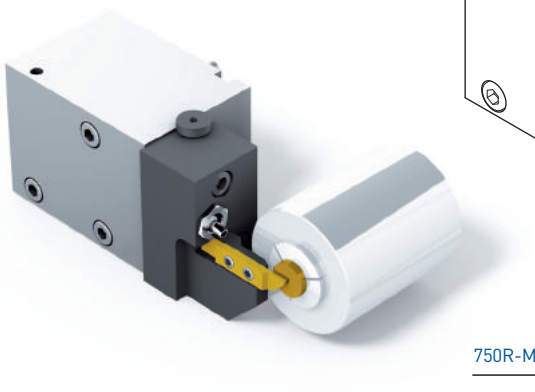


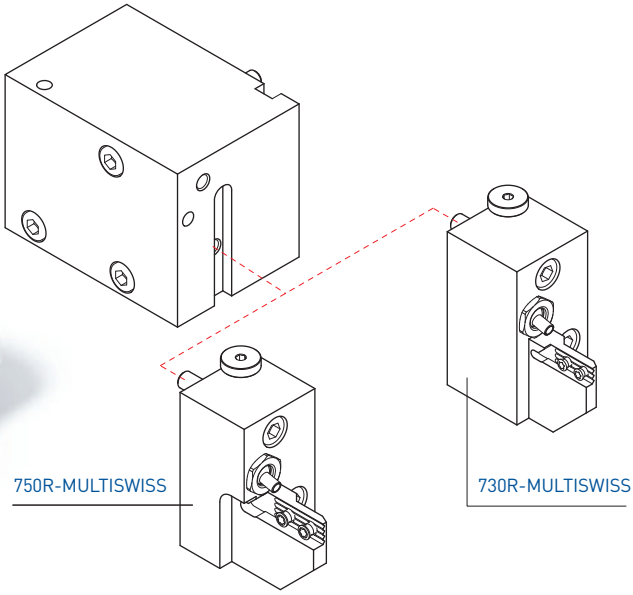
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

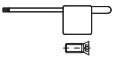
Porte-outils pour machine Tornos
Halter für Tornos Maschine
Holders for Tornos machine

MultiSwiss 6x16



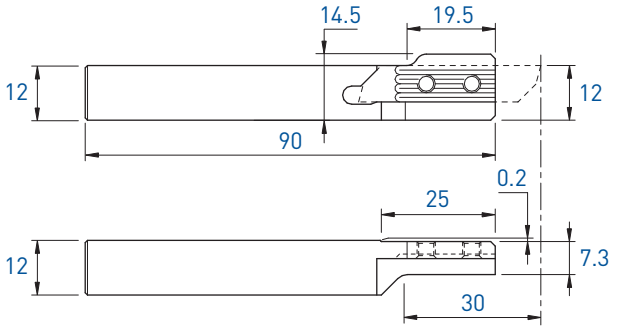




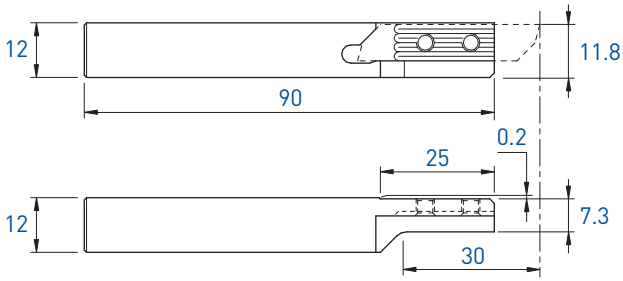


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

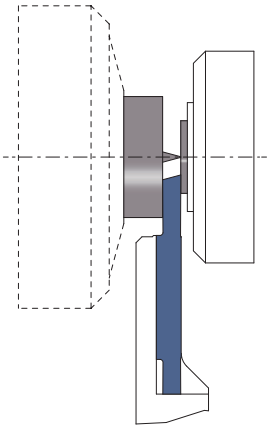
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-MULTISWISS	731R / 731N	1.39 - 1.45
750R-MULTISWISS	751R / 751N	1.88 - 1.99

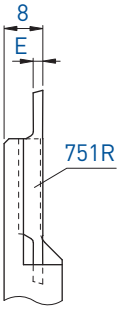


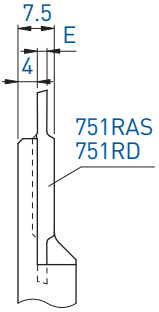
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12	751R	1.88 - 1.96



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12-H11.8	751R	1.88 - 1.96

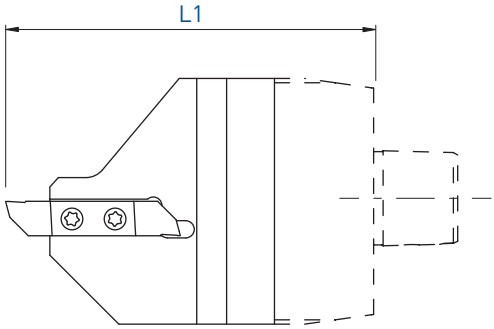


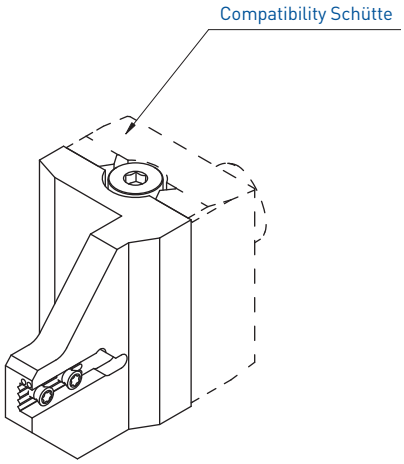


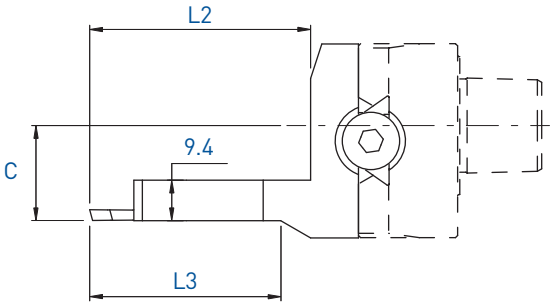


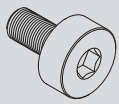
(p. 1.98 - 1.99)

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.







Plaquettes type WSP Typ Inserts type	Pages Seiten Pages	L1	C	L2	L3	Art. N°	Compatibility Schütte	 Art. N°
761-767	> 1.78	86	22	51	44	**DT20-760-JET**	***C3-75870949***	**V-M6X0.5-14-L18**
		83	27.5	48	–	**DT30-760-JET**	***C4-75836783***	

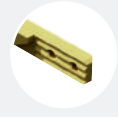
Vis et clés de rechange
Ersatzschrauben und Schlüsseln
Spare screws and keys

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)		Serrage type B Spannsystem Typ B Clamping system type B	
710	710-6 / - NOVIBRA	V-M2.5X5.8-T8	C-T8	-	-
	710-7 / - NOVIBRA	V-M2.5X6.5-T8			
	710-8 / - NOVIBRA	V-M2.5X7.8-T8			
	710-10 - 710-12				
720	720-7	V-M2.5X6.5-T8	C-T8	-	-
	720-8 - 720-12	V-M2.5X7.8-T8			
730	730-7 /- JET / -NOVIBRA	V-M3X7-T8	C-T8	-	-
	730-8 / -NOVIBRA			V-M2.5X7.8-T8	C-T8
	730-10 - 730-20			-	-
	730-DECO10				
	730R-DECO10				
	730RC	V-M3X5.5-T8			
740	740-7 /-JET /-NOVIBRA	V-M3X7-T8	C-T8	-	-
	740-8 /-NOVIBRA - 740-12 /-JET /-NOVIBRA			V-M2.5X7.8-T8	C-T8
	740-16 - 740-20			-	-
	740/730-D				
	740-C	V-M3X5.5-T8			
	740-DECO10	V-M3X7-T8			
	740L-DECO10				
	740-Z	V-M3X9-T8			

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)		Serrage type B Spannsystem Typ B Clamping system type B	
750	750-10 - 750-12 /-JET	V-M4X9-T15	C-T15	-	-
	750-10-AB			V-M3X10-BN21	C-6P-2.0
	750-12-AB			V-M3X8-BN11	C-6P-2.5
	750-12.7 - 750-14			V-M3X10-BN11	
	750-16			V-M3X12-BN11	
	750-20			V-M3X16-BN11	
	750RAS - 750-RC	V-M4X7.3-T15		-	-
	750R-DECO10	V-M4X5.6-T15			
760	760-10 - 760-12 /-JET / -NOVIBRA / 760/750	V-M4X9-T15	C-T15	-	-
	760-10-AB			V-M3X10-BN21	C-6P-2.0
	760-12-AB			V-M3X8-BN11	C-6P-2.5
	760-12.7 - 760-14			V-M3X10-BN11	
	760-16			V-M3X12-BN11	
	760-20			V-M3X16-BN11	
	760LC	V-M4X7.3-T15		-	-
	760L-DECO10	V-M4X5.6-T15			
	760-Z	V-M4X12-T15			

Vis et clés de rechange
Ersatzschrauben und Schlüsseln
Spare screws and keys

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)		Serrage type B Spannsystem Typ B Clamping system type B	
770	770 / -JET	**V-M4X9-T15**	**C-T15**	-	-
	770RC	**V-M4X7.3-T15**			
780	780 / -JET	**V-M4X9-T15**	**C-T15**	-	-
7050	7050	**V-M4X9-T15**	**C-T15**	-	-
7060	7060	**V-M4X9-T15**	**C-T15**	-	-
W	W750 / W760 /-JET	**V-M4X11.5-T15**	**C-T15**	-	-
C3	C3-740	**V-M3X7-T8**	**C-T8**	-	-
	C3-760	**V-M4X9-T15**	**C-T15**		
C4	C4-750	**V-M4X9-T15**	**C-T15**	-	-
	C4-760				
HSK	HSK-T40-740	**V-M3X7-T8**	**C-T8**	-	-
	HSK-T40-760	**V-M4X9-T15**	**C-T15**		
MultiSwiss	730R-MULTISWISS	**V-M3X5.5-T8**	**C-T8**	-	-
	750R-MULTISWISS	**V-M4X7.3-T15**	**C-T15**		
Schütte	DT20-760-JET	**V-M4X9-T15**	**C-T15**	-	-
	DT30-760-JET				

	pour machines à cames für kurvengesteuerte Maschinen for cam driven machines		pour machines CNC für CNC-Maschinen for CNC driven machines	
	L		L	R
	710 710SF 710-NOVIBRA	> 2.06	730 730-NOVIBRA	740 740SF 740-NOVIBRA > 2.10
	711SF	> 2.08		741SF > 2.13
	712SF	> 2.08		742SF > 2.13
	713SF	> 2.09		743SF > 2.15
			736SF	746SF > 2.17
				748SF > 2.18
				749SF > 2.18
	711-ESF	> 2.09	731-ESF	741-ESF > 2.19

Index

SF Series

Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line

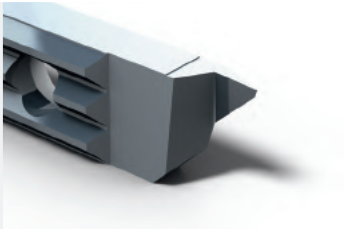
Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

new

N (µK20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace, résistante aux conditions défavorables, recommandée pour des opérations de coupe dans des matières ne nécessitant aucun revêtement
- zähe Freinkornsorte, in ungünstige Bearbeitungs-konditionen widerstandsfähig, für Schnittbearbeitung empfohlen, die keine Beschichtung erfordern
- tough micro-grain grade, suitable for unfavorable machining conditions, suitable for cutting in material that do not necessitate any tool coating

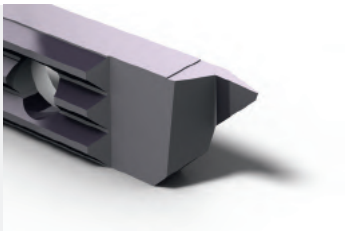


new

TAF

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

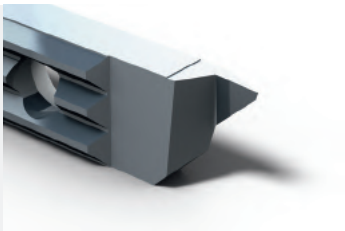
- nuance tenace résistante aux conditions défavorables, recommandée pour des opérations de coupes dans les aciers et aciers inoxydables.
- zähe widerstandsfähige Sorte in ungünstigen Bearbei-tungskonditionen, für Schnittbearbeitung in Stahl und rostfreiem Stahl empfohlen
- tough grade, resistant to unfavorable machining conditions, suitable for cutting of steel and stainless steel



HN (µK10)

non revêtu
unbeschichtet
uncoated

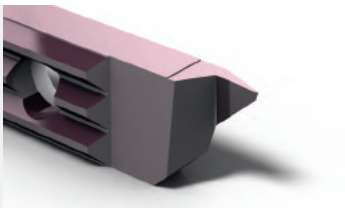
- nuance micro-grain, bonne résistance à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement
- verschleissfeste Feinkornsorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern
- wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating



HTC

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, low friction ratio, recommended for roughing and finishing

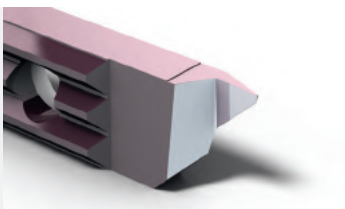


conseillée pour l'usinage de la matière 20AP
für Bearbeitung von 20AP geeignet
suitable for machining of 20AP material

HTC-RE

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance identique à HTC avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTC, after coating grounded clearance, recommended for finishing



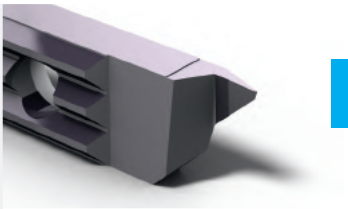
conseillée pour l'usinage de la matière 20AP
für Bearbeitung von 20AP geeignet
suitable for machining of 20AP material

Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

HTAF

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, recommended for roughing and finishing

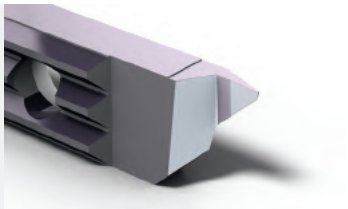


conseillée pour l'usinage des matières Finemac et inox 4c27a
für Bearbeitung von Finemac und 4c27a-Rostfreier Stahl geeignet
suitable for machining of Finemac and 4c27a stainless steel

HTAF-RE

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTAF, after coating grounded clearance, recommended for finishing



recommandée pour les matières Finemac et inox 4c27a
für Bearbeitung von Finemac und 4c27a-Rostfreier Stahl geeignet
suitable for machining of Finemac and 4c27a stainless steel

HTAXF

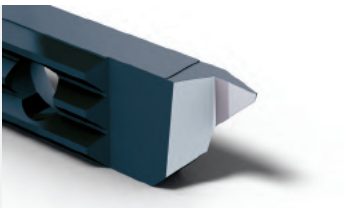
µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance complémentaire, résistante à l'usure et à la température pour l'usinage ébauche et finition des matières inox 304, 316L, 317L, 904, Phynox
  Aciers alliés contenant: Chrome Nickel, Vanadium, molybdène...
- komplementäre Sorte, verschleissfest und temperaturbeständig. Für Schruppen und Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox
  Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, wear and temperature resistant for roughing and finishing of following materials: Inox 304, 316L, 317L, 904, Phynox
  Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...

HTAXF-RE

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

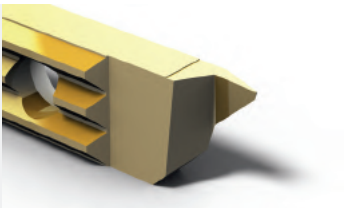
- nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie HTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as HTAXF, after coating grounded clearance, recommended for finishing



HTiN

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition
- verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen
- wear resistant grade, low friction ratio, recommended for roughing and finishing

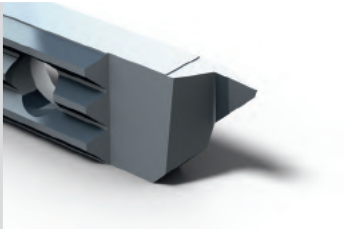


Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

XN (µK01)

non revêtu
unbeschichtet
uncoated

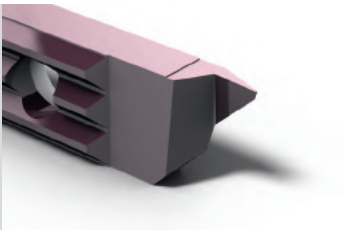
- nuance micro-grain très résistante à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages nécessitant aucun revêtement
- sehr verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern
- wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating



XTC

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

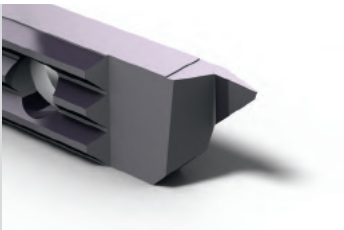
- nuance très résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations de finition
- sehr verschleissfeste Sorte, geringer Reibwert, für Schlichtbearbeitung empfohlen
- very wear resistant grade, low friction ratio, recommended for finishing



XTAF

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

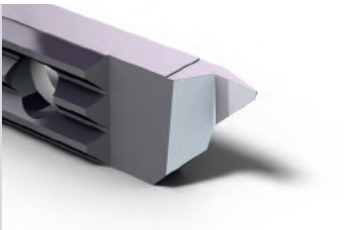
- nuance très résistante à l'usure, recommandée pour des opérations de finition, conseillée pour l'usinage des matières très abrasives
- sehr verschleissfeste Sorte, für Schlichtbearbeitung empfohlen, für die Bearbeitung von sehr abrasive Rohstoffe geeignet
- very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials



XTAF-RE

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

- nuance identique à XTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAF, after coating grounded clearance, recommended for finishing



Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

XTAXF

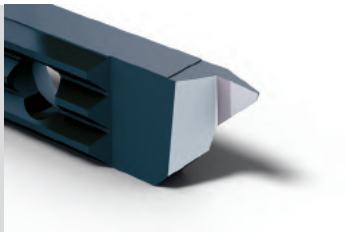
µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

- nuance complémentaire très résistante à l'usure et à la température pour la finition des matières inox 304, 316L, 317L, 904, Phynox
  Aciers alliés contenant: Chrome Nickel, Vanadium, molybdène...
- komplämentere Sorte, sehr verschleissfest und temperaturbeständig. Für Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox
  Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, very wear and temperature resistant for finishing of following materials: Inox 304, 316L, 317L, 904, Phynox
  Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...

XTAXF-RE

µK01 + revêtement PVD
µK01 + PVD Beschichtung
µK01 + PVD coating

- nuance identique à XTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie XTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as XTAXF, after coating grounded clearance, recommended for finishing



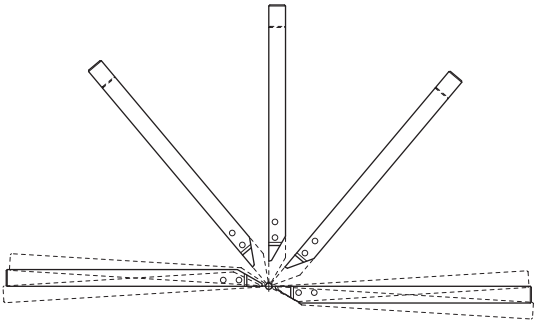
Pièces de rechange
Ersatzteile
Spare parts

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)		Serrage type B Spannsystem Typ B Clamping system type B	
710	710-6 / - NOVIBRA	**V-M2.5X5.8-T8**	**C-T8**	-	-
	710-7 / - NOVIBRA / - SF	**V-M2.5X6.5-T8**			
	710-8 / - NOVIBRA / -SF	**V-M2.5X7.8-T8**			
	710-10 - 710-12				
730	730-7 / - NOVIBRA	**V-M3X7-T8**	**C-T8**	-	-
	730-8 / - NOVIBRA			**V-M2.5X7.8-T8**	**C-T8**
	730-10 - 730-12			-	-
	730RC	**V-M3X5.5-T8**		-	-
740	740-7 /-NOVIBRA /-SF	**V-M3X7-T8**	**C-T8**	-	-
	740-8 -12 /-SF / -NOVIBRA			**V-M2.5X7.8-T8**	**C-T8**
750	750RC	**V-M4X7.3-T15**	**C-T15**	-	-
770	770-SN-SF	**V-M4X7.3-T15**	**C-T15**	-	-

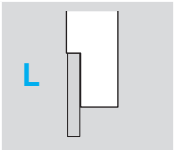
Porte-outils
Halter
Holders

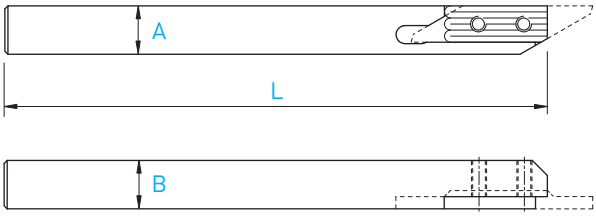
L

710

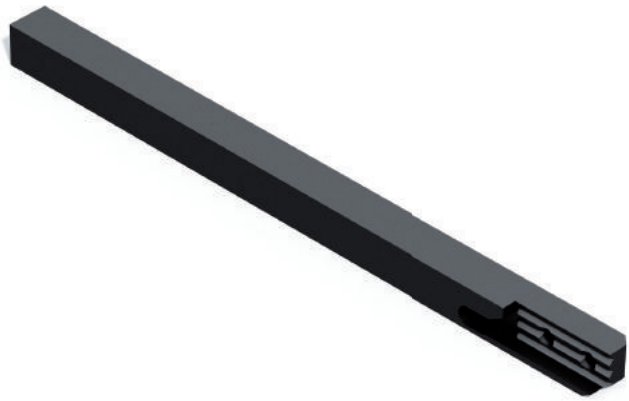


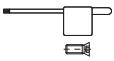
Porte-outils pour machines à cames à gauche
Halter für linksdrehende kurvengesteuerte Maschinen
Tool holders for left hand turning cam driven machines





A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6**
7 x 7	115	A	**710-7**
8 x 8	115	A	**710-8**
8 x 8	140	A	**710-8-140**
10 x 10	115	A	**710-10**
12 x 12	130	A	**710-12**



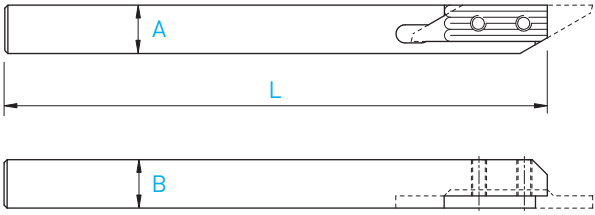


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

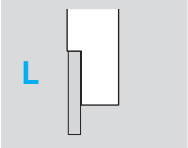
Porte-outils
Halter
Holders

L

710-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish

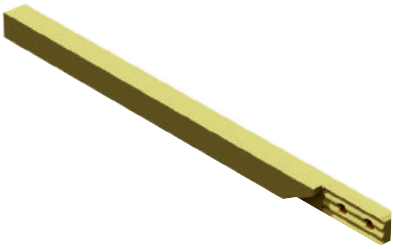


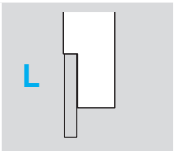
A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	140	A	**710-7-140-SF**
8 x 8	140	A	**710-8-140-SF**

Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

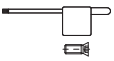
L

710-NOVIBRA





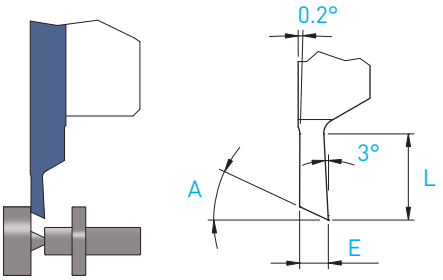
A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	**710-6-NOVIBRA**
7 x 7	115	A	**710-7-NOVIBRA**
8 x 8	115	A	**710-8-NOVIBRA**



Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

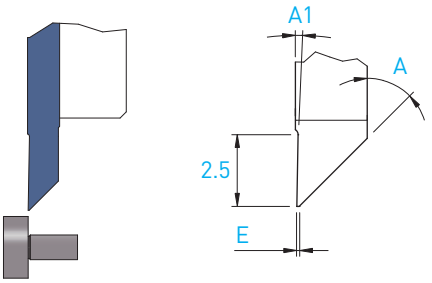
Plaquettes d'horlogerie pour machines à cames
Uhrenindustrie-WSP für kurvengesteuerte Maschinen
Watch industry inserts for cam driven machines

L **711SF / 712SF**



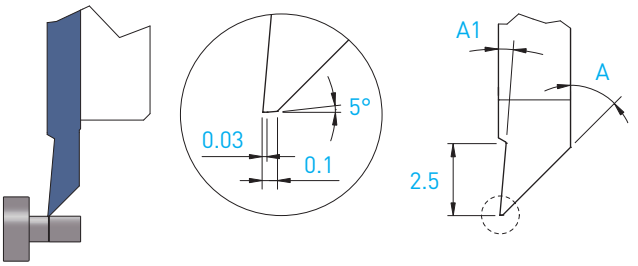
Tronçonnage
Abstechen
Parting off

E	L	A	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
0.8	3.0	25°	**711SF-0.8-25°**	■	■	■	■	■
1.0	3.0	25°	**711SF-1.0-25°**	■	□	■	□	■



Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing

E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
0.03	45°	3°	**712SF-3/3-45°**	■	□	■	□	■
0.08	45°	1°	**712SF-8/8-45°**	■	■	■	□	■

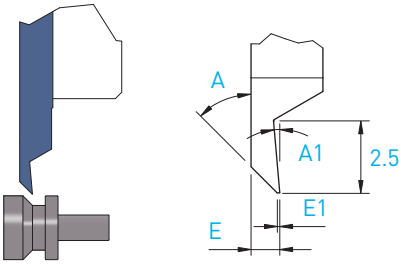


Tournage avant finition (pivotage)
Vorwärts drehen schlichten
Front turning for finishing

A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
45°	3°	**712SF-10/3**	■	□	■	■	■

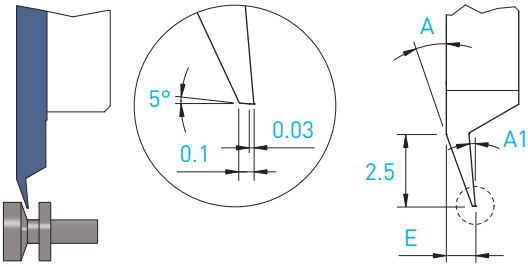
Plaquettes d'horlogerie pour machines à cames
Uhrenindustrie-WSP für kurvengesteuerte Maschinen
Watch industry inserts for cam driven machines

L **713SF**



Tournage arrière ébauche / finition
Rückwärts drehen schruppen / schlichten
Back turning for roughing / finishing

E1	E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
0.03	1.0	45°	5°	**713SF-3/3-45°-1.0**	■	□	■	□	■
0.10	1.0	45°	5°	**713SF-10/10-45°-1.0**	■	□	■	□	■

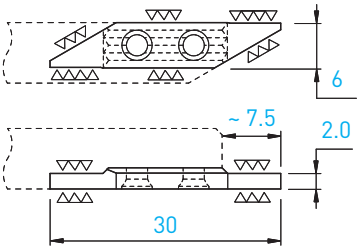


Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTiN	HN (µK10)
1.0	20°	5°	**713SF-10/3**	■	□	■	■	■

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L **711-ESF**



Art. N°	HTC	HTAF	HTiN	HN (µK10)	XN (µK01)	XTC	XTAF
711-ESF	■	■	□	■	■	■	■

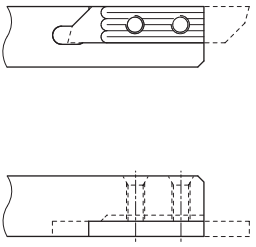
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Porte-outils
Halter
Holders

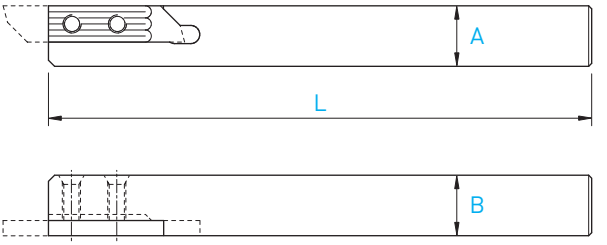
L / R

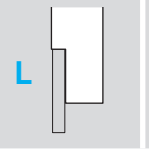
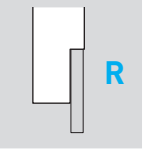
730 / 740

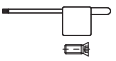
L



R



A x B	L	Serrage Spannsystem Clamping	L  Art. N°	R  Art. N°
7 x 7	115	A	**730-7**	**740-7**
8 x 8	115	A + B	**730-8**	**740-8**
8 x 8	140	A + B	**730-8-140**	**-**
10 x 10	115	A + B	**730-10**	**740-10**
12 x 12	130	A + B	**730-12**	**740-12**
12 x 12	90	A + B	**730-12-90**	**740-12-90**

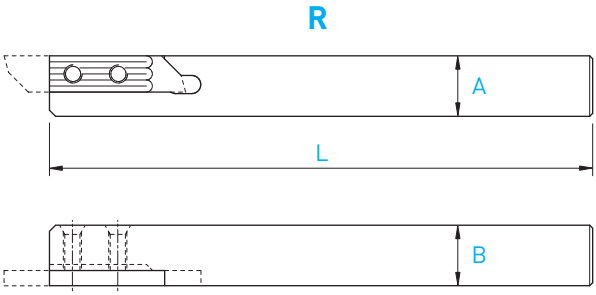


Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

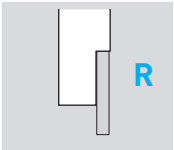
Porte-outils
Halter
Holders

R

740-SF



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



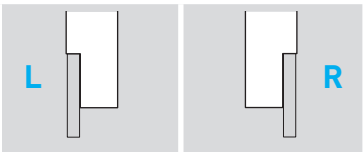
A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	90	A	**740-7-90-SF**
8 x 8	115	A + B	**740-8-SF**
8 x 8	90	A + B	**740-8-90-SF**
10 x 10	115	A + B	**740-10-SF**
10 x 10	90	A + B	**740-10-90-SF**
12 x 12	130	A + B	**740-12-SF**
12 x 12	90	A + B	**740-12-90-SF**

Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

L / R

730 / 740-NOVIBRA

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.



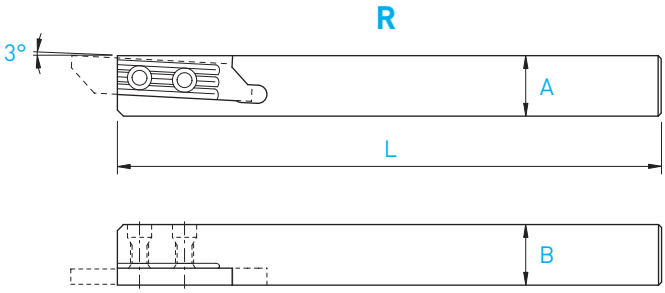
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	**730-7-NOVIBRA**	**740-7-NOVIBRA**
8 x 8	115	A + B	**730-8-NOVIBRA**	**740-8-NOVIBRA**
8 x 8	80	A + B	-	**740-8-80-NOVIBRA**
10 x 10	115	A + B	-	**740-10-NOVIBRA**
12 x 12	130	A + B	-	**740-12-NOVIBRA**

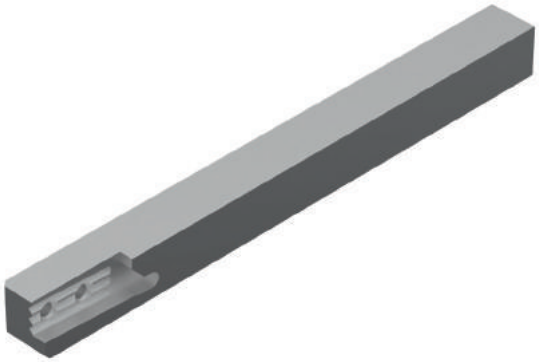
Porte-outils
Halter
Holders

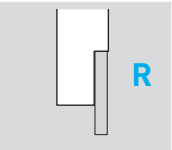
R

740X3-SF

new





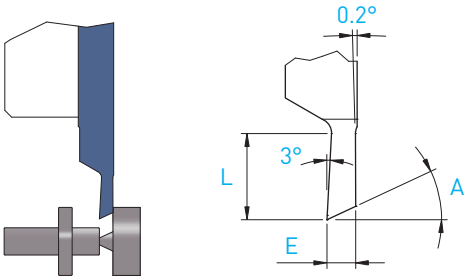


A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A + B	**740X3-8-SF**
10 x 10	115	A + B	**740X3-10-SF**
12 x 12	130	A + B	**740X3-12-SF**

Plaquettes d'horlogerie pour machines CNC
Uhrenindustrie-WSP für CNC-Maschinen
Watch industry inserts for CNC machines

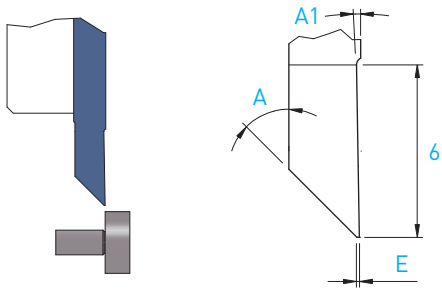
R

741SF / 742SF



Tronçonnage
Abstechen
Parting off

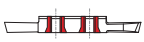
E	L	A	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
0.5	2.0	25°	**741SF-0.5-25°**	■	□	■	□	■		□	■	■	■		□
0.8	3.0	25°	**741SF-0.8-25°**	■	□	■	□	■		□	■	■	■		□
1.0	3.0	25°	**741SF-1.0-25°**	■	□	■	■	■	■	□	■	■	■	□	■
1.2	6.0	22°	**741SF-1.2-22°**	■	□	■	■	■	■	□	■	■	■	□	□



Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing

E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAF-RE	XN (µK01)
0.03	45°	3°	**742SF-3/3-45°**	■	■	■	■	■	■	□	■	■	■	□	■
0.08	45°	1°	**742SF-8/8-45°**	■	■	■	■	■	■	□	■	■	■	□	■

7XX-XX-B



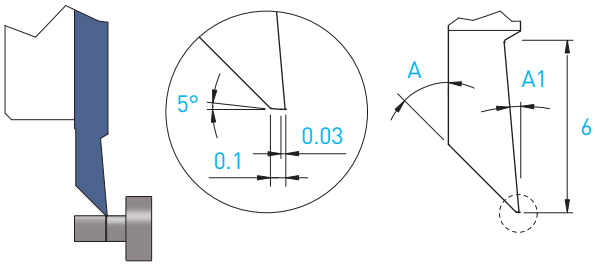
Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Plaquettes d'horlogerie pour machines CNC
Uhrenindustrie-WSP für CNC-Maschinen
Watch industry inserts for CNC machines

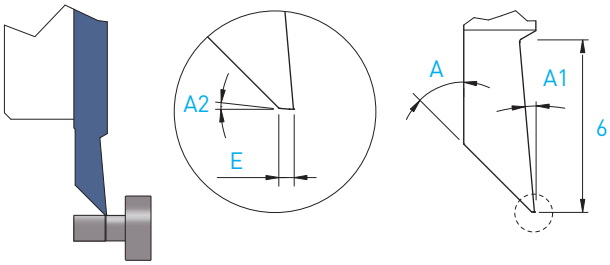
R

742SF



Tournage avant finition
Vorwärts drehen schlichten
Front turning for finishing

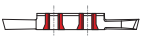
A	A1	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
45°	5°	**742SF-10/3**	■	■	■	□	□	■	■	■	■	■	□	□



Tournage avant finition
Vorwärts drehen schlichten
Front turning for finishing

E	A	A1	A2	Art. N°	HTAF-RE	XTAF-RE
0.10	45°	5°	5°	**742SF-10/0-5°-45°**	■	■
0.15	30°	3°	2°	**742SF-15/0-2°-30°**	■	■

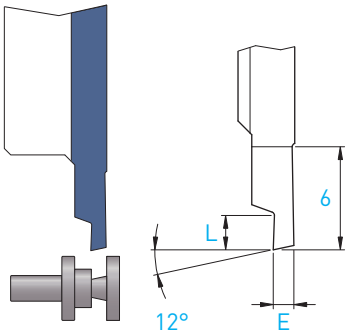
7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

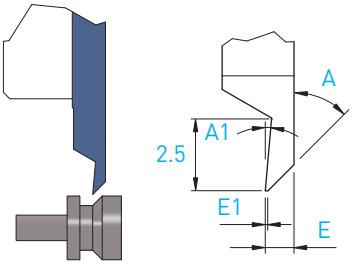
Plaquettes d'horlogerie pour machines CNC
Uhrenindustrie-WSP für CNC-Maschinen
Watch industry inserts for CNC machines

R **743SF**



Tournage arrière ébauche
Rückwärts drehen schruppen
Back turning for roughing

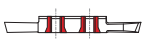
E	L	Art. N°	HTC	HTAF	HN (µK10)
1.2	2.5	**743SF-120/0-12°**	■	■	■
1.4	3.0	**743SF-140/0-12°**	■	■	■
1.6	3.0	**743SF-160/0-12°**	■	■	■
1.8	4.0	**743SF-180/0-12°**	■	■	■



Tournage arrière ébauche/finition
Rückwärts drehen schruppen/schlichten
Back turning for roughing/finishing

E1	E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
0.03	1.0	45°	5°	**743SF-3/3-45°-1.0**	■	■	■	■	■	■	□	■	■	■	■	■
0.03	1.2	45°	5°	**743SF-3/3-45°-1.2**	■	■	■	■	■	■	□	■	■	■	■	■
0.10	1.0	45°	5°	**743SF-10/10-45°-1.0**	■	■	■	■	■	■	□	■	■	■	■	■
0.05	0.8	30°	3°	**743SF-5/5-30°-0.8**				■								
0.05	1.0	30°	3°	**743SF-5/5-30°-1.0**				■								

7XX-XX-B



Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available
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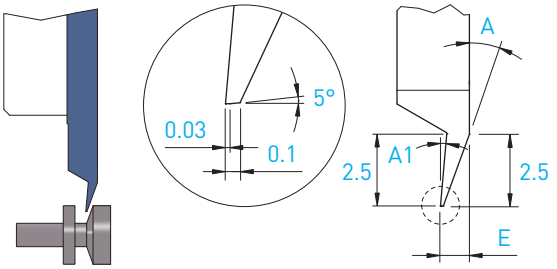
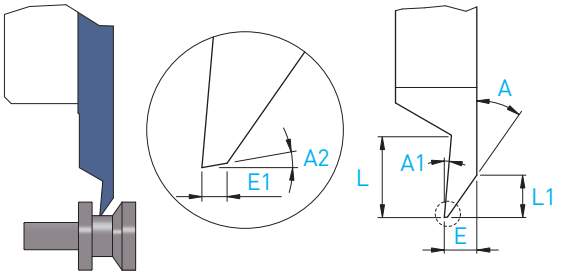
Plaquettes d'horlogerie pour machines CNC
Uhrenindustrie-WSP für CNC-Maschinen
Watch industry inserts for CNC machines

R **743SF**



Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

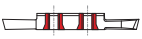
E	A	A1	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µK10)	XTAF	XTAXF	XTAXF-RE	XN (µK01)
1.0	20°	5°	**743SF-10/3**	■	■	■	■	■	■	□	■	■	■	□	□



Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

E1	E	L1	L	A	A1	A2	Art. N°	HTAF-RE	XTAF-RE
0.08	1.0	1.6	2.5	30°	5°	2°	**743SF-8/0-2°-30°-1.0**	■	■
0.15	1.2	1.8	4.0	30°	3°	2°	**743SF-15/0-2°-30°-1.2**	■	■
0.10	1.0	1.3	2.5	35°	5°	10°	**743SF-10/0-10°-35°-1.0**	■	■

7XX-XX-B

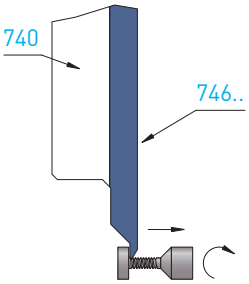


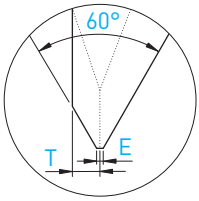
Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

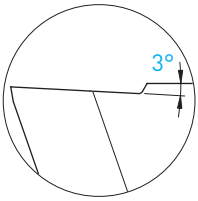
Filetage à profil partiel – norme NIHS
Gewinde drehen mit Teilprofil – Norm NIHS
Threading with partial profile – norm NIHS

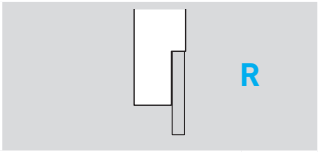
R / L

746SF / 736SF







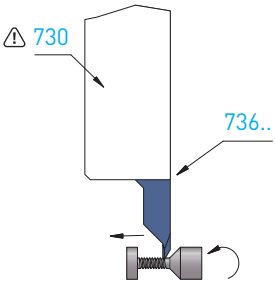


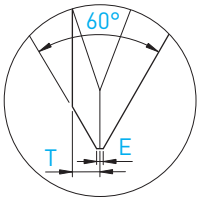
Filetage à droite
sens rotation machine M3

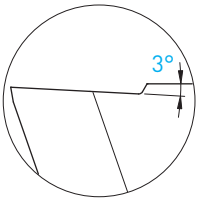
Rechtgewinde Drehrichtung
der Maschine M3

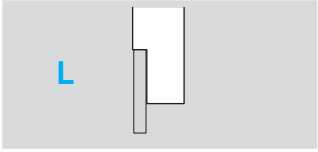
Right-hand thread rotating
machinery M3

Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	HTAF	HN (µK10)
S0.50	0.125	0.07	0.015	**746SFX3-A60-S0.50-AR**	■	■
S0.60	0.150	0.09	0.020	**746SFX3-A60-S0.60-AR**	■	■
S0.70	0.175	0.10	0.020	**746SFX3-A60-S0.70-AR**	■	■
S0.80	0.200	0.12	0.025	**746SFX3-A60-S0.80-AR**	■	■
S0.90	0.225	0.13	0.030	**746SFX3-A60-S0.90-AR**	■	■
S1.00	0.250	0.15	0.035	**746SFX3-A60-S1.00-AR**	■	■









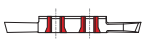
Filetage à droite
sens rotation machine M4

Rechtgewinde Drehrichtung
der Maschine M4

Right-hand thread rotating
machinery M4

Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	HTAF	HN (µK10)
S0.50	0.125	0.07	0.015	**736SFX3-A60-S0.50-AR**	■	■
S0.60	0.150	0.09	0.020	**736SFX3-A60-S0.60-AR**	■	■
S0.70	0.175	0.10	0.020	**736SFX3-A60-S0.70-AR**	■	■
S0.80	0.200	0.12	0.025	**736SFX3-A60-S0.80-AR**	■	■
S0.90	0.225	0.13	0.030	**736SFX3-A60-S0.90-AR**	■	■
S1.00	0.250	0.15	0.035	**736SFX3-A60-S1.00-AR**	■	■

7XX-XX-B

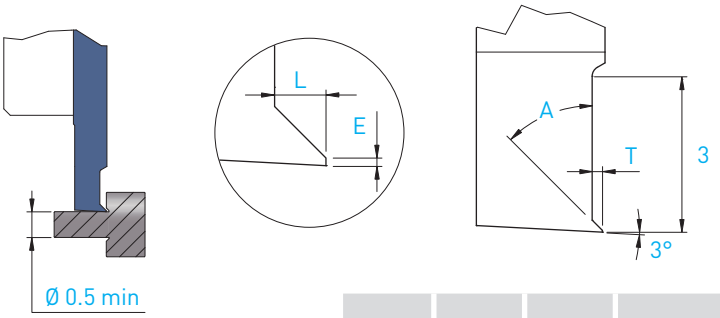


Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Plaquettes piqûre avant
Fronteinstich WSP
Front grooving inserts

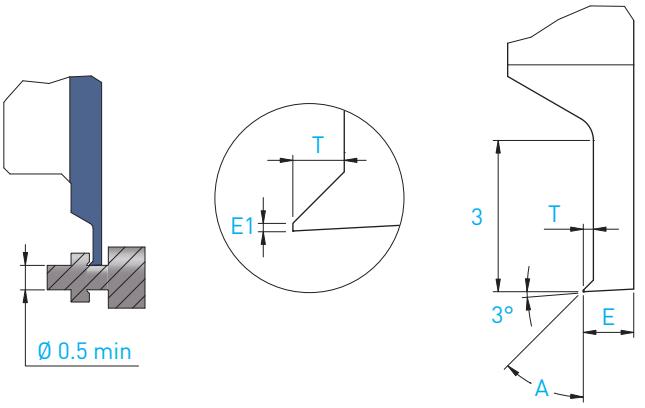
R **748SF**



E 0/-0.01	A	T	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTiN	HN (µK10)
0.03	45°	0.2	**748SF-E03-A45°-L20**	■	■	■	■	□	■
0.05	45°	0.3	**748SF-E05-A45°-L30**	■	■	■		■	■
0.08	45°	0.5	**748SF-E08-A45°-L50**	■	■	■		□	■

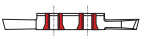
Plaquettes piqûre arrière
Rückeinstich WSP
Back grooving inserts

R **749SF**



E1 0/-0.01	A	T	E	Art. N°	HTC	HTC-RE	HTAF	HTAF-RE	HTiN	HN (µK10)
0.03	45°	0.2	1.0	**749SF-E03-A45°-L20-B100**	■	■	■	■	□	■
0.05	45°	0.3	1.0	**749SF-E05-A45°-L30-B100**	■	□	■		□	■
0.08	45°	0.5	1.2	**749SF-E08-A45°-L50-B120**	■	■	■		□	■

7XX-XX-B



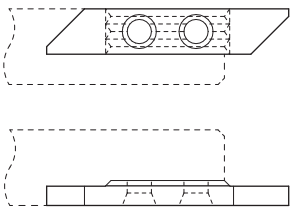
Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

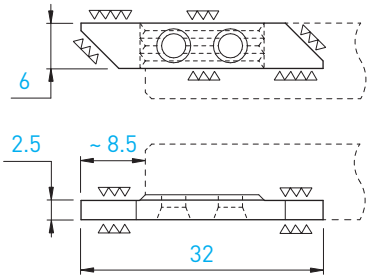
L / R

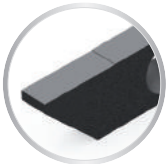
731-ESF / 741-ESF

L



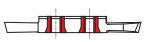
R





L									R								
Art. N°	HTC	HTAF	HTAXF	HTiN	HN (µK10)	XTC	XTAF	XN (µK01)	Art. N°	HTC	HTAF	HTAXF	HTiN	HN (µK10)	XTC	XTAF	XN (µK01)
731-ESF	■	■	■	■	■	■	■	■	741-ESF	■	■	■	■	■	■	■	■

7XX-XX-B



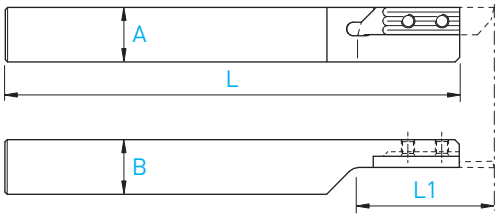
Sur demande pour serrage type B, voir page 2.25
Wahlweise für B-Spannsystem, siehe Seite 2.25
On request for B clamping system, see page 2.25

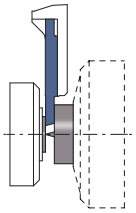
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

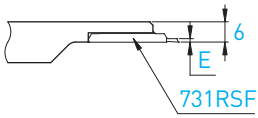
Porte-outils
Halter
Holders

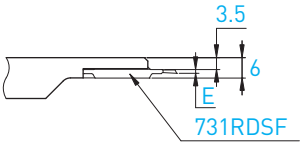
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

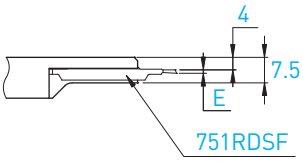
730RC / 750RC





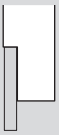






L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



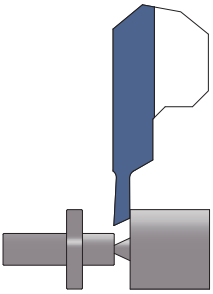
A x B	L	L1	Art. N°
8 x 8	115	24	**730RC-8**
10 x 10	115	24	**730RC-10**
12 x 12	130	30	**730RC-12**
16 x 16	130	40	**730RC-16**

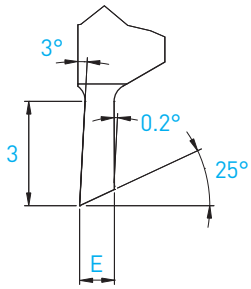
A x B	L	L1	Art. N°
12 x 12	130	30	**750RC-12**
16 x 16	130	40	**750RC-16**

Tronçonnage / Abstechen / Parting off

Coupe à droite déportée / Versetztes Rechtsschneiden / Right cut off line

731R / 751R

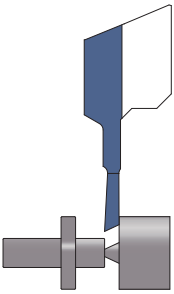


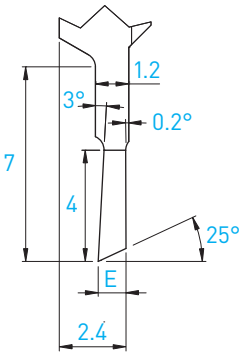


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	HTAF	HTiN	HN (µK10)
1.0	**731RSF-1.0-25°**	■	■	■

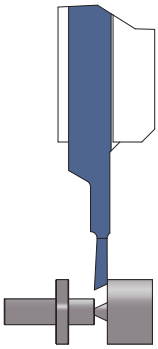


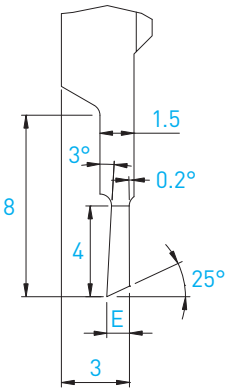


L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	HTAF	HTiN	HN (µK10)
0.8	**731RDSF-0.8-25°**	■		■
1.0	**731RDSF-1.0-25°**	■	□	■





L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	HTAF	HTiN	HN (µK10)
0.8	**751RDSF-0.8-25°**	■		■
1.0	**751RDSF-1.0-25°**	■	□	■

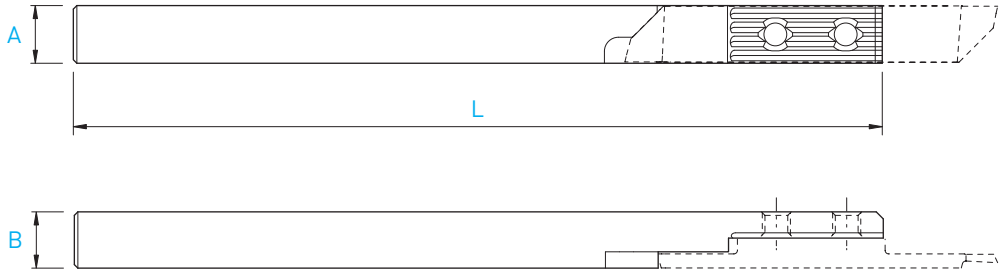
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

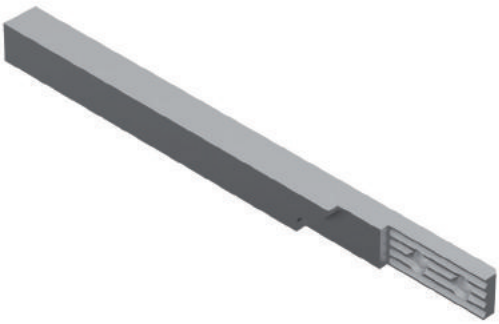
Porte-outils
Halter
Holders

SwissNANO 4

770-SN4-SF

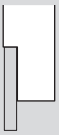
new



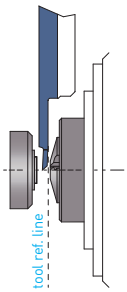


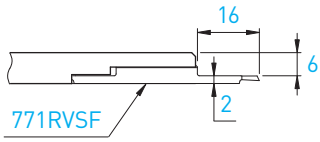
L (R)

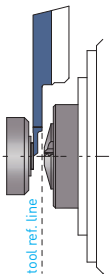
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

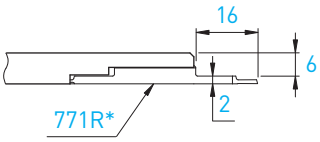


A x B	L	Art. N°
8.2 x 8	115	**770-8.2X8-SN4-SF**









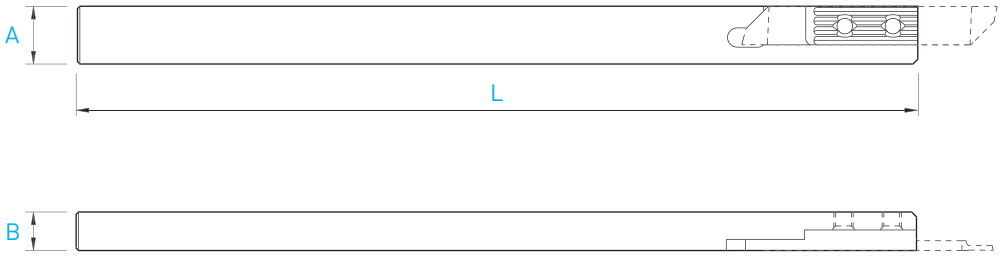
* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

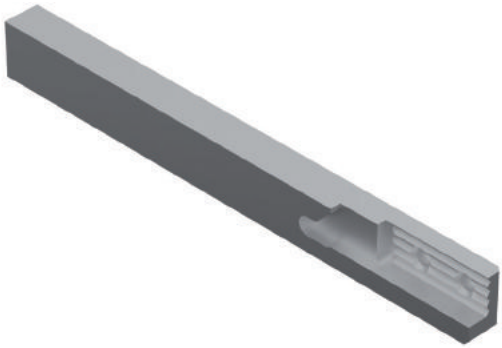
Porte-outils
Halter
Holders

SwissNANO 7

770-SN7-SF

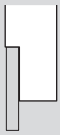
new



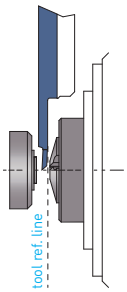


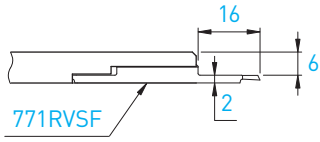
L (R)

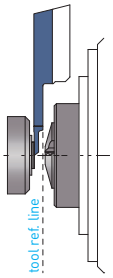
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

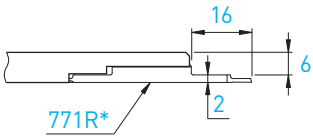


A x B	L	Art. N°
12 x 8	115	**770-12X8-SN7-SF**









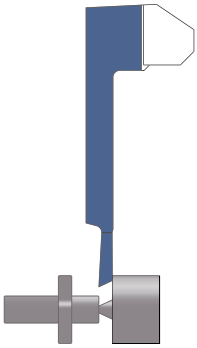
* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

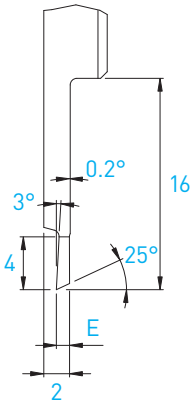
Plaquette
Wendeplatte
Insert

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

771RVSF

new





R (L)

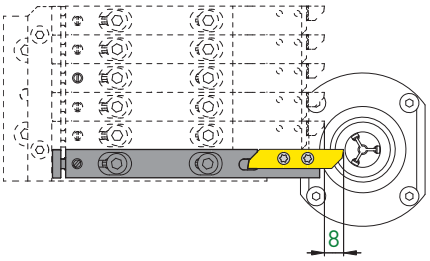
Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

E	Art. N°	TAF	N (µK20)
1.0	**771RVSF-1.0-25°**	■	■
1.2	**771RVSF-1.2-25°**	■	■
1.5	**771RVSF-1.5-25°**	■	■

Porte-outils spéciaux de tronçonnage
Sonder Abstechwerkzeughalter
Special parting off tool holders

MODU-LINE

ML12



Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	Art. N°	Plaquettes type WSP Typ Inserts type
SwissNano	ML12	**ML12A-730RC-SWISS-NANO**	731RSF / 731RDSF
SwissNano	ML12	**ML12A-750RC-SWISS-NANO**	751RDSF

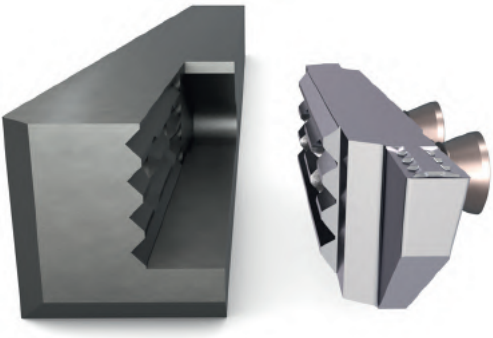
Voir documentation MODU-Line
Siehe MODU-Line Dokumentation
See MODU-Line documentation

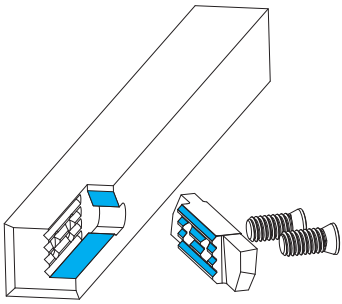
L'outil de référence pour le décolletage
Hochwertiges Wendeplattensystem für Langdrehautomaten
Top class turning tool for automatic lathes

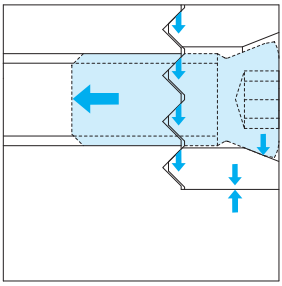
700 Series

100% rigid!

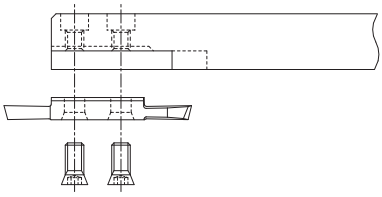
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

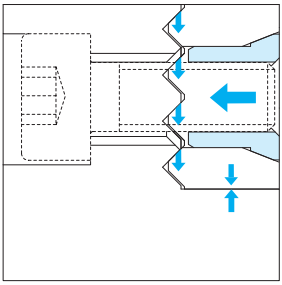






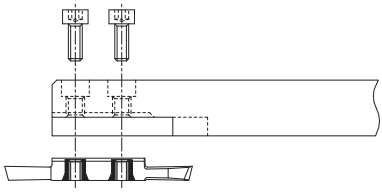
Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)





Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



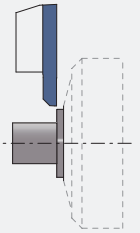
Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

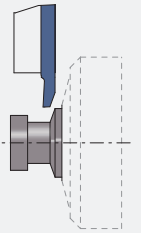
APPLITEC

Codification des usinages
Bearbeitung Bezeichnungssystem
Machining designation key

642



643



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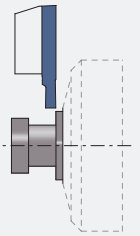

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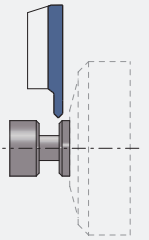

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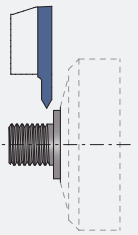
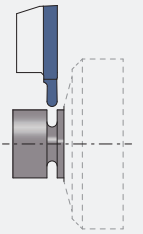
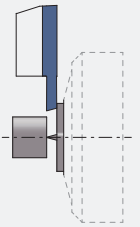


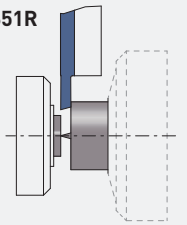
647



661



651R



Codification des plaquettes PRO-Line série 600
WSP-Bezeichnungssystem für PRO-Line 600 Serie
Inserts designation key for PRO-Line 600 series

INFO

6	4	4	X	–	2.0	–	R15	–	TiAlN

Dimension
Abmessung
Dimension

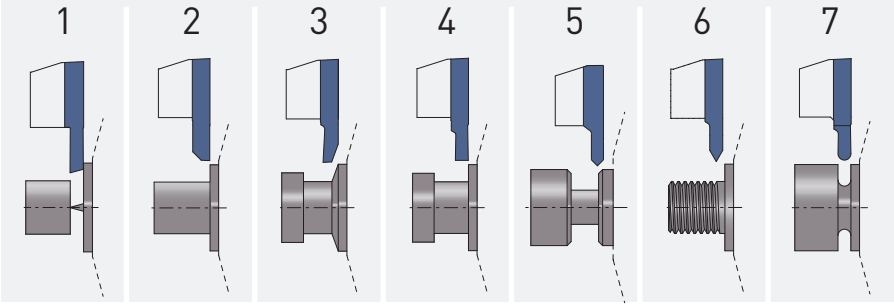
Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe
Schneidgeometrie
Cutting geometry

brise-copeau	particularités
Spanbrecher	Sondereigenschaften
chip breaker	special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry



Gamme de produit
Produktserie
Product series

définit la compatibilité des plaquettes avec le porte-outil
bestimmt die WSP und Halter Kompatibilität
shows the inserts and holder compatibility

L = 3, 5 (chiffre impair / ungerade Zahl / uneven number)

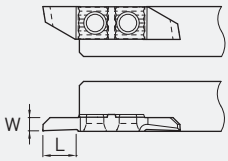
R = 4, 6 (chiffre pair / gerade Zahl / even number)

SERIES

Tournage et gorge
Drehen und Einstechen
Turning and grooving

W max = 3 mm
L max = 8 mm

L	R
630	640

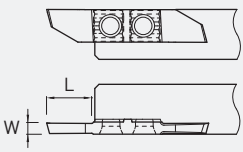


SERIES

Tronçonnage
Abstechen
Parting off

W max = 2.5 mm
L max = 11 mm

L	R
650	660



Applitec série 600
Applitec 600 Serie
Applitec 600 series

Système de serrage à denture avec 2 vis de fixation
Spannsystem mit Verzahnung und 2 Schrauben
Teeth clamping system with 2 screws

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning 630/640			Tronçonnage Abstechen Parting off 650/660		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 2.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel < 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 2.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel < 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel > 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 2 .50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 2.50	0.01 - 0.03 0.03 - 0.06

Nuances
Sorten
Grades

TiAlN

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

N (µK20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- tough micro-grain grade
- suitable for interrupted cut and other unfavorable machining conditions

HTA

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favorable machining conditions

HN (µK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

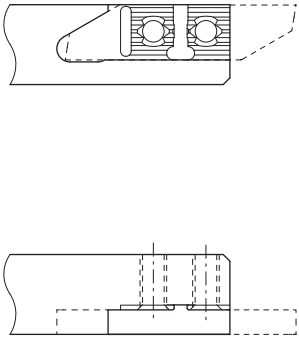
- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavorable machining conditions

Porte-outils
Halter
Holders

630 / 640

L



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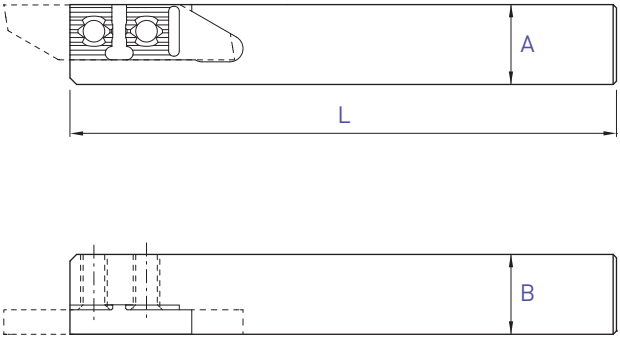
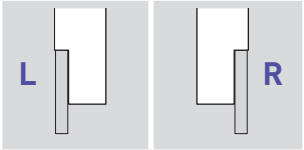


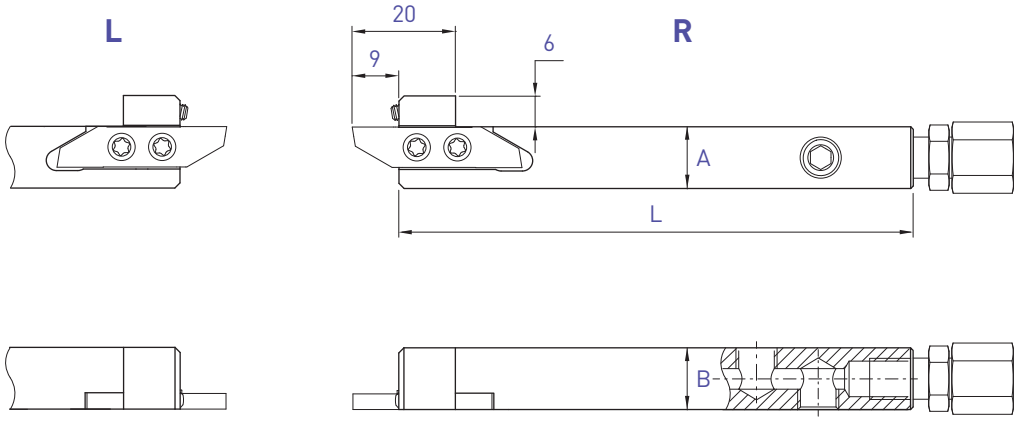


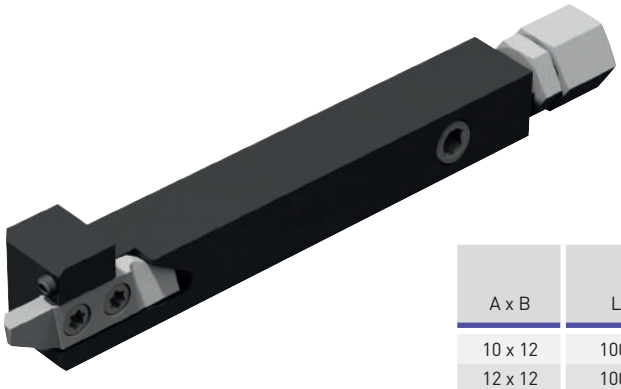
A x B	L	Art. N°	Art. N°
8 x 8	115	**630-8**	**640-8**
10 x 10	115	**630-10**	**640-10**
10 x 10	50	**630-10-50**	**640-10-50**
12 x 12	130	**630-12**	**640-12**
12 x 12	90	**630-12-90**	**640-12-90**
12.7 x 12.7	130	**630-12.7**	**640-12.7**
16 x 16	130	**630-16**	**640-16**
16 x 16	75	**630-16-75**	**640-16-75**
20 x 20	120	**630-20**	**640-20**

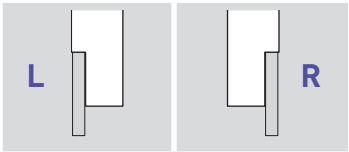
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

630-JET / 640-JET







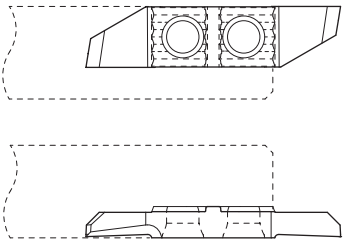
A x B	L	Art. N°	Art. N°
10 x 12	100	**630-1012-JET**	**640-1012-JET**
12 x 12	100	**630-12-JET**	**640-12-JET**
12.7 x 12.7	100	**630-12.7-JET**	**640-12.7-JET**
16 x 16	100	**630-16-JET**	**640-16-JET**
20 x 20	100	**630-20-JET**	**640-20-JET**

Chaque support est livré avec vis, clé, raccord droit et buse d'arrosage Ø 1.5 mm.
Jeder Halter wird mit Spannschraube(n), Schlüssel, gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert.
Screw(s), key, straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder.

Tournage avant
Vorwärts drehen
Front turning

632 / 642

L



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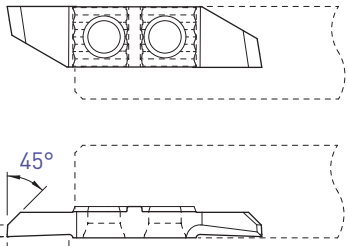
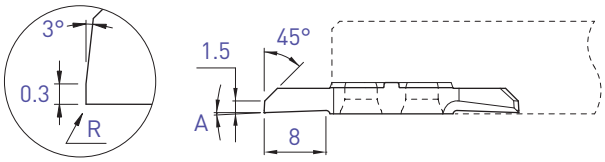


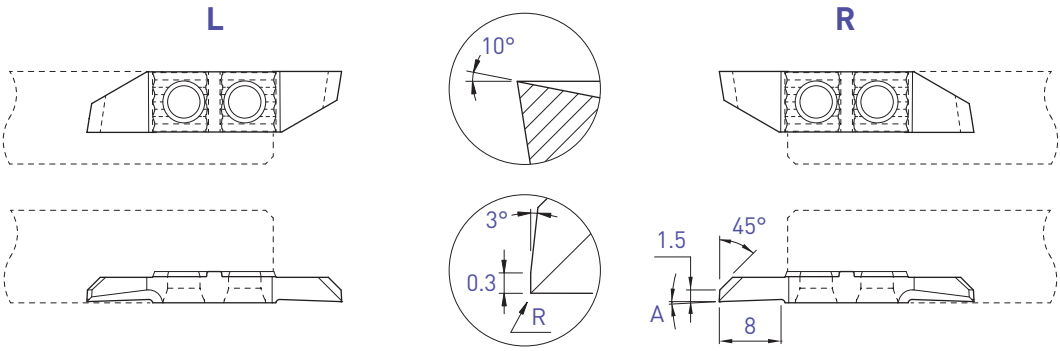


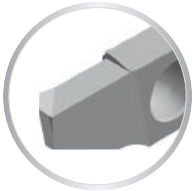
A	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0°	0	**632**	■	■			**642**	■	■	□	□
0°	0.08	–					**642-R08**	■	■	□	□
0°	0.15	–					**642-R15**	■	■	□	□
2°	0	**632-2°**	■	■			**642-2°**	■	■	□	□
2°	0.08	–					**642-2°-R08**	■	■	□	□
2°	0.15	–					**642-2°-R15**	■	■	□	□

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Tournage avant
Vorwärts drehen
Front turning

632X / 642X





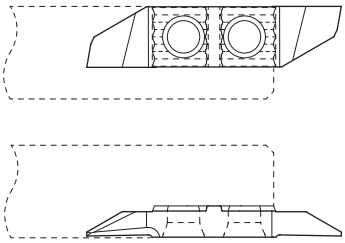
A	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0°	0	**632X10**	■	■			**642X10**	■	■	□	□
0°	0.08	–					**642X10-R08**	■	■	□	□
0°	0.15	–					**642X10-R15**	■	■	□	□
2°	0	**632X10-2°**	■	■			**642X10-2°**	■	■	□	□
2°	0.08	–					**642X10-2°-R08**	■	■	□	□
2°	0.15	–					**642X10-2°-R15**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

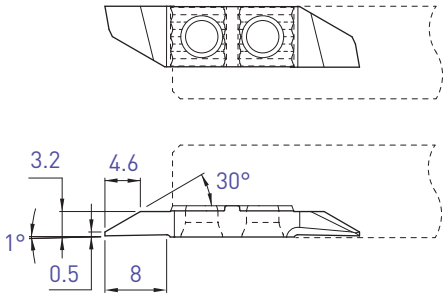
Tournage multifonction
Mehrweck drehen
Multifunction turning

632S / 642S

L



R



Tournage avant
Vorwärts drehen
Front turning

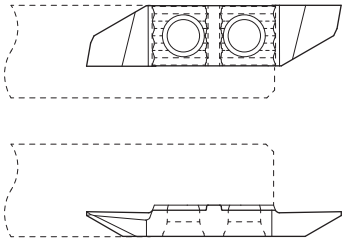
L					R				
Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
632S05	■	■			642S05	■	■	□	□

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

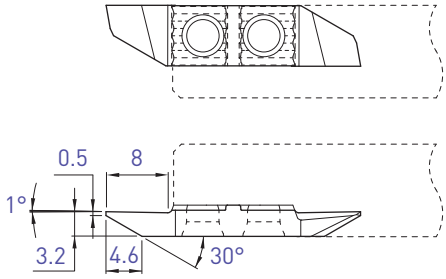
Tournage multifonction
Mehrweck drehen
Multifunction turning

633S / 643S

L



R



Tournage arrière
Rückwärts drehen
Back turning

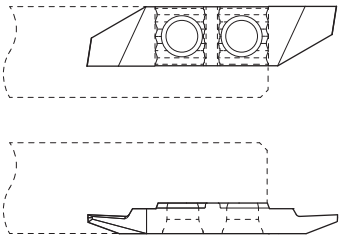
L					R				
Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
633S05	■	■			643S05	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

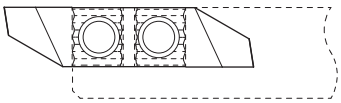
Tournage arrière
Rückwärts drehen
Back turning

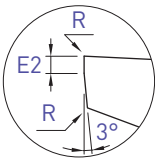
633 / 643

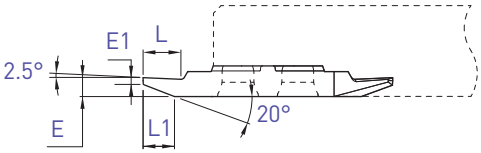
L

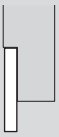


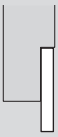
R







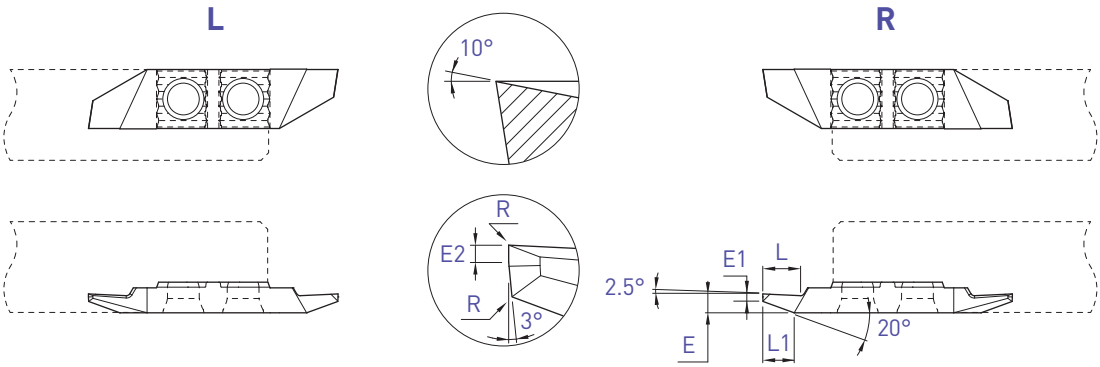




E1	E2	L	L1	E	R	L Art. N°	L TiAlN	L N (µk20)	L HTA	L HN (µk10)	R Art. N°	R TiAlN	R N (µk20)	R HTA	R HN (µk10)
0.5	0.25	3	2.8	1.5	0	**633-0.5**	■	■			**643-0.5**	■	■	□	□
0.5	0.25	3	2.8	1.5	0.08	-					**643-0.5-R08**	■	■	□	□
0.8	0.40	4.5	3.3	2.0	0	-					**643-0.8**	■	■	□	□
0.8	0.40	4.5	3.3	2.0	0.08	-					**643-0.8-R08**	■	■	□	□
1.0	0.40	5	4.2	2.5	0	-					**643-1.0**	■	■	□	□
1.0	0.40	5	4.2	2.5	0.08	-					**643-1.0-R08**	■	■	□	□
1.5	0.50	6	4.2	3.0	0	-					**643-1.5**	■	■	□	□
1.5	0.50	6	4.2	3.0	0.08	-					**643-1.5-R08**	■	■	□	□

Tournage arrière
Rückwärts drehen
Back turning

633X / 643X

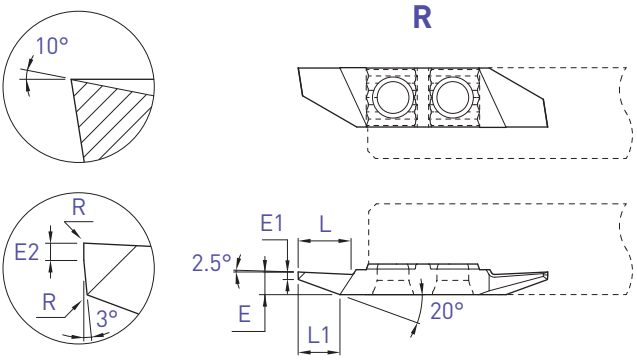


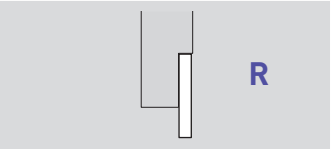
E1	E2	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.5	0.25	3	2.8	1.5	0	**633X10-0.5**	■	■			**643X10-0.5**	■	■	□	□
0.5	0.25	3	2.8	1.5	0.08	-					**643X10-0.5-R08**	■	■	□	□
0.8	0.40	4.5	3.3	2.0	0	-					**643X10-0.8**	■	■	□	□
0.8	0.40	4.5	3.3	2.0	0.08	-					**643X10-0.8-R08**	■	■	□	□
1.0	0.40	5	4.2	2.5	0	-					**643X10-1.0**	■	■	□	□
1.0	0.40	5	4.2	2.5	0.08	-					**643X10-1.0-R08**	■	■	□	□
1.5	0.50	6	4.2	3.0	0	-					**643X10-1.5**	■	■	□	□
1.5	0.50	6	4.2	3.0	0.08	-					**643X10-1.5-R08**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

643XS

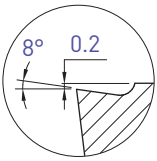




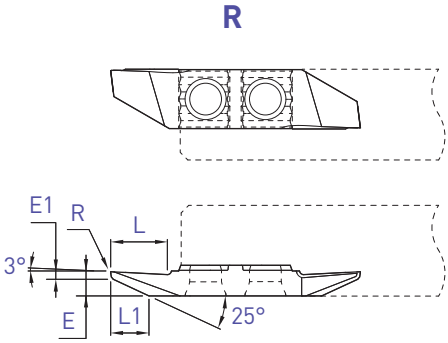
E1	E2	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	0.4	7	5.5	3.0	0	**643X10S-1.0**	■	■	□	□
1.0	0.4	7	5.5	3.0	0.08	**643X10S-1.0-R08**	■	■	□	□

Tournage arrière
Rückwärts drehen
Back turning

643VX8



R



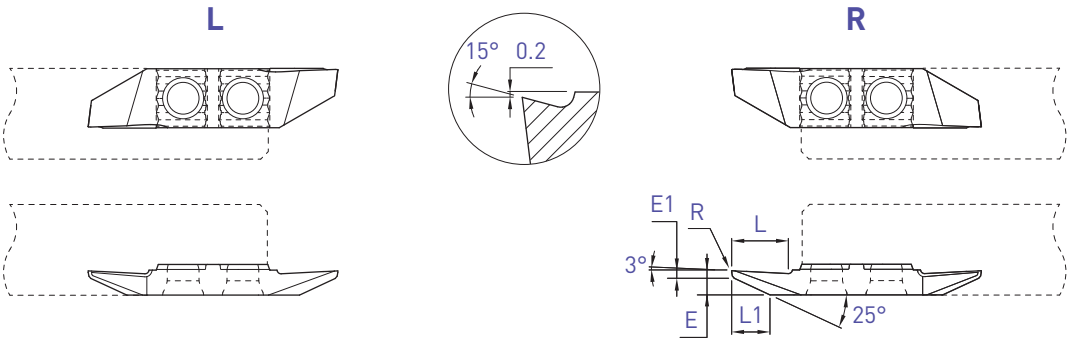
R

E1	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	7.5	5.0	3.2	0	**643VX8**	■	■	□	□
1.0	7.5	5.0	3.2	0.08	**643VX8-R08**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

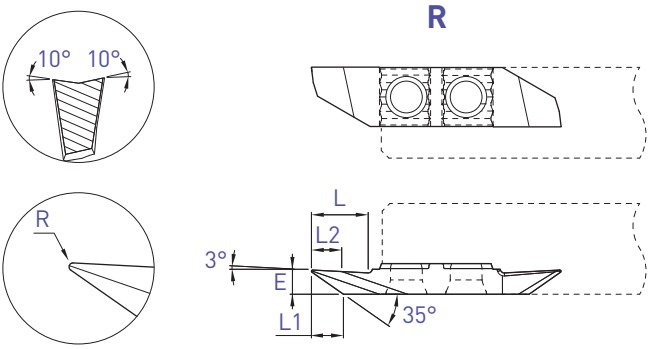
633VX15 / 643VX15



E1	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.6	7.5	5.2	3.2	0	**633VX15**	■	■			**643VX15**	■	■	□	□
0.6	7.5	5.2	3.2	0.08	-					**643VX15-R08**	■	■	□	□

Tournage arrière
Rückwärts drehen
Back turning

643VUX



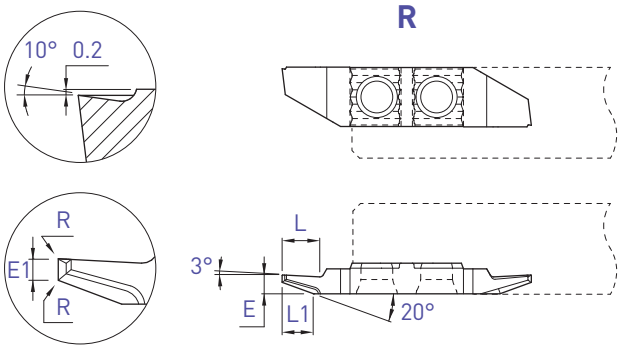
R

L	L1	L2	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
7.5	4.2	4.0	3.2	0.15	**643VUX10-R15**	■	■	□	□
7.5	3.8	3.8	3.2	0.35	**643VUX10-R35**	■	■	□	□

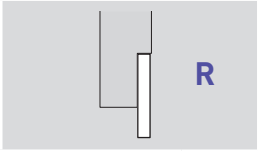
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

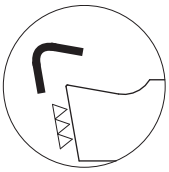
643ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



E1	L	L1	E	R	Art. N°	TiAlN N (µk20)
1.0	5	4	2.5	0.01	**643ZX10-1.0**	■
1.0	5	4	2.5	0.08	**643ZX10-1.0-R08**	■



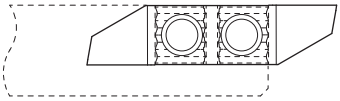
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

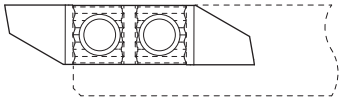
Fonçage-tournage
Einstechen und drehen
Grooving and turning

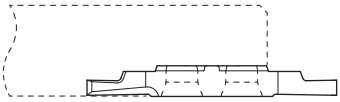
634 / 644

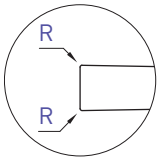
L

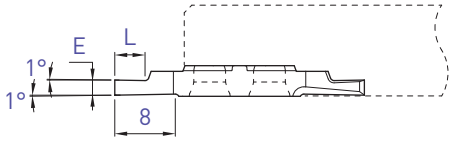


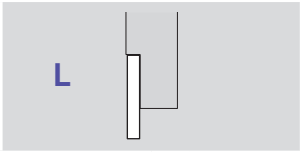
R

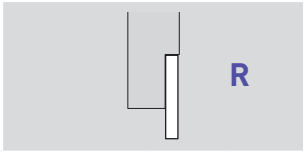












E	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.5	1.5	0	**634-0.5**	■	■			**644-0.5**	■	■	□	□
0.6	1.8	0	-					**644-0.6**	■	■	□	□
0.75	2	0	-					**644-0.75**	■	■	□	□
0.8	2	0	**634-0.8**	■	■			**644-0.8**	■	■	□	□
0.9	2.5	0	-					**644-0.9**	■	■	□	□
0.95	3	0	-					**644-0.95**	■	■	□	□
1.0	2.5	0	**634-1.0**	■	■			**644-1.0**	■	■	□	□
1.0	2.5	0.08	-					**644-1.0-R08**	■	■	□	□
1.2	3	0	**634-1.2**	■	■			**644-1.2**	■	■	□	□
1.2	3	0.08	-					**644-1.2-R08**	■	■	□	□
1.5	3	0	**634-1.5**	■	■			**644-1.5**	■	■	□	□
1.5	3	0.08	-					**644-1.5-R08**	■	■	□	□
1.5	3	0.15	-					**644-1.5-R15**	■	■	□	□
1.8	4	0	-					**644-1.8**	■	■	□	□
2.0	4	0	**634-2.0**	■	■			**644-2.0**	■	■	□	□
2.0	4	0.08	-					**644-2.0-R08**	■	■	□	□
2.0	4	0.15	-					**644-2.0-R15**	■	■	□	□
2.5	6	0	**634-2.5**	■	■			**644-2.5**	■	■	□	□
2.5	6	0.08	-					**644-2.5-R08**	■	■	□	□
2.5	6	0.15	-					**644-2.5-R15**	■	■	□	□
3	6	0	**634-3.0**	■	■			**644-3.0**	■	■	□	□
3	6	0.08	-					**644-3.0-R08**	■	■	□	□
3	6	0.15	-					**644-3.0-R15**	■	■	□	□

■ = disponible / verfügbar / available
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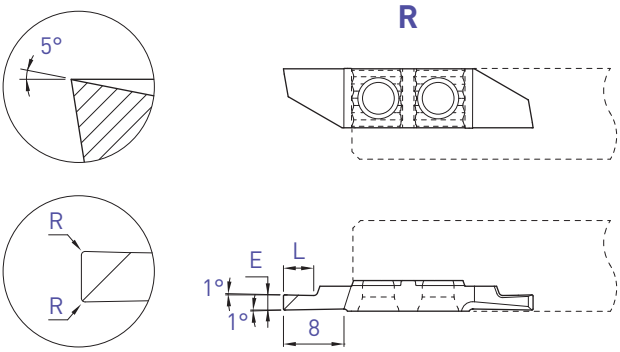
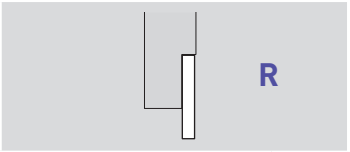
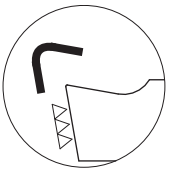
Fonçage-tournage
Einstechen und drehen
Grooving and turning

644X5



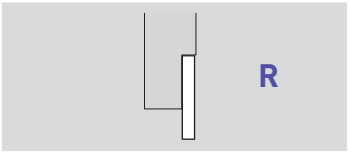


E	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	3	0.08	**644X5-1.5-R08**	■	■	□	□
2	4	0.08	**644X5-2.0-R08**	■	■	□	□
2	4	0.15	**644X5-2.0-R15**	■	■	□	□
2.5	6	0.08	**644X5-2.5-R08**	■	■	□	□
2.5	6	0.15	**644X5-2.5-R15**	■	■	□	□
3	6	0.08	**644X5-3.0-R08**	■	■	□	□
3	6	0.15	**644X5-3.0-R15**	■	■	□	□



Arête de coupe honée
Gehonte Schneidkante
Honed edge

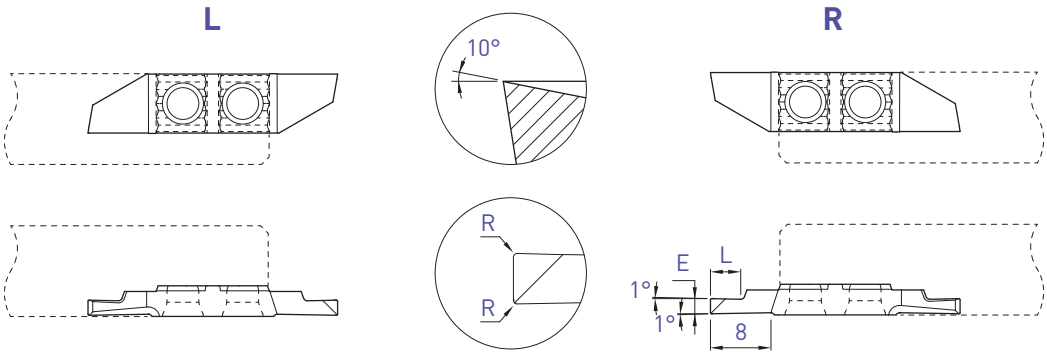
f min: 0.02 mm/U

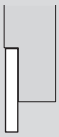


E	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	3	0.08	**644X5-1.5-R08-EP**	■	■		
2	4	0.08	**644X5-2.0-R08-EP**	■	■		
2	4	0.15	**644X5-2.0-R15-EP**	■	■		
2.5	6	0.08	**644X5-2.5-R08-EP**	■	■		
2.5	6	0.15	**644X5-2.5-R15-EP**	■	■		
3	6	0.08	**644X5-3.0-R08-EP**	■	■		
3	6	0.15	**644X5-3.0-R15-EP**	■	■		

Fonçage-tournage
Einstechen und drehen
Grooving and turning

634X10 / 644X10





			L					R			
E	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.8	2	0	**634X10-0.8**	■	■			**644X10-0.8**	■	■	□	□
1.0	2.5	0	**634X10-1.0**	■	■			**644X10-1.0**	■	■	□	□
1.0	2.5	0.08	**634X10-1.0-R08**	■	■			**644X10-1.0-R08**	■	■	□	□
1.2	3	0	-					**644X10-1.2**	■	■	□	□
1.2	3	0.08	-					**644X10-1.2-R08**	■	■	□	□
1.5	3	0	**634X10-1.5**	■	■			**644X10-1.5**	■	■	□	□
1.5	3	0.08	**634X10-1.5-R08**	■	■			**644X10-1.5-R08**	■	■	□	□
1.5	3	0.15	**634X10-1.5-R15**	■	■			**644X10-1.5-R15**	■	■	□	□
1.8	4	0	-					**644X10-1.8**	■	■	□	□
2	4	0	**634X10-2.0**	■	■			**644X10-2.0**	■	■	□	□
2	4	0.08	**634X10-2.0-R08**	■	■			**644X10-2.0-R08**	■	■	□	□
2	4	0.15	**634X10-2.0-R15**	■	■			**644X10-2.0-R15**	■	■	□	□
2.5	6	0	**634X10-2.5**	■	■			**644X10-2.5**	■	■	□	□
2.5	6	0.08	**634X10-2.5-R08**	■	■			**644X10-2.5-R08**	■	■	□	□
2.5	6	0.15	**634X10-2.5-R15**	■	■			**644X10-2.5-R15**	■	■	□	□
3	6	0	**634X10-3.0**	■	■			**644X10-3.0**	■	■	□	□
3	6	0.08	**634X10-3.0-R08**	■	■			**644X10-3.0-R08**	■	■	□	□
3	6	0.15	**634X10-3.0-R15**	■	■			**644X10-3.0-R15**	■	■	□	□

■ = disponible / verfügbar / available
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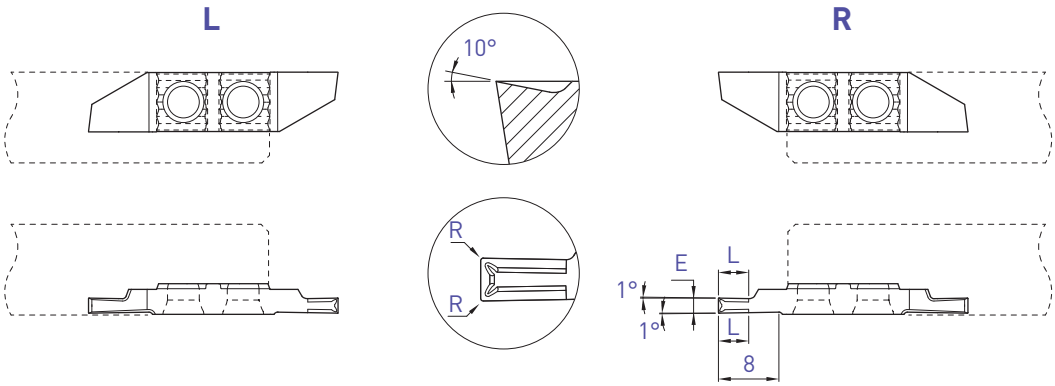
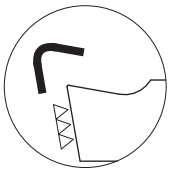
Fonçage-tournage
Einstechen und drehen
Grooving and turning

634ZXB / 644ZXB



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

			L		R	
E	L	R	Art. N°	TiAlN N (µk20)	Art. N°	TiAlN N (µk20)
1.0	2.5	0.01	**634ZXB10-1.0**	■	**644ZXB10-1.0**	■
1.5	4	0.01	**634ZXB10-1.5**	■	**644ZXB10-1.5**	■
1.5	4	0.08	**634ZXB10-1.5-R08**	■	**644ZXB10-1.5-R08**	■
2.0	4	0.01	**634ZXB10-2.0**	■	**644ZXB10-2.0**	■
2.0	4	0.08	**634ZXB10-2.0-R08**	■	**644ZXB10-2.0-R08**	■
2.0	4	0.15	**634ZXB10-2.0-R15**	■	**644ZXB10-2.0-R15**	■
2.5	5	0.08	**634ZXB10-2.5-R08**	■	**644ZXB10-2.5-R08**	■
2.5	5	0.15	**634ZXB10-2.5-R15**	■	**644ZXB10-2.5-R15**	■
3.0	6	0.08	**634ZXB10-3.0-R08**	■	**644ZXB10-3.0-R08**	■
3.0	6	0.15	**634ZXB10-3.0-R15**	■	**644ZXB10-3.0-R15**	■
3.0	6	0.35	**634ZXB10-3.0-R35**	■	**644ZXB10-3.0-R35**	■

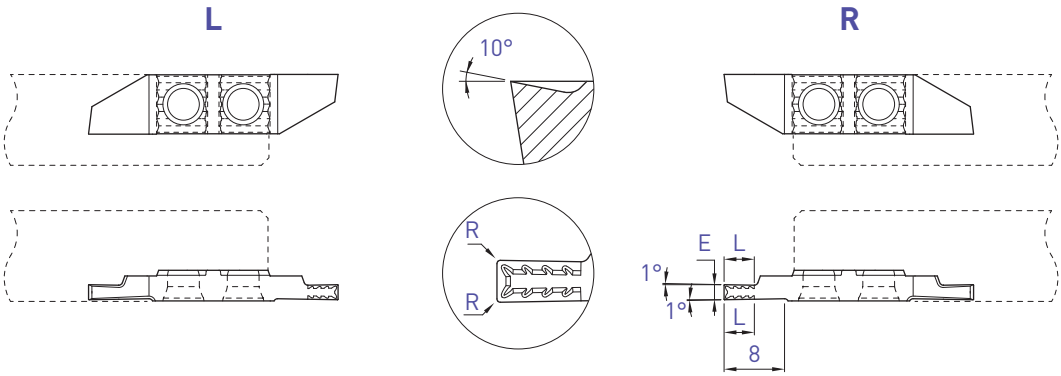


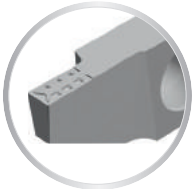
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

Fonçage-tournage
Einstechen und drehen
Grooving and turning

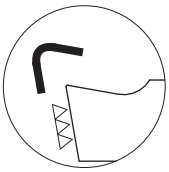
634ZXT / 644ZXT





Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

			L		R	
E	L	R	Art. N°	TiAlN N (µk20)	Art. N°	TiAlN N (µk20)
1.0	2.5	0.01	**634ZXT10-1.0**	■	**644ZXT10-1.0**	■
1.5	4	0.01	**634ZXT10-1.5**	■	**644ZXT10-1.5**	■
1.5	4	0.08	**634ZXT10-1.5-R08**	■	**644ZXT10-1.5-R08**	■
2.0	4	0.01	**634ZXT10-2.0**	■	**644ZXT10-2.0**	■
2.0	4	0.08	**634ZXT10-2.0-R08**	■	**644ZXT10-2.0-R08**	■
2.0	4	0.15	**634ZXT10-2.0-R15**	■	**644ZXT10-2.0-R15**	■
2.5	5	0.08	**634ZXT10-2.5-R08**	■	**644ZXT10-2.5-R08**	■
2.5	5	0.15	**634ZXT10-2.5-R15**	■	**644ZXT10-2.5-R15**	■
3.0	6	0.08	**634ZXT10-3.0-R08**	■	**644ZXT10-3.0-R08**	■
3.0	6	0.15	**634ZXT10-3.0-R15**	■	**644ZXT10-3.0-R15**	■
3.0	6	0.35	-		**644ZXT10-3.0-R35**	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

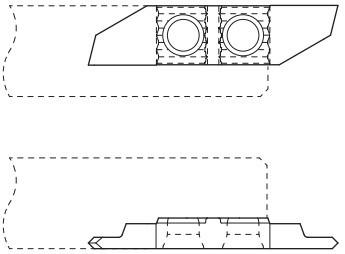
f min: 0.02 mm/U

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

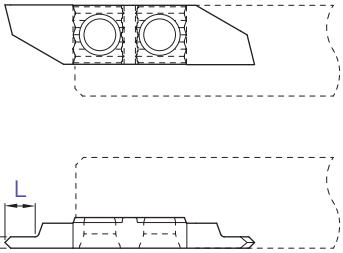
Chanfreinage
Anfasen
Chamfering

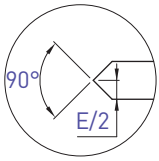
635-90 / 645-90

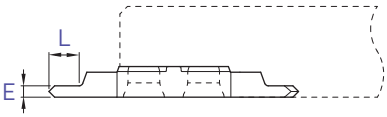
L



R



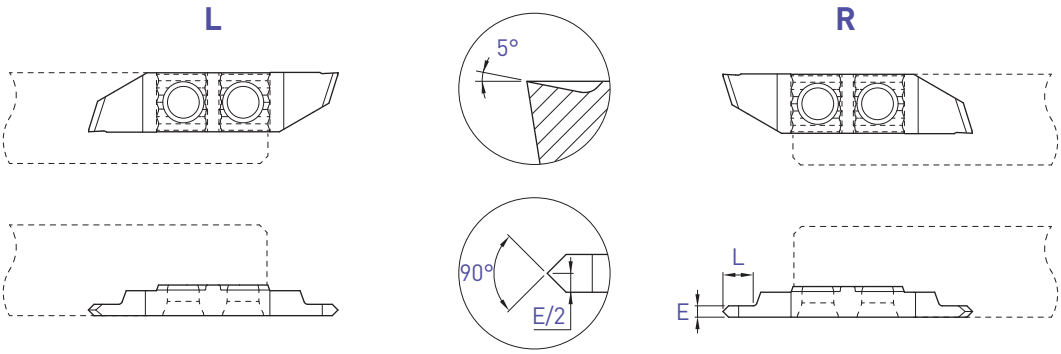




		L			R		
E	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	4	635-90-1.5	■	■	645-90-1.5	■	■

Chanfreinage
Anfasen
Chamfering

635X-90 / 645X-90

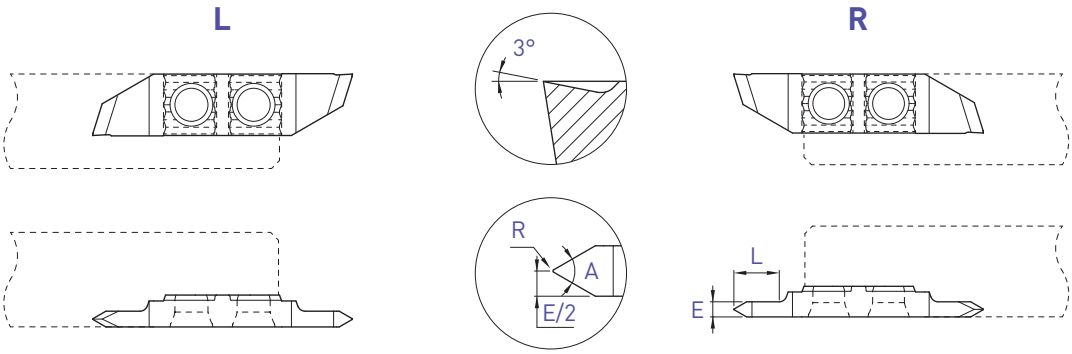


		L			R		
E	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	4	635X5-90-1.5	■	■	645X5-90-1.5	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Filetage
Gewinde drehen
Threading

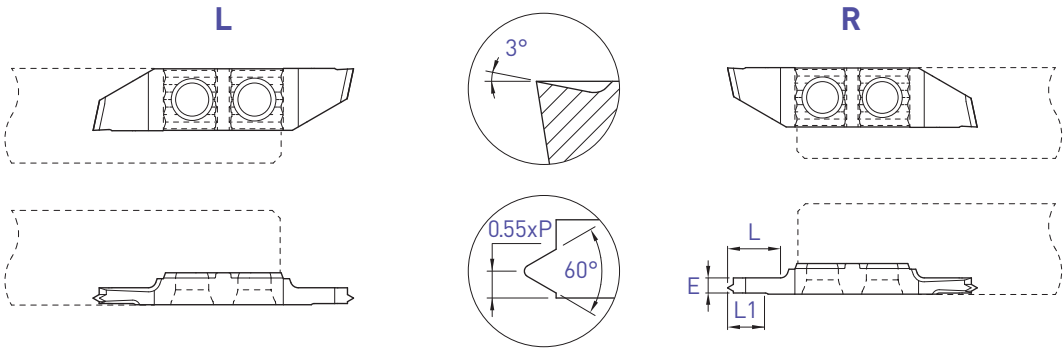
636X / 646X



Profil partiel
Teilprofil
Partial profile

A	E	L	R	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
55°	1.5	4	0	**636X3-55-1.5**	■	■	**646X3-55-1.5**	■	■
55°	2.0	6	0.03	**636X3-55-2.0-R03**	■	■	**646X3-55-2.0-R03**	■	■
60°	1.5	4	0	**636X3-60-1.5**	■	■	**646X3-60-1.5**	■	■
60°	2.0	6	0.03	**636X3-60-2.0-R03**	■	■	**646X3-60-2.0-R03**	■	■
60°	2.0	6	0.06	**636X3-60-2.0-R06**	■	■	**646X3-60-2.0-R06**	■	■
60°	3.0	8	0.06	**636X3-60-3.0-R06**	■	■	**646X3-60-3.0-R06**	■	■
60°	3.0	8	0.12	**636X3-60-3.0-R12**	■	■	**646X3-60-3.0-R12**	■	■

636X-M / 646X-M



Profil complet métrique
Metrisches Vollprofil
Metric full profile

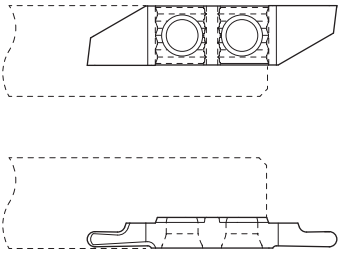
				L			R		
E	L	L1	Pas Steigung Pitch P	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.0	3	3	0.25	636X3-M-0.25	■	■	646X3-M-0.25	■	■
1.0	3	3	0.30	636X3-M-0.30	■	■	646X3-M-0.30	■	■
1.0	3	3	0.35	636X3-M-0.35	■	■	646X3-M-0.35	■	■
1.0	3	3	0.40	636X3-M-0.40	■	■	646X3-M-0.40	■	■
1.0	3	3	0.45	636X3-M-0.45	■	■	646X3-M-0.45	■	■
1.0	3	3	0.50	636X3-M-0.50	■	■	646X3-M-0.50	■	■
1.5	5	5	0.60	636X3-M-0.60	■	■	646X3-M-0.60	■	■
1.5	5	5	0.70	636X3-M-0.70	■	■	646X3-M-0.70	■	■
1.5	5	5	0.75	636X3-M-0.75	■	■	646X3-M-0.75	■	■
1.5	5	5	0.80	636X3-M-0.80	■	■	646X3-M-0.80	■	■
2.0	7	5	1.00	636X3-M-1.00	■	■	646X3-M-1.00	■	■
2.0	7	5	1.25	636X3-M-1.25	■	■	646X3-M-1.25	■	■
2.0	7	5	1.50	636X3-M-1.50	■	■	646X3-M-1.50	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

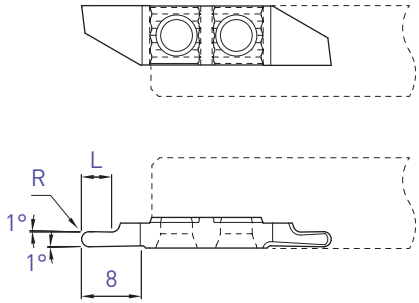
Plaquettes à rayon
Radius Wendeplatten
Radius inserts

637 / 647

L



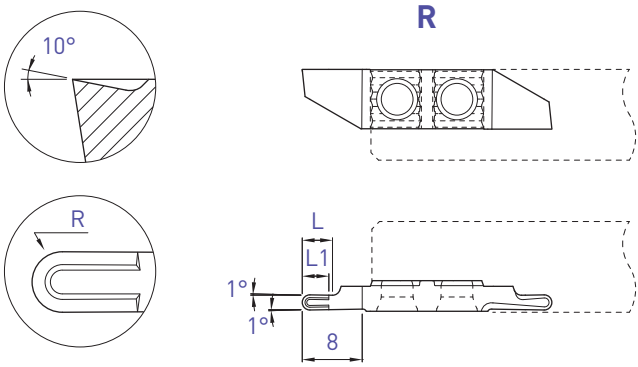
R



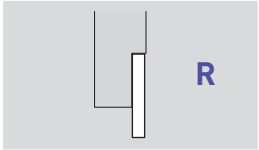
		L					R				
R	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.25	1.5	-					647-R0.25	■	■		
0.4	2	-					647-R0.4	■	■		
0.5	2.5	637-R0.5	■	■			647-R0.5	■	■	□	□
0.6	2.5	-					647-R0.6	■	■		
0.75	3	-					647-R0.75	■	■		
0.8	3	-					647-R0.8	■	■		
1.0	4	637-R1.0	■	■			647-R1.0	■	■		
1.5	6	-					647-R1.5	■	■		

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

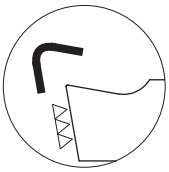
647ZX10



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



R	L	L1	Art. N°	TiAlN N (µk20)
1.0	4	3.5	**647ZX10-R1.0**	■
1.5	6	4	**647ZX10-R1.5**	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

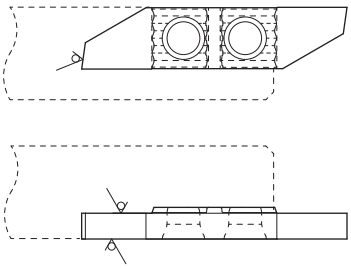
f min: 0.02 mm/U

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

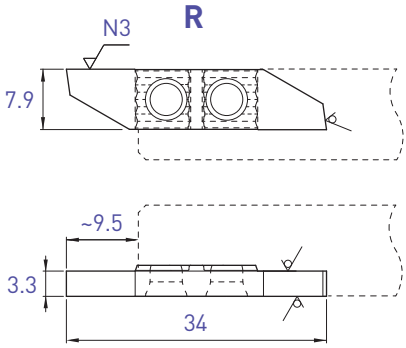
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

631-EP / 641-EP

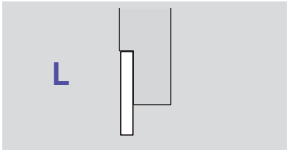
L

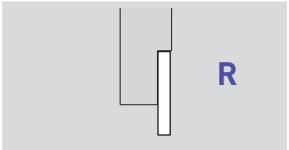


R



Face de coupe polie
Polierte Schneidfläche
Polished cutting face

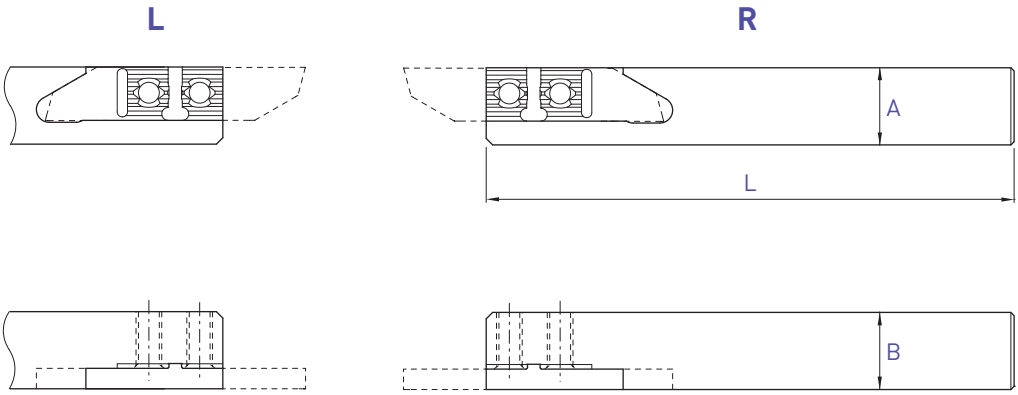


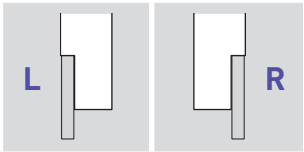


Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
631-EP	■	■	■	■	641-EP	■	■	■	■

Porte-outils
Halter
Holders

650 / 660





A x B	L	Art. N°	Art. N°
8 x 8	115	**650-8**	**660-8**
10 x 10	115	**650-10**	**660-10**
10 x 10	50	**650-10-50**	**660-10-50**
12 x 12	130	**650-12**	**660-12**
12 x 12	90	**650-12-90**	**660-12-90**
12.7 x 12.7	130	**650-12.7**	**660-12.7**
16 x 16	130	**650-16**	**660-16**
16 x 16	75	**650-16-75**	**660-16-75**
20 x 20	120	**650-20**	**660-20**

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

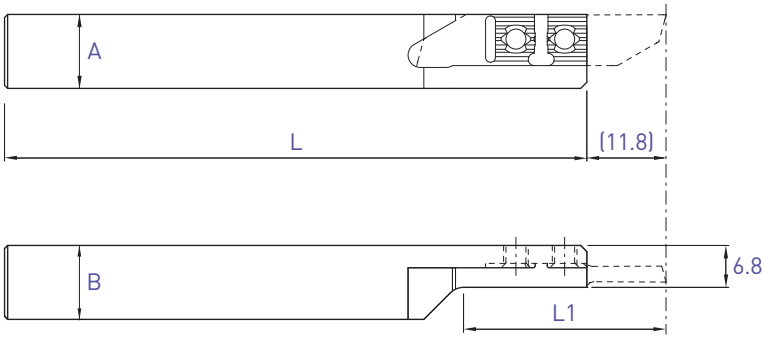
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

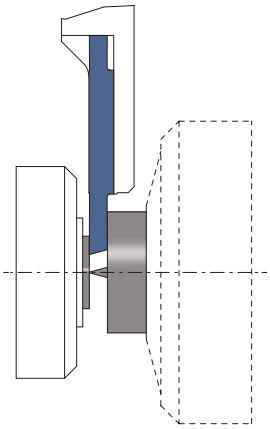
Porte-outils | **Coupe à droite déportée**
Halter | **Versetztes Rechtsschneiden**
Holders | **Right cut off line**

650 RC

Utiliser des plaquettes type 651R
WSP Typ 651R verwenden
Use inserts type 651R

Voir dès page 3.39
Siehe ab Seite 3.39
See from page 3.39





L (R)

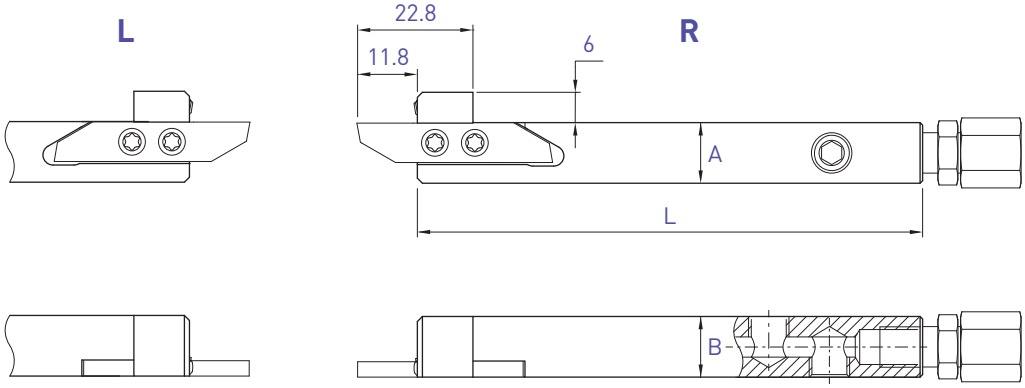
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

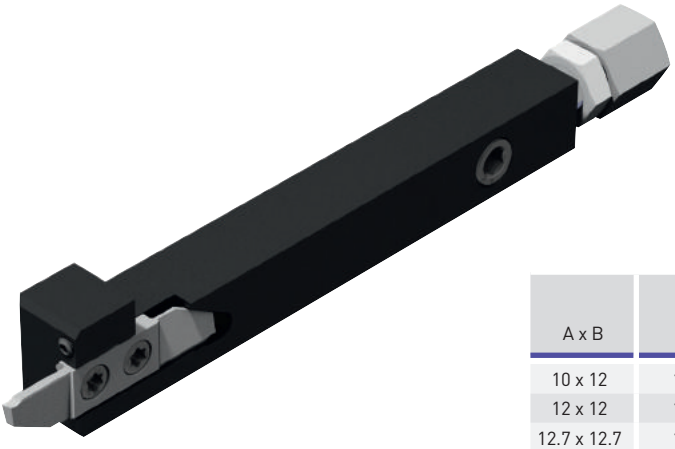
A x B	L	L1	Art. N°
10 x 10	115	32	**650RC-10**
12 x 12	130	32	**650RC-12**
16 x 16	130	42	**650RC-16**

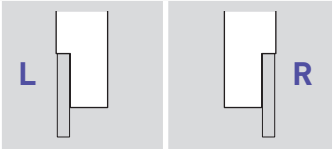
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils avec arrosage intégré
Halter mit integrierter Kuhlmittelzufuhr
Holders with integrated coolant supply

650-JET / 660-JET







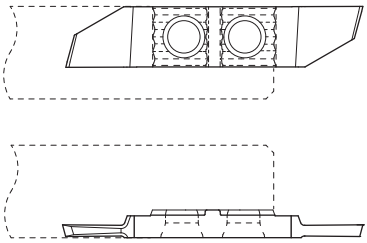
A x B	L	Art. N°	Art. N°
10 x 12	100	**650-1012-JET**	**660-1012-JET**
12 x 12	100	**650-12-JET**	**660-12-JET**
12.7 x 12.7	100	**650-12.7-JET**	**660-12.7-JET**
16 x 16	100	**650-16-JET**	**660-16-JET**
20 x 20	100	**650-20-JET**	**660-20-JET**

Chaque support est livré avec vis, clé, raccord droit et buse d'arrosage Ø 1.5 mm.
Jeder Halter wird mit Spannschraube(n), Schlüssel, gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert.
Screw(s), key, straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder.

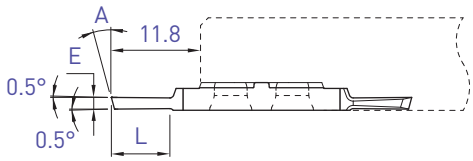
Tronçonnage
Abstechen
Parting off

651 / 661

L



R

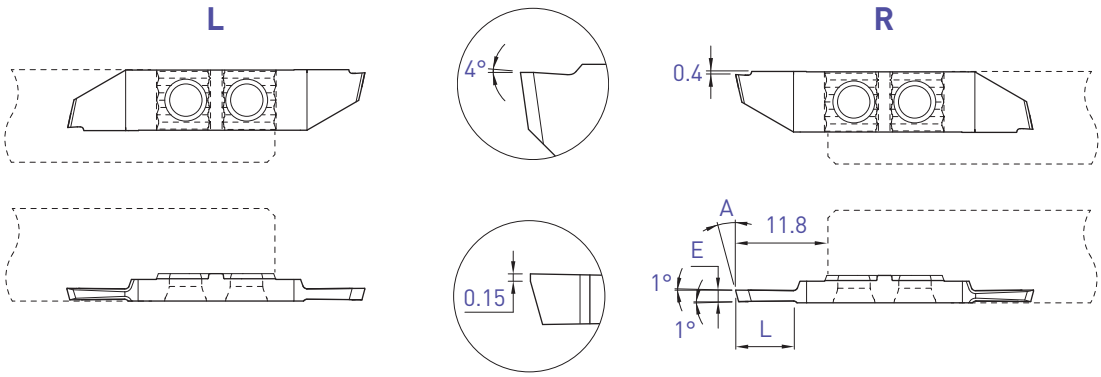


E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.8	20°	5	**651-0.8-20°**	■	■			**661-0.8-20°**	■	■	□	□
1.0	15°	5	–					**661-1.0-15°**	■	■	□	□
1.0	20°	5	**651-1.0-20°**	■	■			**661-1.0-20°**	■	■	□	□
1.2	15°	5	–					**661-1.2-15°**	■	■	□	□
1.2	20°	5	**651-1.2-20°**	■	■			**661-1.2-20°**	■	■	□	□
1.5	15°	7.5	**651-1.5-15°**	■	■			**661-1.5-15°**	■	■	□	□
1.5	20°	7.5	–					**661-1.5-20°**	■	■	□	□
1.8	15°	9	**651-1.8-15°**	■	■			**661-1.8-15°**	■	■	□	□
2.0	15°	11	**651-2.0-15°**	■	■			**661-2.0-15°**	■	■	□	□
2.5	15°	11	**651-2.5-15°**	■	■			**661-2.5-15°**	■	■	□	□

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Tronçonnage
Abstechen
Parting off

651XF / 661XF

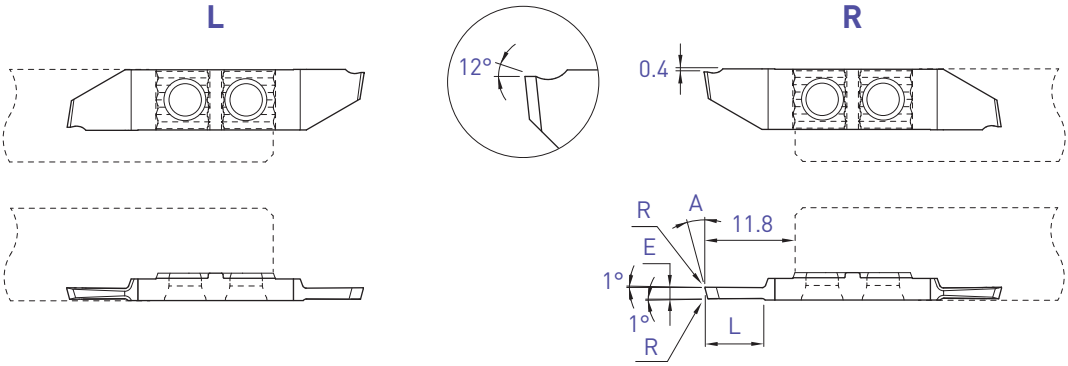


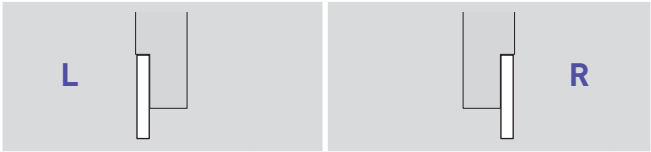
E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	15°	7.5	**651XF-1.5**	■	■			**661XF-1.5**	■	■	□	□
2.0	15°	11	**651XF-2.0**	■	■			**661XF-2.0**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tronçonnage
Abstechen
Parting off

651X12 / 661X12



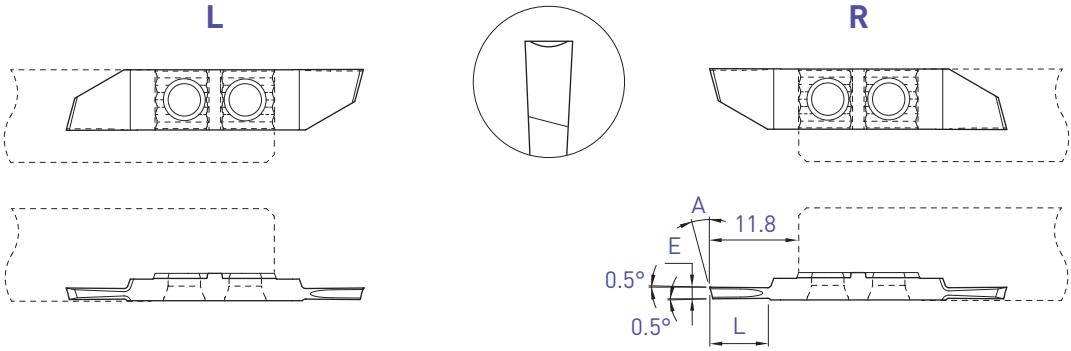


E	A	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	15°	5	0.03	**651X12-1.0**	■	■			**661X12-1.0**	■	■	□	□
1.5	15°	7.5	0.03	**651X12-1.5**	■	■			**661X12-1.5**	■	■	□	□
2.0	15°	11	0.03	**651X12-2.0**	■	■			**661X12-2.0**	■	■	□	□

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Tronçonnage
Abstechen
Parting off

651U / 661U

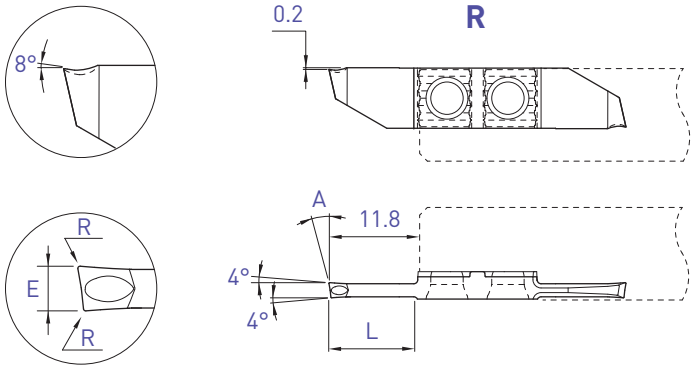


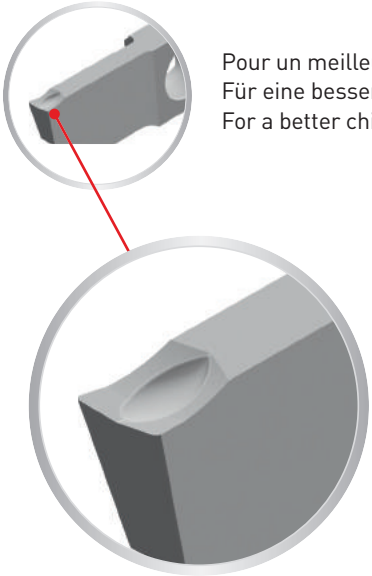
E	A	L	Art. N°	TiAlN	N (µk20)	Art. N°	TiAlN	N (µk20)
1.5	15°	7.5	**651U-1.5**	■	■	**661U-1.5**	■	■
2.0	15°	11	**651U-2.0**	■	■	**661U-2.0**	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

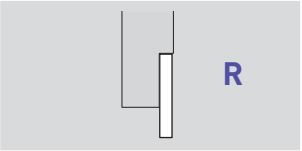
Tronçonnage
Abstechen
Parting off

661ZU

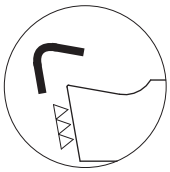




Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



E	A	L	R	Art. N°	TiAlN	N (µk20)
2.0	8°	11	0.10	**661ZU8-2.0-8°-R10**	■	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

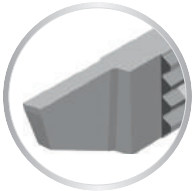
f min: 0.02 mm/U

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

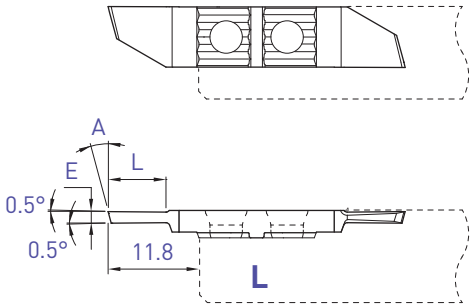
Tronçonnage
Abstechen
Parting off

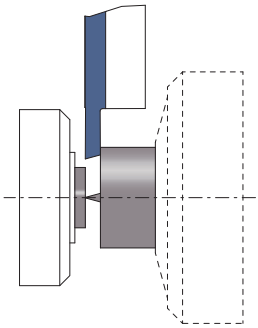
Coupe déportée
Versetztes Schneiden
Cut off line

651R



Cut R





L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

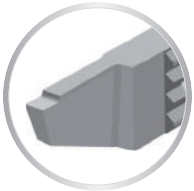
E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	15°	5	**651R-1.0-15°**	■	■	□	□
1.2	15°	5	**651R-1.2-15°**	■	■	□	□
1.5	15°	7.5	**651R-1.5-15°**	■	■	□	□
2.0	15°	11	**651R-2.0-15°**	■	■	□	□
2.5	15°	11	**651R-2.5-15°**	■	■	□	□

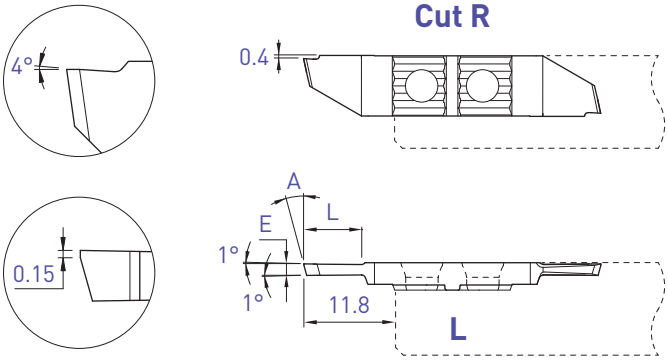
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

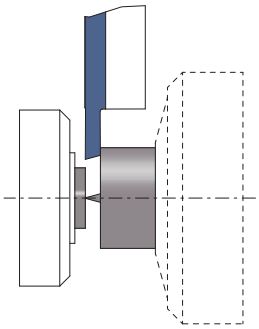
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RXF







L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

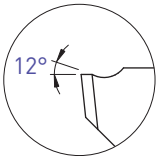
E	A	L	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	15°	7.5	**651RXF-1.5**	■	■	□	□
2.0	15°	11	**651RXF-2.0**	■	■	□	□

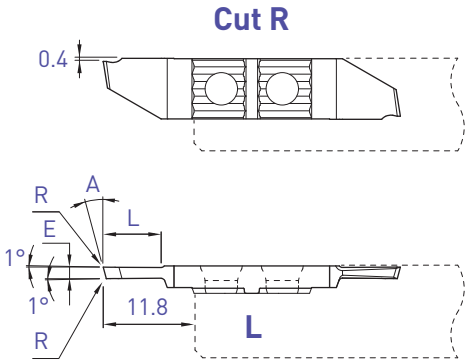
Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

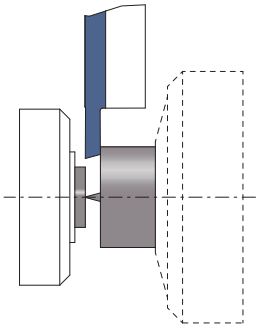
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RX12







L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

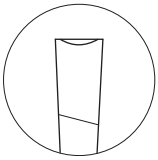
E	A	L	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
1.5	15°	7.5	0.03	**651RX12-1.5**	■	■	□	□
2.0	15°	11	0.03	**651RX12-2.0**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

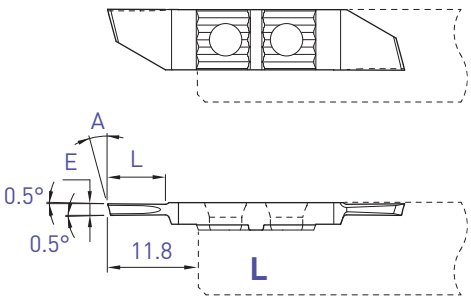
Tronçonnage / Abstechen / Parting off

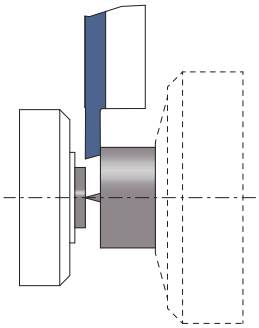
Coupe déportée / Versetztes Schneiden / Cut off line

651RU



Cut R





L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

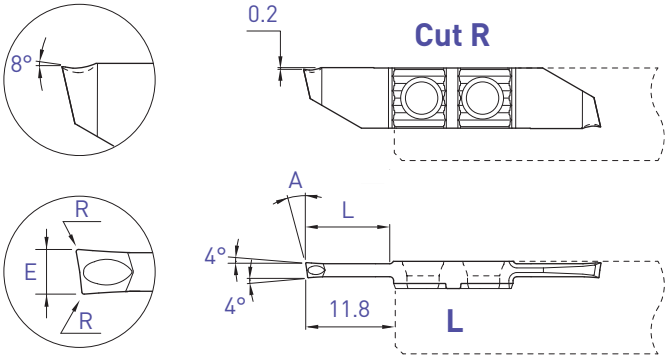
E	A	L	Art. N°	TiAlN	N (µk20)
1.5	15°	7.5	**651RU-1.5**	■	■
2.0	15°	11	**651RU-2.0**	■	■

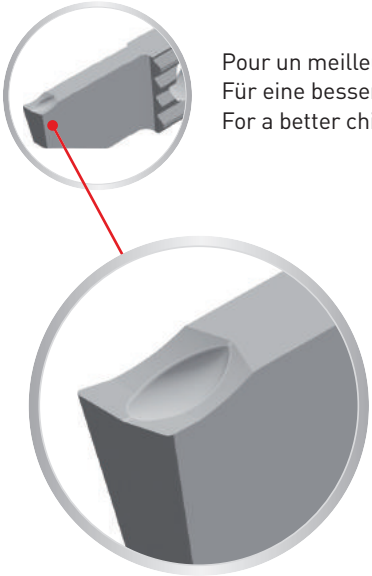
Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RZU



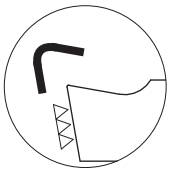


Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control

L (R)

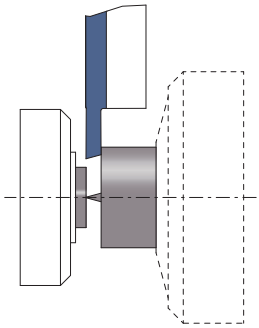
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	R	Art. N°	TiAlN N (µk20)
2.0	8°	11	0.10	**651RZU8-2.0-8°-R10**	■



Arête de coupe honée
Gehonte Schneidkante
Honed edge

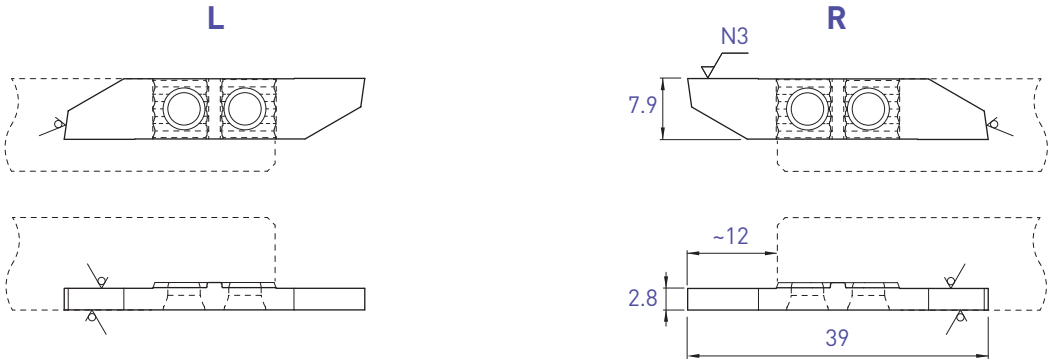
f min: 0.02 mm/U



■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

651-EP / 661-EP

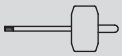
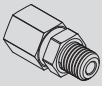


Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L					R				
Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
651-EP	■	■	■	■	661-EP	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

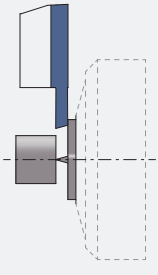
Pièces de rechange et accessoires
Ersatzteile und Zubehöre
Spare parts and accessories

Pièces de rechange Ersatzteile Spare parts							
Porte-outils Halter Holders						**Option** **Art. N°**	Recommandation de serrage Drehmoment Empfehlung Clamping recommendation
630 640	**V-M4X9-T15**	**C-T15**	-	-	-	**SET-NM-TX15**	3 Nm
630-JET 640-JET			**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**		
650 660			-	-	-		
650-RC	**V-M4X6.5-T15**		-	-	-		
650-JET 660-JET	**V-M4X9-T15**		**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**		

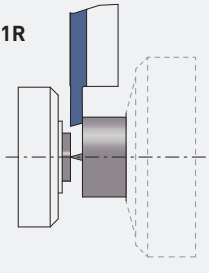
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

APPLITEC

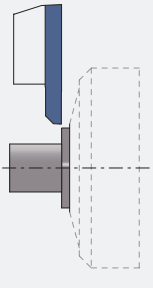
261



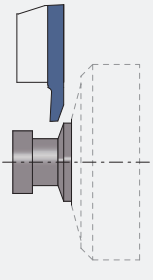
251R



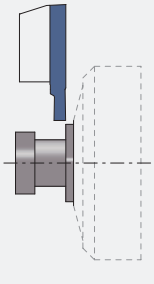
262



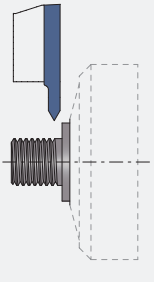
263



264



266



Index

Nuances
Sorten
Grades

AP302

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

AP202

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance particulièrement adaptée aux faibles vitesses de coupe

- besonders geeignete Sorte für niedrige Schnittgeschwindigkeiten

- grade particularly suitable for low cutting speeds

N (µK20)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain tenace
- supporte les coupes interrompues et autres conditions d'usinage défavorables

- zähe Feinkornsorte
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- tough micro-grain grade
- suitable for interrupted cut and other unfavourable machining conditions

AH302

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

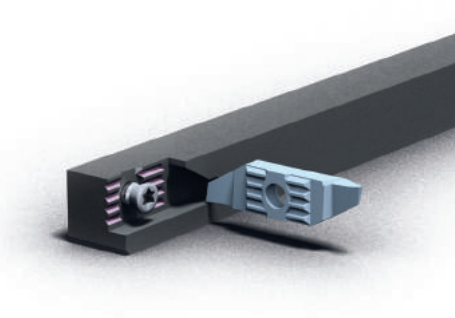
HN (µK10)

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

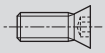
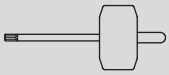


Rigid clamping system

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning		Tronçonnage Abstechen Parting off	
		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15
Acier Stahl < 600 N/mm² Steel	P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12
Acier Stahl < 800 N/mm² Steel	P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10
Acier Stahl > 800 N/mm² Steel	P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06

Accessoires
Zubehöre
Accessories

Porte-outils Halter Holders			
250-8 / 260-8	**V-M3.5X7.3-T15**	**C-T15**	**SET-NM-TX15**
250-... / 260-...	**V-M4X9-T15**		
250RC / 260-C	**V-M4X7.3-T15**		

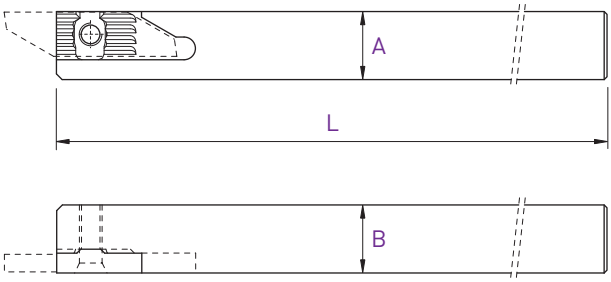
Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

3.0 Nm

Porte-outils
Halter
Holders

250 / 260

R

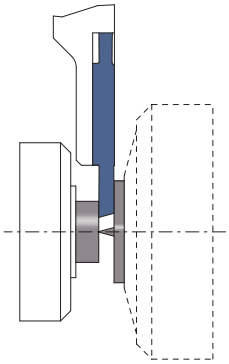


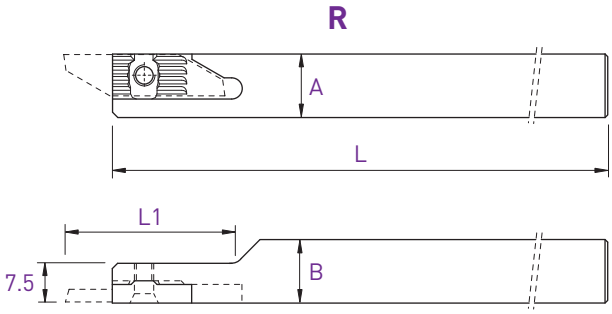
		L	R
A x B	L	Art. N°	Art. N°
8 x 8	115	**250-8**	**260-8**
10 x 10	115	**250-10**	**260-10**
12 x 12	130	**250-12**	**260-12**
12 x 12	90	**250-12-90**	**260-12-90**
12.7 x 12.7	130	**250-12.7**	**260-12.7**
16 x 16	130	**250-16**	**260-16**
16 x 16	75	**250-16-75**	**260-16-75**
20 x 20	120	**250-20**	**260-20**

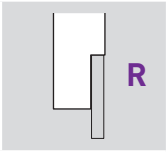
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils
Halter
Holders

260-C





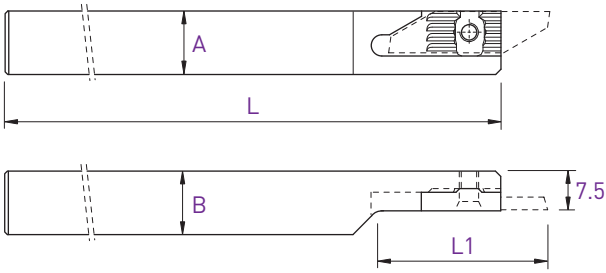


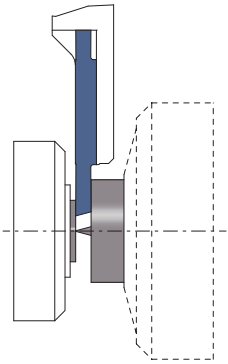
A x B	L	L1	Art. N°
12 x 12	130	30	**260-C-12**

Porte-outils
Halter
Holders

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

250RC





Utiliser des plaquettes type 251R
WSP Typ 251R verwenden
Use inserts type 251R

L (R)

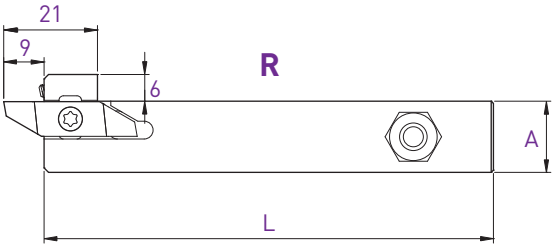
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

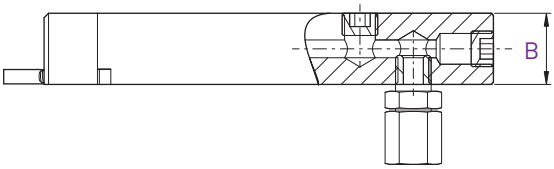
A x B	L	L1	Art. N°
12 x 12	130	30	**250RC-12**
16 x 16	130	40	**250RC-16**

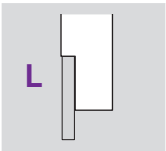
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

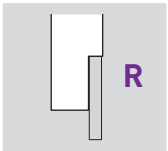
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

250-JET / 260-JET

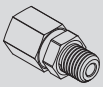








A x B	L	Art. N°	Art. N°
10 x 12	100	**250-1012-JET**	**260-1012-JET**
12 x 12	100	**250-12-JET**	**260-12-JET**
16 x 16	100	**250-16-JET**	**260-16-JET**
20 x 20	100	**250-20-JET**	**260-20-JET**

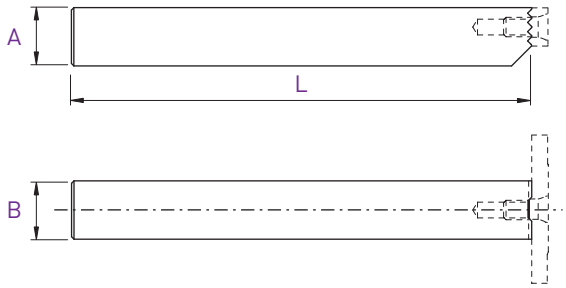
Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	**Art. N°**	**Art. N°**
250-JET / 260-JET	**J-M8X1-D6**	**JB-M8X1**	**JJ-M3X6-D1.5**

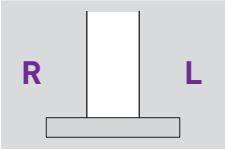
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

Porte-outils
Halter
Holders

260/250F

L / R



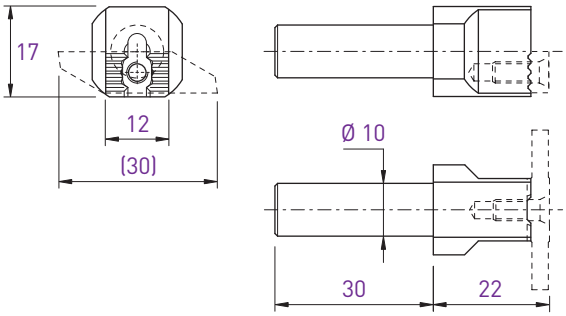


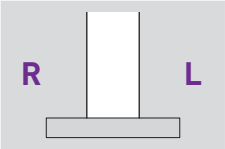
A x B	L	Art. N°
10 x 12	120	**260/250F-1012**
12 x 12	120	**260/250F-1212**

Porte-outils
Halter
Holders

260/250-D

L / R



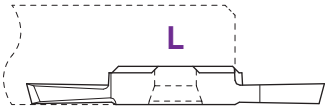


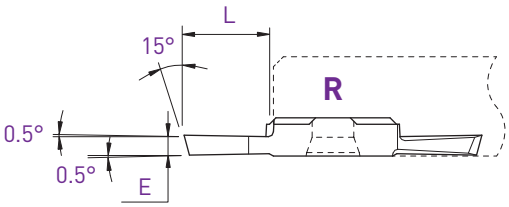
Art. N°
260/250-D10

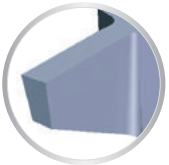
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

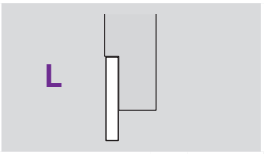
Tronçonnage
Abstechen
Parting off

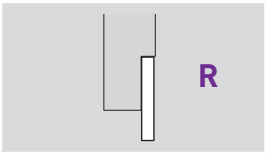
251 / 261









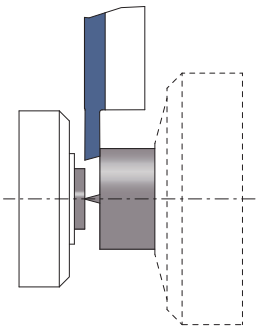


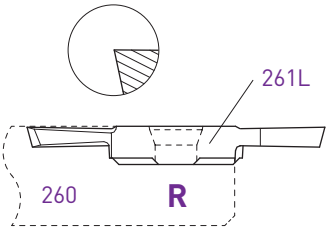
E	L	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
0.8	4	**251-0.8**	■	□	■	**261-0.8**	■	□	■
1.0	5	**251-1.0**	■	□	■	**261-1.0**	■	□	■
1.2	5	**251-1.2**	■	□	■	**261-1.2**	■	□	■
1.5	7	**251-1.5**	■	□	■	**261-1.5**	■	□	■
2.0	8.5	**251-2.0**	■	□	■	**261-2.0**	■	□	■
2.5	8.5	**251-2.5**	■	□	■	**261-2.5**	■	□	■

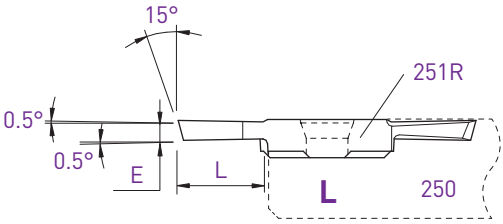
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

261L / 251R





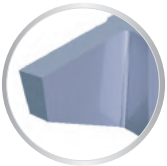


R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

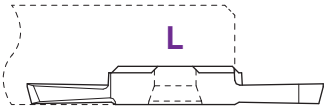
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

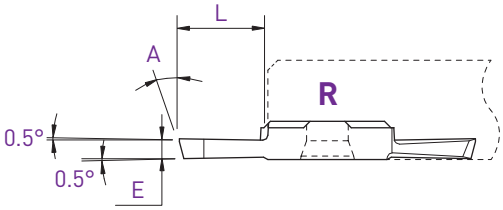


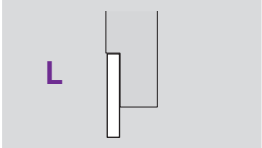
E	L	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
1.0	5	-				**251R-1.0**	■	□	■
1.5	7	-				**251R-1.5**	■	□	■
2.0	8.5	**261L-2.0**	■	□	■	**251R-2.0**	■	□	■

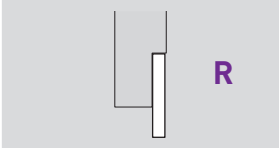
Tronçonnage
Abstechen
Parting off

251XF / 261XF







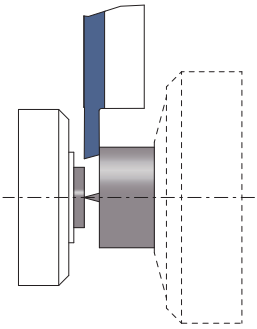


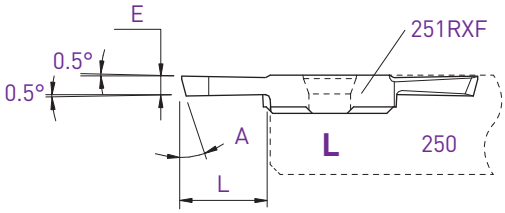
a	E	L	A	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
4°	1.0	4	15°	-				261XF-1.0	■		■
6°	1.0	4	8°	-				261XF6°-1.0-8°	■		■
4°	1.5	7	15°	251XF-1.5	■	□	■	261XF-1.5	■	□	■
4°	2.0	8.5	15°	251XF-2.0	■	□	■	261XF-2.0	■	□	■

Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

251RXF





L (R)

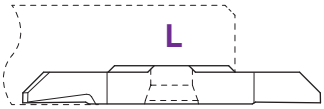
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

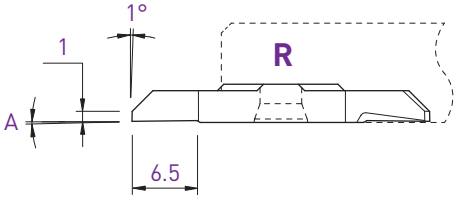
a	E	L	A	Art. N°	AP302	AP202	N (µk20)
6°	1.0	4	8°	251RXF6°-1.0-8°	■		■
4°	1.5	7	15°	251RXF-1.5	■	□	■
4°	2.0	8.5	15°	251RXF-2.0	■	□	■

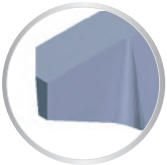
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage avant
Vorwärts drehen
Front turning

252 / 262



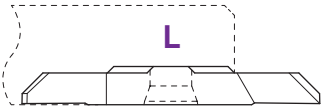


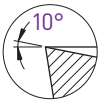


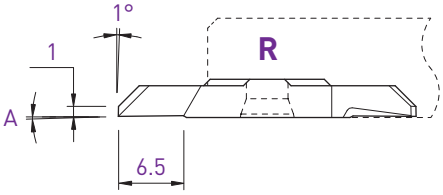
	L				R			
A	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
0°	252	■	□	■	262	■	□	■
2°	252-2°	■	□	■	262-2°	■	□	■

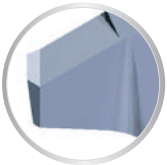
Tournage avant
Vorwärts drehen
Front turning

252X / 262X





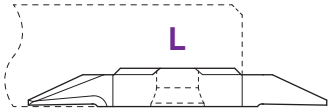


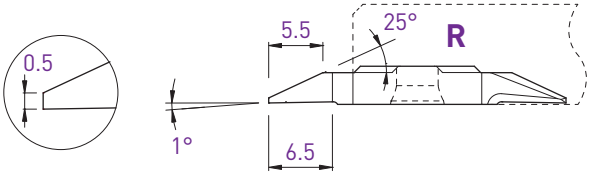


	L				R			
A	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
0°	252X	■	□	■	262X	■	□	■
2°	252X-2°	■	□	■	262X-2°	■	□	■

Tournage avant
Vorwärts drehen
Front turning

252S / 262S

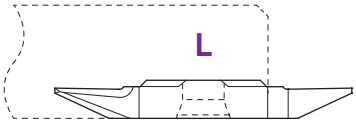


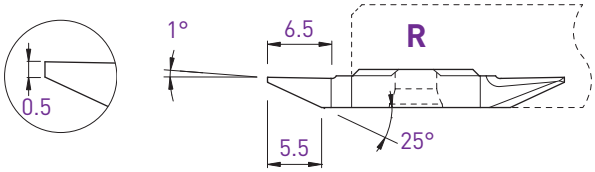


Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
252S05	■	□	■	262S05	■	□	■

Tournage arrière
Rückwärts drehen
Back turning

253S / 263S



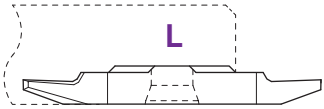


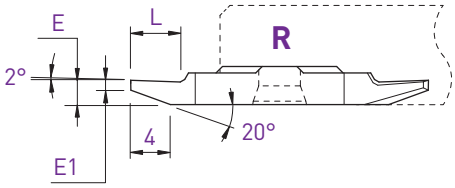
Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
253S05	■	□	■	263S05	■	□	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tournage arrière
Rückwärts drehen
Back turning

253 / 263

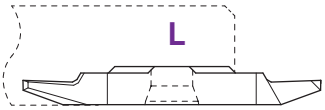


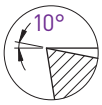


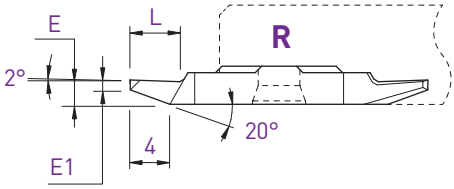
E	E1	L	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
2.0	0.5	4	**253-0.5**	■	□	■	**263-0.5**	■	□	■
2.5	1.0	5	**253-1.0**	■	□	■	**263-1.0**	■	□	■

Tournage arrière
Rückwärts drehen
Back turning

253X / 263X



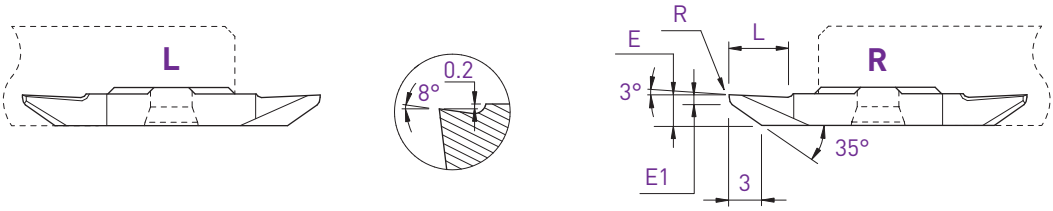




E	E1	L	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
2.0	0.5	5	**253X-0.5**	■	□	■	**263X-0.5**	■	□	■
2.5	1.0	5	**253X-1.0**	■	□	■	**263X-1.0**	■	□	■

Tournage arrière
Rückwärts drehen
Back turning

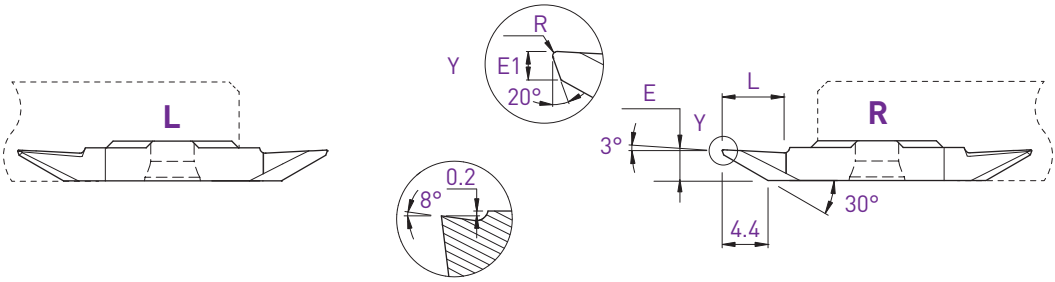
253VX-8° / 263VX-8°



E	E1	L	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
3.1	1.0	6	0	**253VX-8°**	■	□	■	**263VX-8°**	■	□	■		
3.1	1.0	6	0.08	-				**263VX-8°-R08**	■	□	■	■	■
3.1	1.0	6	0.20	-				**263VX-8°-R20**	■	□	■	■	■

Tournage arrière
Rückwärts drehen
Back turning

253VX-805 / 263VX-805

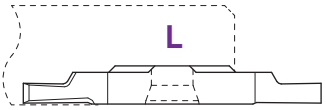


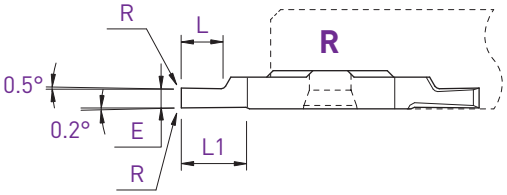
E	E1	L	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
3.0	0.5	6	0.08	**253VX-805-R08**	■	□	■	**263VX-805-R08**	■	□	■	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Fonçage-tournage
Einstechen und drehen
Grooving and turning

254 / 264

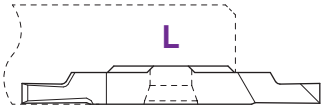


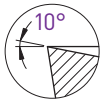


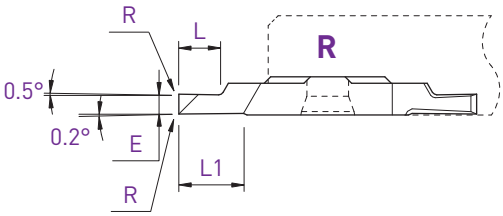
				L				R			
E	L	L1	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
0.8	2	4	0	**254-0.8**	■	□	■	**264-0.8**	■	□	■
1.0	2.5	4	0	**254-1.0**	■	□	■	**264-1.0**	■	□	■
1.2	3	4	0	**254-1.2**	■	□	■	**264-1.2**	■	□	■
1.5	3	4	0	**254-1.5**	■	□	■	**264-1.5**	■	□	■
1.8	4	6.5	0	-				**264-1.8**	■	□	■
2.0	4	6.5	0	**254-2.0**	■	□	■	**264-2.0**	■	□	■
2.5	6	6.5	0	**254-2.5**	■	□	■	**264-2.5**	■	□	■
3.0	6.5	6.5	0	**254-3.0**	■	□	■	**264-3.0**	■	□	■

Fonçage-tournage
Einstechen und drehen
Grooving and turning

254X / 264X







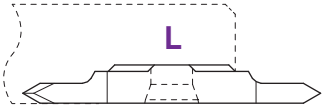
E	L	L1	R	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
0.8	2	4	0	**254X-0.8**	■	□	■	**264X-0.8**	■	□	■		
1.0	2.5	4	0	**254X-1.0**	■	□	■	**264X-1.0**	■	□	■		
1.0	2.5	4	0.08	-				**264X-1.0-R08**	■	□	■	■	■
1.2	3	4	0	**254X-1.2**	■	□	■	**264X-1.2**	■	□	■		
1.5	3	4	0	**254X-1.5**	■	□	■	**264X-1.5**	■	□	■		
1.5	3	4	0.08	-				**264X-1.5-R08**	■	□	■	■	■
1.5	3	4	0.20	-				**264X-1.5-R20**	■	□	■	■	■
2.0	4	6.5	0	**254X-2.0**	■	□	■	**264X-2.0**	■	□	■		
2.0	4	6.5	0.08	-				**264X-2.0-R08**	■	□	■	■	■
2.0	4	6.5	0.20	-				**264X-2.0-R20**	■	□	■	■	■
2.5	6	6.5	0	**254X-2.5**	■	□	■	**264X-2.5**	■	□	■		
2.5	6.5	6.5	0.08	-				**264X-2.5-R08**	■	□	■	■	■
2.5	6.5	6.5	0.20	-				**264X-2.5-R20**	■	□	■	■	■
3.0	6.5	6.5	0	**254X-3.0**	■	□	■	**264X-3.0**	■	□	■		
3.0	6.5	6.5	0.08	-				**264X-3.0-R08**	■	□	■	■	■
3.0	6.5	6.5	0.20	-				**264X-3.0-R20**	■	□	■	■	■

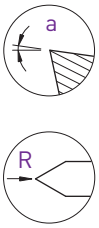
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

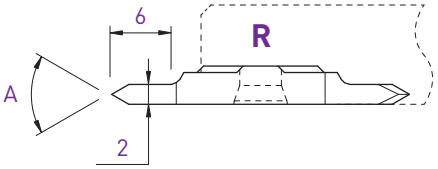
Filetage
Gewinde drehen
Threading

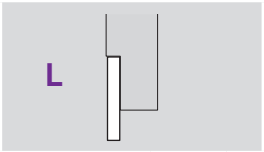
Partial profile 60°

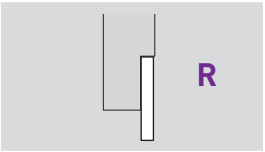
256-60 / 266-60









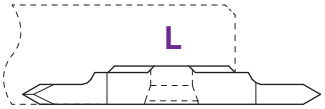


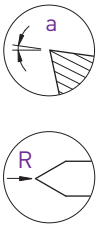
A	R	a	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
60°	0	0°	256-60-2.0	■	□	■	266-60-2.0	■	□	■
60°	0.06	3°	256-AG60°	■	□	■	266-AG60°	■	□	■

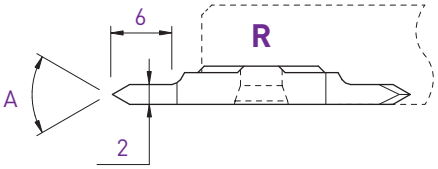
Filetage
Gewinde drehen
Threading

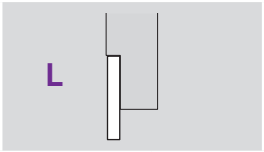
Partial profile 55°

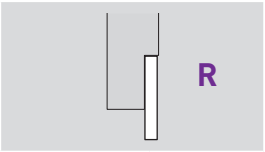
256-55 / 266-55







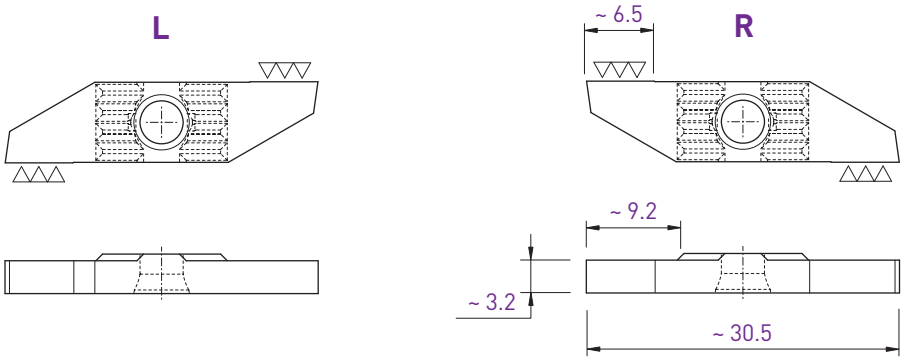




A	R	a	Art. N°	AP302	AP202	N (µk20)	Art. N°	AP302	AP202	N (µk20)
55°	0	0°	256-55-2.0	■	□	■	266-55-2.0	■	□	■
55°	0.06	3°	256-AG55°	■	□	■	266-AG55°	■	□	■

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

251-E / 261-E



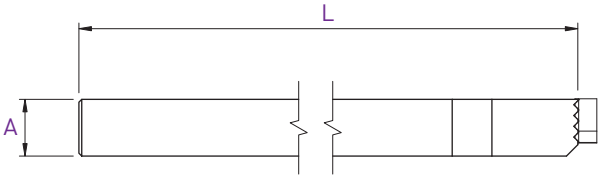
L						R					
Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)	Art. N°	AP302	AP202	N (µk20)	AH302	HN (µk10)
251-E	■	□	■	■	■	261-E	■	□	■	■	■

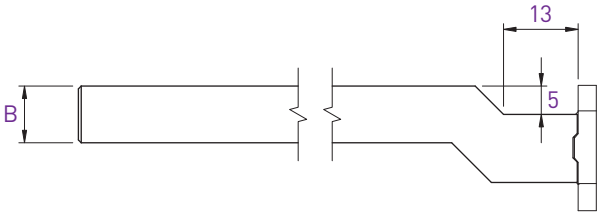
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

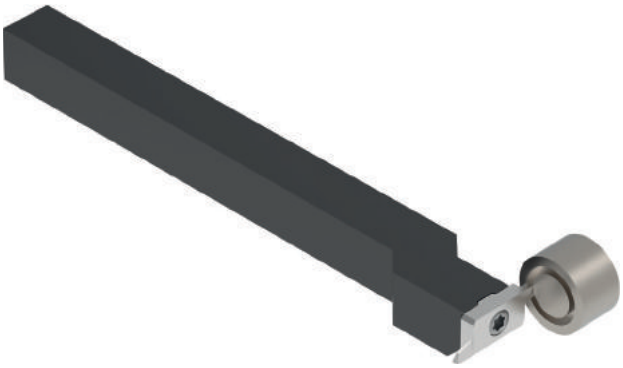
Porte-outils
Halter
Holders

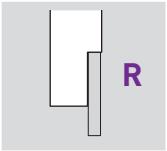
250RFG

new

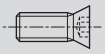
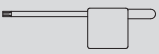








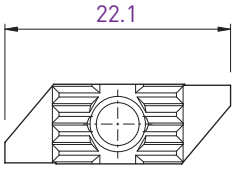
A x B	L	Art. N°
8x10	130	**250RFG-0810**
10x10	130	**250RFG-1010**
12x12	130	**250RFG-1212**
16x16	130	**250RFG-1616**

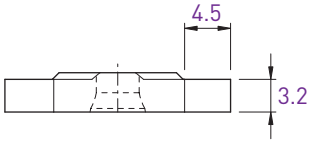
Pièces de rechange Ersatzteile Spare parts		
	Art. N°	**Art. N°**
	V-M4X9-T15	**C-T15**

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

251RFG

new





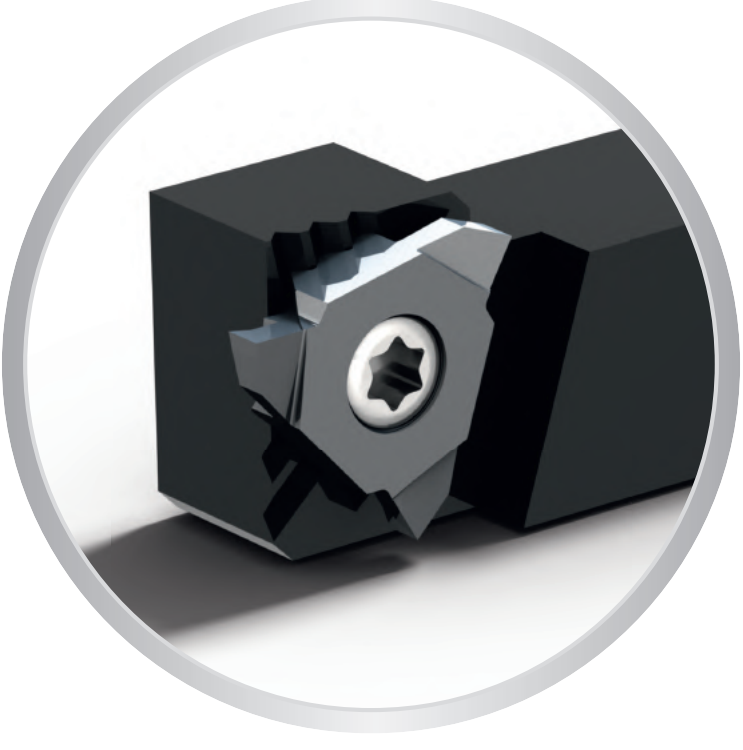
R

Art. N°	N (µk20)	AP302
251RFG-EP	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

<<< Main menu

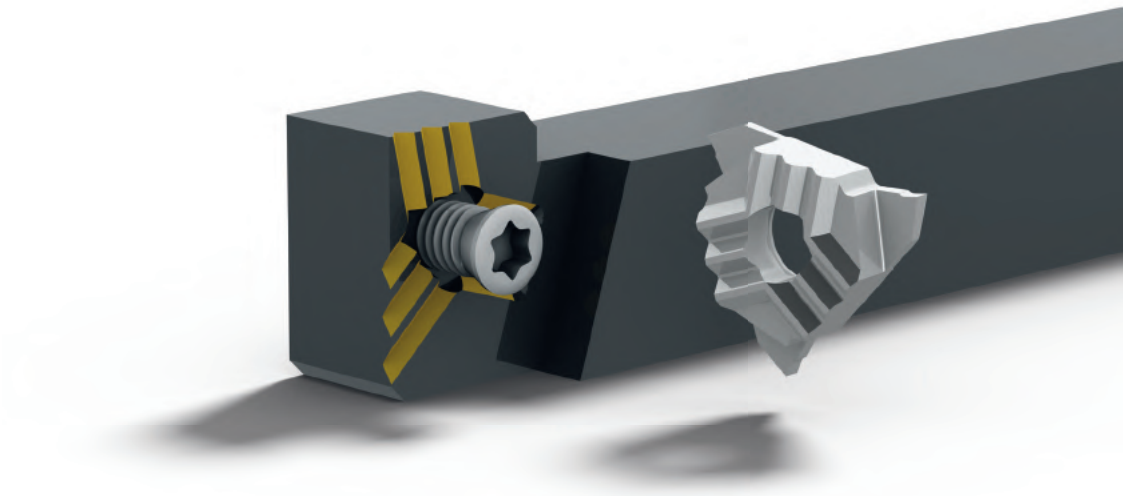
APPLITEC



Index

INFO

Rigid clamping system with the famous Applitec teeth clamping



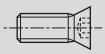
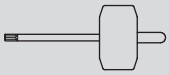
Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

HTA µK10 + revêtement PVD µK10 + PVD Beschichtung µK10 + PVD coating	HN (µK10) non revêtu unbeschichtet uncoated
• nuance très résistante à l'usure • pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane	• nuance micro-grain très résistante à l'usure • recommandé pour l'usinage du laiton, de l'aluminium et du titane faiblement allié
• sehr verschleissfeste Sorte • für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen	• sehr verschleissfeste Feinkornsorte • für die Bearbeitung von Messing und niedrig legiertem Aluminium und Titan empfehlenswert
• very wear resistant grade • for light machining of steel, stainless steel and titanium alloys under favourable machining conditions	• very wear resistant micro-grain grade • suitable for the machining of brass and low alloyed aluminium and titanium

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

		Tournage Drehen Turning		Foncer Einstechen Grooving	
Matière Werkstoff Material		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15
Acier Stahl < 600 N/mm² Steel	P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12
Acier Stahl < 800 N/mm² Steel	P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10
Acier Stahl > 800 N/mm² Steel	P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06

Accessoires
Zubehöre
Accessories

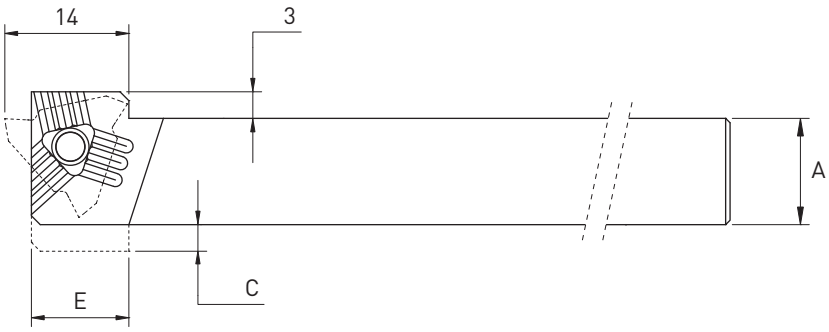
Porte-outils Halter Holders			
T216-H...	**V-M4X9-T15**	**C-T15**	**SET-NM-TX15**

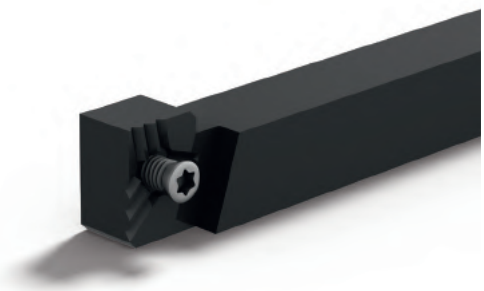
Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

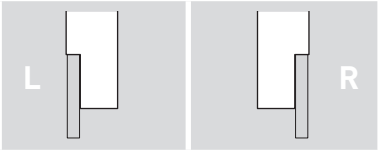
3.0 Nm

Porte-outils
Halter
Holders

T216-L/R





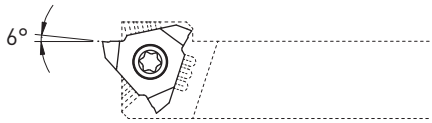


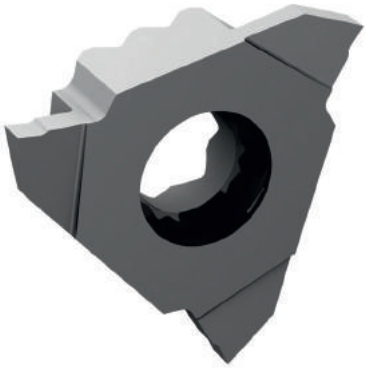
AxB	C	E	L	Art. N°	Art. N°
8x10	4	11	115	**T216-H0810L**	**T216-H0810R**
10x10	2	8	130	**T216-H1010L**	**T216-H1010R**
12x12	-	-	130	**T216-H1212L**	**T216-H1212R**
12x12	-	-	90	**T216-H1212L-90**	**T216-H1212R-90**
16x16	-	-	120	**T216-H1616L**	**T216-H1616R**
20x20	-	-	130	**T216-H2020L**	**T216-H2020R**

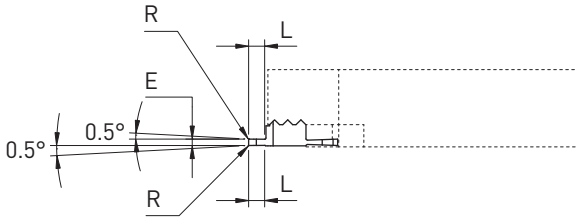
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

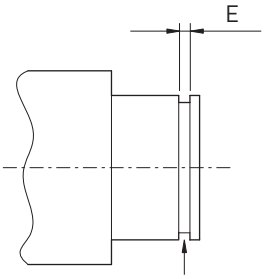
Plaquettes de gorge pour circlips
Einstechwendeplatte für Seegerring
Grooving inserts for retaining ring

GX









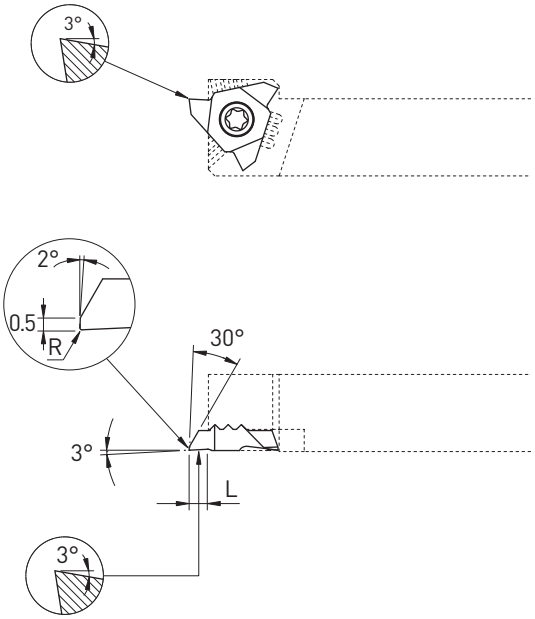
Selon DIN6799 et DIN471
Gemäss DIN6799 und DIN471
According to DIN6799 and DIN471

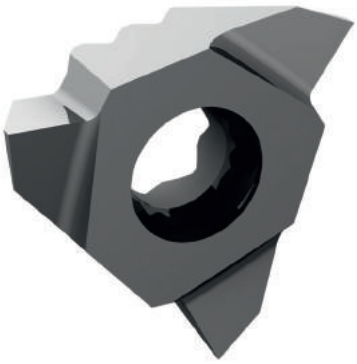
			L			R		
E ±0.01	L	R	Art. N°	HTA	HN	Art. N°	HTA	HN
0.26	0.8	0.03	T216L-GX026	■	■	T216R-GX026	■	■
0.36	0.8	0.03	T216L-GX036	■	■	T216R-GX036	■	■
0.46	0.8	0.03	T216L-GX046	■	■	T216R-GX046	■	■
0.50	1.5	0.03	T216L-GX050	■	■	T216R-GX050	■	■
0.57	1.5	0.03	T216L-GX057	■	■	T216R-GX057	■	■
0.67	1.5	0.03	T216L-GX067	■	■	T216R-GX067	■	■
0.77	2.0	0.03	T216L-GX077	■	■	T216R-GX077	■	■
0.87	2.0	0.03	T216L-GX087	■	■	T216R-GX087	■	■
0.97	2.5	0.03	T216L-GX097	■	■	T216R-GX097	■	■
1.00	2.5	0.03	T216L-GX100	■	■	T216R-GX100	■	■
1.10	2.5	0.03	T216L-GX110	■	■	T216R-GX110	■	■
1.20	2.5	0.03	T216L-GX120	■	■	T216R-GX120	■	■
1.30	2.5	0.03	T216L-GX130	■	■	T216R-GX130	■	■
1.50	2.5	0.03	T216L-GX150	■	■	T216R-GX150	■	■
1.60	2.5	0.03	T216L-GX160	■	■	T216R-GX160	■	■
1.85	2.5	0.03	T216L-GX185	■	■	T216R-GX185	■	■
2.00	2.5	0.03	T216L-GX200	■	■	T216R-GX200	■	■
2.50	2.5	0.03	T216L-GX250	■	■	T216R-GX250	■	■

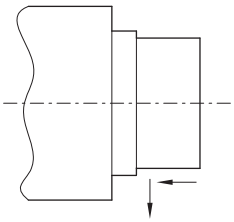
■ = disponible / verfügbar / available

Tournage avant
Vorwärts drehen
Front turning

FT



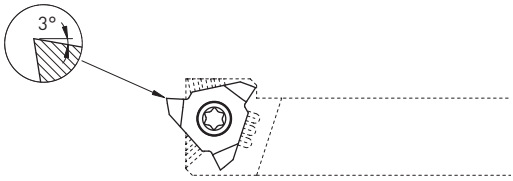


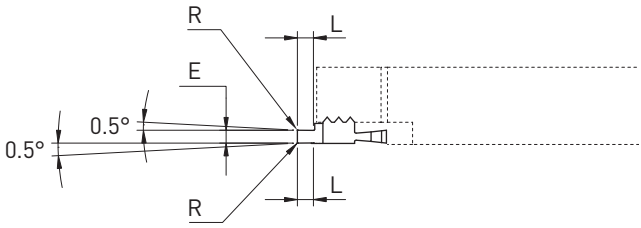


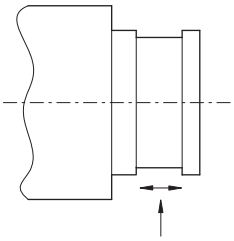
		L			R		
L	R	Art. N°	HTA	HN	Art. N°	HTA	HN
3.0	0.03	T216L-FT	■	■	T216R-FT	■	■
3.0	0.08	T216L-FT-R08	■	■	T216R-FT-R08	■	■

Fonçage-tournage
Einstechen und drehen
Grooving and turning

GT





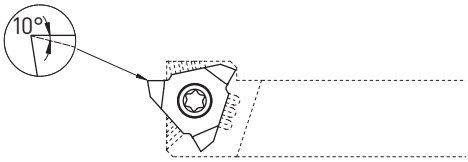


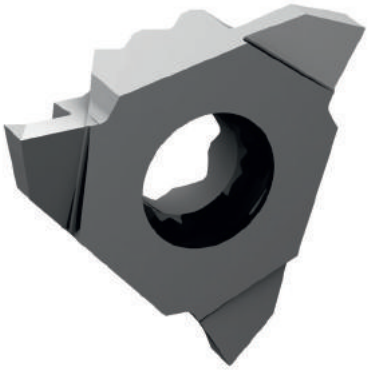
			L			R		
E	L	R	Art. N°	HTA	HN	Art. N°	HTA	HN
0.5	1.5	0.03	T216L-GT050	■	■	T216R-GT050	■	■
1.0	2.5	0.03	T216L-GT100	■	■	T216R-GT100	■	■
1.0	2.5	0.08	T216L-GT100-R08	■	■	T216R-GT100-R08	■	■
1.5	2.5	0.03	T216L-GT150	■	■	T216R-GT150	■	■
1.5	2.5	0.08	T216L-GT150-R08	■	■	T216R-GT150-R08	■	■
1.5	2.5	0.15	T216L-GT150-R15	■	■	T216R-GT150-R15	■	■
2.0	2.5	0.03	T216L-GT200	■	■	T216R-GT200	■	■
2.0	2.5	0.08	T216L-GT200-R08	■	■	T216R-GT200-R08	■	■
2.0	2.5	0.15	T216L-GT200-R15	■	■	T216R-GT200-R15	■	■
2.5	2.5	0.15	T216L-GT250-R15	■	■	T216R-GT250-R15	■	■

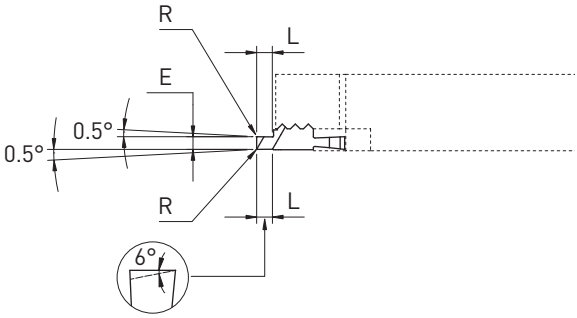
■ = disponible / verfügbar / available

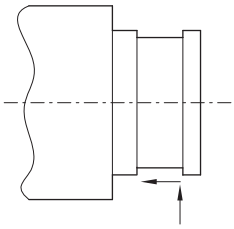
Fonçage-tournage
Einstechen und drehen
Grooving and turning

GTX









			L			R		
E	L	R	Art. N°	HTA	HN	Art. N°	HTA	HN
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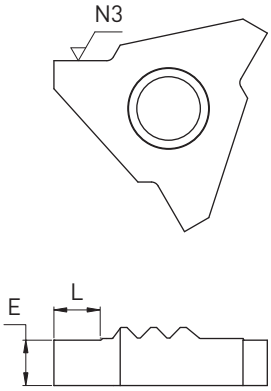
1.0	2.5	0.08	T216L-GTX100-R08	■	■	T216R-GTX100-R08	■	■
1.5	2.5	0.03	T216L-GTX150	■	■	T216R-GTX150	■	■
1.5	2.5	0.08	T216L-GTX150-R08	■	■	T216R-GTX150-R08	■	■
1.5	2.5	0.15	T216L-GTX150-R15	■	■	T216R-GTX150-R15	■	■
2.0	2.5	0.03	T216L-GTX200	■	■	T216R-GTX200	■	■
2.0	2.5	0.08	T216L-GTX200-R08	■	■	T216R-GTX200-R08	■	■
2.0	2.5	0.15	T216L-GTX200-R15	■	■	T216R-GTX200-R15	■	■
2.5	2.5	0.15	T216L-GTX250-R15	■	■	T216R-GTX250-R15	■	■

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

EP



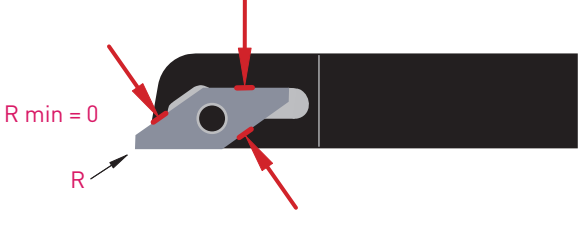
		L			R		
E	L	Art. N°	HTA	HN	Art. N°	HTA	HN
~3	3	T216L-EP		■	T216R-EP		■

■ = disponible / verfügbar / available

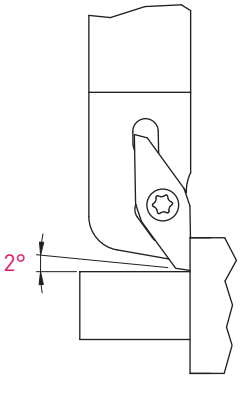
APPLITEC

300 Series

3 contact points



rigid clamping system



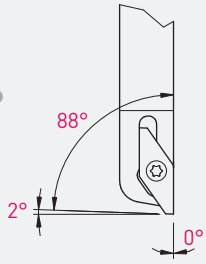
“wiper effect”

Pour un meilleur état de surface
Für eine bessere Oberflächengüte
For a better surface finish

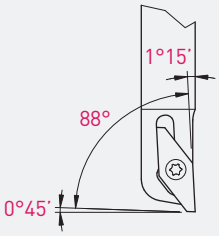
Tournage avant
Vorwärts drehen
Front turning

88°

310 / 320



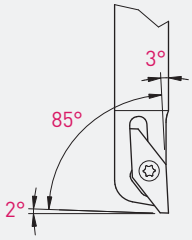
310-BC / 320-BC



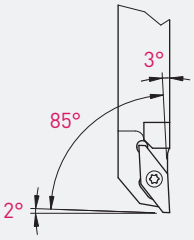
Tournage avant
Vorwärts drehen
Front turning

85°

330 / 340



340-JET



Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Géométries de coupe Spanformgeometrien Cutting geometry		P Acier de décolletage Automatenstahl Free-cutting steel	P Acier Stahl Steel	M Acier inoxydable Rostfreistahl Stainless steel	N Aluminium	N Laiton, bronze Messing, Bronze Brass, bronze	N Cuivre Kupfer Copper	S Titane Titane Titanium	
	3_7	★	★	★	★		★	☆	Géométrie universelle, très bonne maîtrise du copeau Allgemeine Geometrie, sehr gute Spankontrolle All-round insert with efficient chip control
	3_7-EN	☆	★	☆					Arête renforcée (augmente l'effort de coupe) Verstärkte Schneidkante (Schneidkrafterhöhung) Reinforced cutting edge (increases cutting force) f min: 0.02 mm/U
	3_8	✓	✓	✓		★			Géométrie plate classique Standard flache Geometrie Standard flat geometry
	3_8VS	☆		☆	✓		✓	✓	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation
	3_8VX	★	★	★	★		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	3_8X	★	★	★	☆		☆	★	Coupe positive traditionnelle Standard positive Geometrie Standard positive geometry
	3_9	☆	☆	☆		☆			Témoin plat sur la coupe pour réduire les vibrations Vibrationsreduzierung durch einer Flachfase und der Schneidkante Vibration reduction through flat ended cutting edge

★	1er choix 1. Wahl 1st choice
☆	Recommandé Empfohlen Recommended
✓	Pour pièces fragiles de très petits diamètres Für empfindliche und sehr kleine Werkstücke For fragile and very small work pieces

Nuances micro-grain à dureté élevée
Verschleissfeste Feinkornsorten
Wear resistant micro-grain grades

TiAlN

P M N S

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- excellente nuance universelle
- 1er choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

TiN

P M N

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for the machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

TiAlX

P M S

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

N (µK20)

P N S

non revêtu
unbeschichtet
uncoated

- supporte les coupes interrompues et autres conditions d'usinage défavorables

- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet

- suitable for interrupted cut and other unfavourable machining conditions

HTA

P M N S

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

HTiN

P M N

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées
- très faible coefficient de frottement
- à éviter pour l'usinage du titane

- Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden
- sehr geringer Reibwert
- für die Bearbeitung von Titan nicht geeignet

- grade for light machining of low resistance materials which causes edge build-up
- very low friction ratio
- not suitable for titanium machining

HTAX

P M S

µK10 + revêtement PVD
µK10 + PVD Beschichtung
µK10 + PVD coating

- nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

HN (µK10)

P N S

non revêtu
unbeschichtet
uncoated

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du titane faiblement allié
- déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables

- verschleissfeste Feinkornsorte
- für die Bearbeitung von niedrig legiertem Titan empfehlenswert
- für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet

- wear resistant micro-grain grade
- suitable for the machining of low alloyed titanium
- not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material			Tournage Drehen Turning		
			VC (m/min)	Prof. de passe Schnitttiefe Depth of cut (mm)	Avance Vorschub Feed (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel		P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 600 N/mm²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 800 N/mm²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20
Acier Stahl Steel	> 800 N/mm²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Acier inoxydable Rostfreistahl Stainless steel		M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Aluminium Si <12%		N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Aluminium Si >12%		N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze		N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35
Titane Titan Titanium		S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15

Indications pour premier réglage
Hinweise für die erste Einrichtung
Indications for first setting

Ébauche Schruppen Roughing	Finition Schlichten Finishing
• vitesse de coupe moyenne • avance élevée	• vitesse de coupe élevée • avance faible
• durchschnittliche Schnittgeschwindigkeit • hohe Schnittgeschwindigkeit	• hohe Schnittgeschwindigkeit • niedriger Vorschub
• average cutting feed • high cutting feed	• high cutting feed • low cutting feed

Remarques importantes
Wichtige Bemerkungen
Important remarks

- en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées
- les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables
- des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces

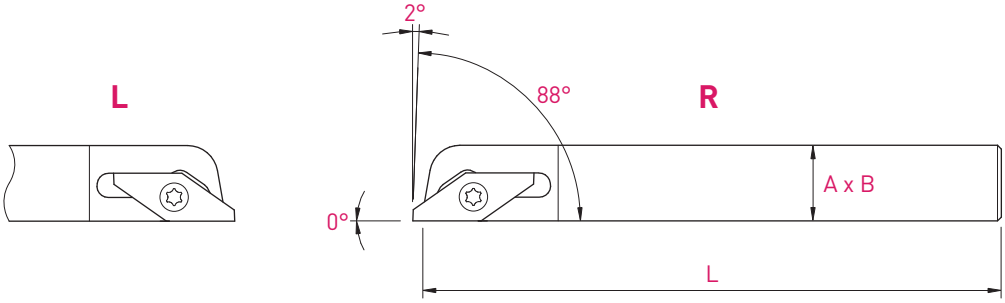
- wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen
- Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein
- die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen

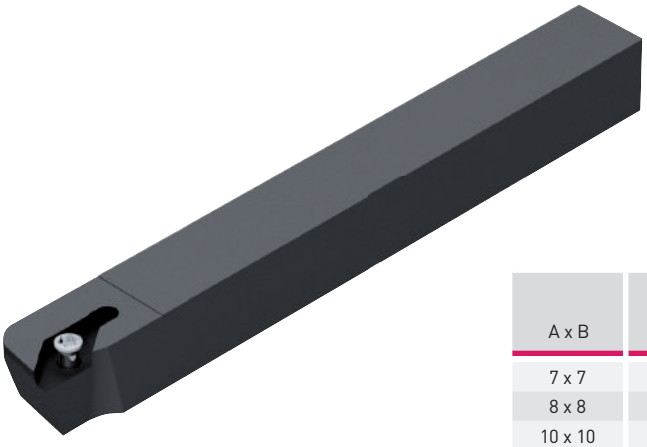
- in many cases, it is impossible to reach the recommended cutting speed, due to the machine limits
- Applitec tools are especially designed to be efficient even in bad cutting conditions
- applications not mentioned in the opposite table can also be efficient

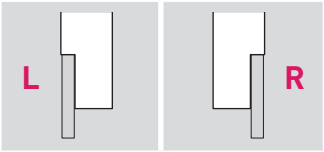
Porte-outils
Halter
Holders

88°

310 / 320





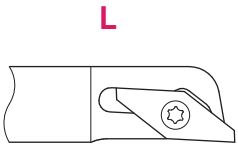


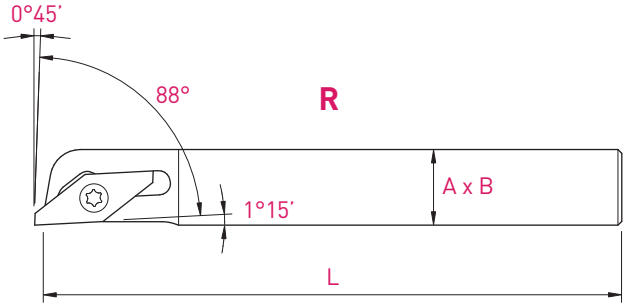
A x B	L	Art. N°	Art. N°
7 x 7	115	**310-7**	**320-7**
8 x 8	115	**310-8**	**320-8**
10 x 10	115	**310-10**	**320-10**
10 x 10	140	**-**	**320-10-140**
12 x 12	115	**310-12**	**320-12**
12 x 12	90	**310-12-90**	**320-12-90**
12 x 12	140	**310-12-140**	**320-12-140**
12.7 x 12.7	140	**310-12.7**	**320-12.7**
16 x 16	100	**310-16**	**320-16**
16 x 16	140	**310-16-140**	**320-16-140**
20 x 20	120	**310-20**	**320-20**

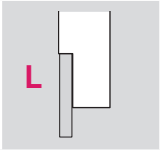
Porte-outils
Halter
Holders

88°

310-BC / 320-BC







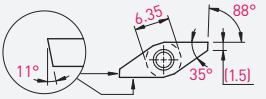
A x B	L	Art. N°	Art. N°
7 x 7	115	**310-7-BC**	**320-7-BC**
8 x 8	115	**310-8-BC**	**320-8-BC**
10 x 10	115	**310-10-BC**	**320-10-BC**
10 x 10	140	**-**	**320-10-140-BC**
12 x 12	115	**310-12-BC**	**320-12-BC**
12 x 12	90	**310-12-90-BC**	**320-12-90-BC**
12 x 12	140	**310-12-140-BC**	**320-12-140-BC**
12.7 x 12.7	140	**310-12.7-BC**	**320-12.7-BC**
16 x 16	100	**310-16-BC**	**320-16-BC**
16 x 16	140	**310-16-140-BC**	**320-16-140-BC**
20 x 20	120	**310-20-BC**	**320-20-BC**

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	
311 / 321	**V-M2.5X6.5-T8**	**C-T8**
312 - 316	**V-M2.5X7.8-T8**	
322 - 326		

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

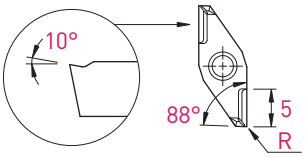
Tournage avant
Vorwärts drehen
Front turning

88°



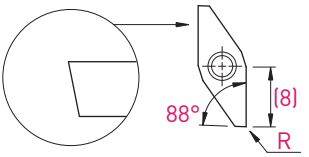
310 / 320

317 / 327

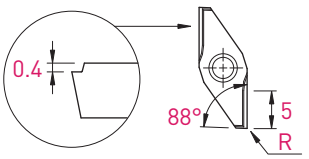
R	L Art. N°	TiAlN (P M N S)	TiN (P M N)	N (µk20) (P M N S)	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P M N S)	R Art. N°	TiAlN (P M N S)	TiN (P M N)	N (µk20) (P M N S)	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P M N S)
0	317	■	■	■	■	■	■	327	■	■	■	■	■	■
0.03	317-R03	■	■	■	■	■	■	327-R03	■	■	■	■	■	■
0.08	317-R08	■	■	■	■	■	■	327-R08	■	■	■	■	■	■
0.10	317-R10	■	■	■	■	■	■	327-R10	■	■	■	■	■	■
0.20	317-R20	■	■	■	■	■	■	327-R20	■	■	■	■	■	■

318 / 328

R	L Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P M N)	R Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P M N)
0	318	■	■	■	328	■	■	■
0.05	318-R05	■	■	■	328-R05	■	■	■
0.10	318-R10	■	■	■	328-R10	■	■	■
0.20	318-R20	■	■	■	328-R20	■	■	■
0.40	318-R40	■	■	■	328-R40	■	■	■

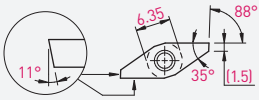
318VS / 328VS

R	L Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P M N S)	R Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P M N S)
0	318VS	■	■	■	328VS	■	■	■
0.10	318VS-R10	■	■	■	328VS-R10	■	■	■

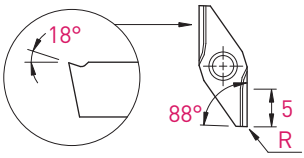
Tournage avant
Vorwärts drehen
Front turning

88°



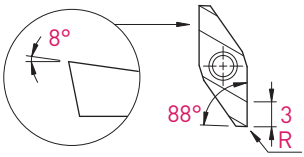
310 / 320

318VX / 328VX



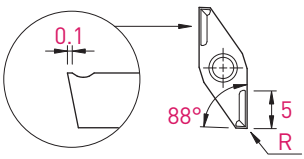
R	L Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)	R Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)
0	318VX	■	■	■	328VX	■	■	■
0.05	318VX-R05	■	■	■	328VX-R05	■	■	■
0.10	318VX-R10	■	■	■	328VX-R10	■	■	■
0.20	-				328VX-R20	■	■	■
0.40	-				328VX-R40	■	□	■

318X / 328X



R	L Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)	R Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)
0	318X	■	■	■	328X	■	■	■
0.10	318X-R10	■	■	■	328X-R10	■	■	■

319 / 329



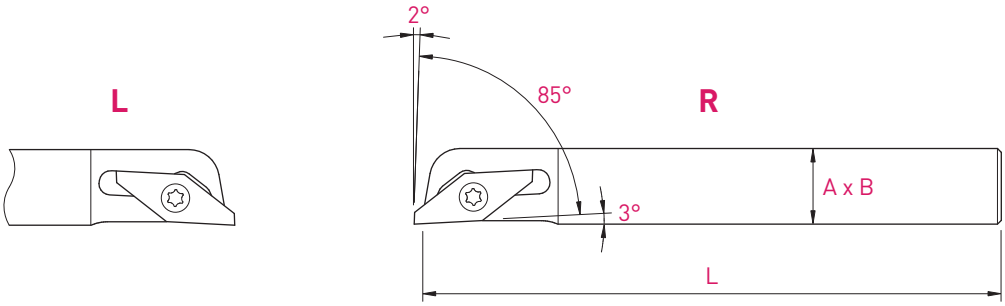
R	L Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P N)	R Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P N)
0	319	■	■	■	329	■	■	■
0.10	319-R10	■	■	■	329-R10	■	■	■
0.20	319-R20	■	■	■	329-R20	■	■	■

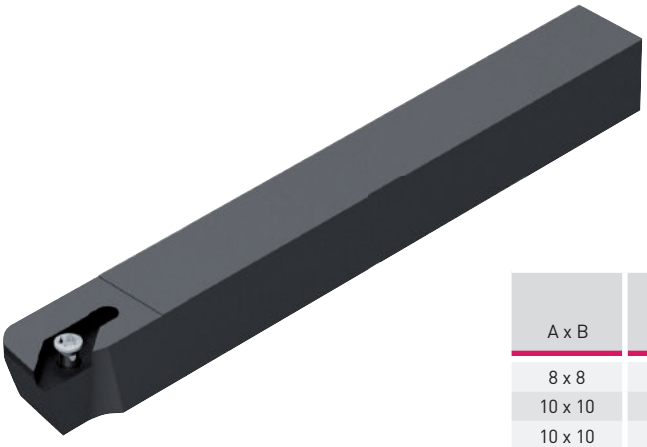
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

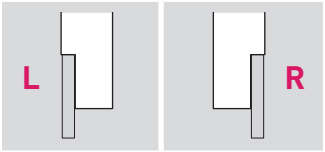
Porte-outils
Halter
Holders

85°

330 / 340







A x B	L	Art. N°	Art. N°
8 x 8	115	**330-8**	**340-8**
10 x 10	115	**330-10**	**340-10**
10 x 10	140	**-**	**340-10-140**
12 x 12	115	**330-12**	**340-12**
12 x 12	90	**330-12-90**	**340-12-90**
12 x 12	140	**330-12-140**	**340-12-140**
12.7 x 12.7	140	**330-12.7**	**340-12.7**
16 x 16	100	**330-16**	**340-16**
16 x 16	140	**330-16-140**	**340-16-140**
20 x 20	120	**330-20**	**340-20**

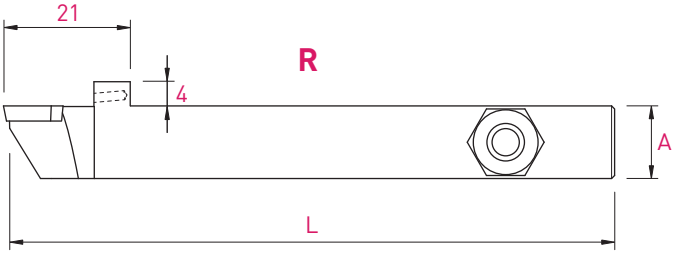
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	
332 - 336 342 - 346	**V-M2.5X7.8-T8**	**C-T8**

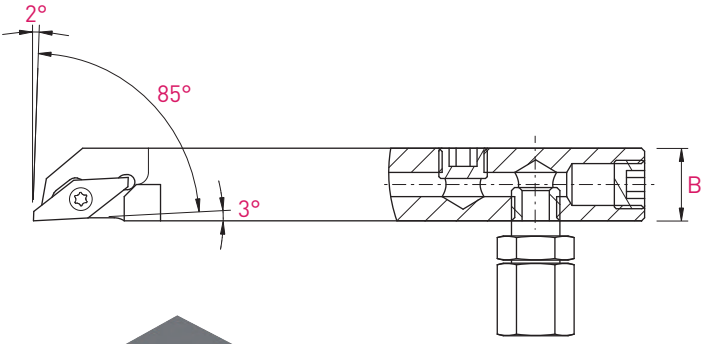
Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

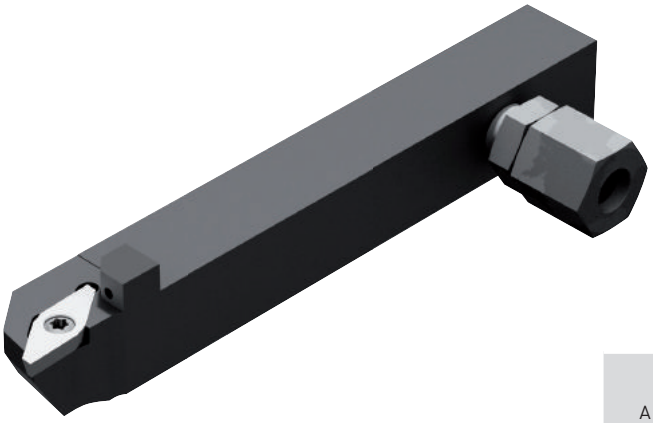
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

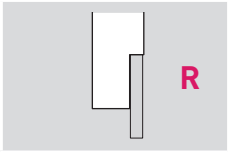
85°

340-JET

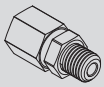
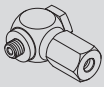








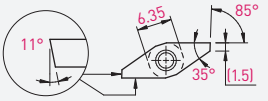
A x B	L	Art. N°
8 x 10	100	**340-0810-JET**
10 x 12	100	**340-1012-JET**
12 x 12	100	**340-12-JET**
12.7 x 12.7	100	**340-12.7-JET**
16 x 16	100	**340-16-JET**
20 x 20	100	**340-20-JET**

Pièces de rechange Ersatzteile Spare parts		Option 	
	Art. N°	**Art. N°**	**Art. N°**
340-0810-JET	**J-M5-D5**	**JC-M5-D5**	**JB-M5**
340-JET	**J-M8X1-D6**	**–**	**JB-M8X1**

Chaque support est livré avec vis et clé.
Jeder Halter wird mit Spannschraube(n) und Schlüssel geliefert.
Screw(s) and key are included with each tool holder.

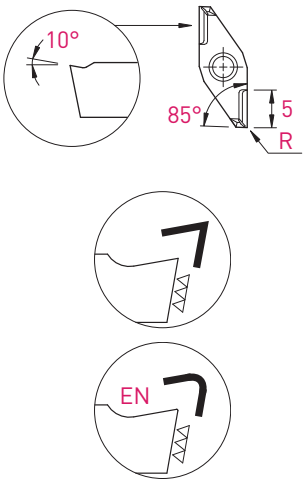
Tournage avant
Vorwärts drehen
Front turning

85°



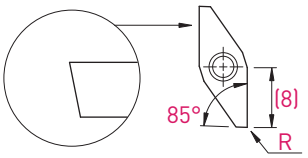
330 / 340

337 / 347



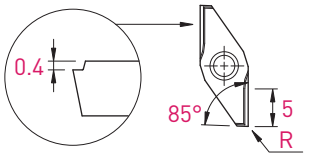
R	L Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µk20)	P M N S HTA	P M S HTAX	P M N HTiN	P S N HN (µk10)	R Art. N°	P M N S TiAlN	P M S TiAlX	P M N TiN	P S N (µk20)	P M N S HTA	P M S HTAX	P M N HTiN	P S N HN (µk10)
0	337	■		■	■	■		■	■	347	■	■	■	■	■	■	■	■
0.03	337-R03	■		■	■	■		■	■	347-R03	■	■	■	■	■	■	■	■
0.08	337-R08	■		■	■	■		■	■	347-R08	■	■	■	■	■	■	■	■
0.10	337-R10	■		■	■	■		■	■	347-R10	■	■	■	■	■	■	■	■
0.20	337-R20	■		■	■	■		■	■	347-R20	■	■	■	■	■	■	■	■
0.35	-									347-R35	■	■	■	■	■	■	■	■
0	337-EN	■		■	■					347-EN	■	■	■	■	■	■	□	■
0.03	337-EN-R03	■		□	■	■		□	■	347-EN-R03	■	■	□	■	■	■	□	■
0.08	337-EN-R08	■		□	■					347-EN-R08	■	■	■	■	■	■	□	■
0.10	337-EN-R10	■		■	■					347-EN-R10	■	■	■	■	■	■	□	■
0.20	337-EN-R20	■		□	■					347-EN-R20	■	■	■	■	■	■	□	■
0.35	-									347-EN-R35	■	■	■	■	■	■	□	■

338 / 348



R	L Art. N°	P M N S HTA	P M N HTiN	P N S HN (µk10)	R Art. N°	P M N S HTA	P M N HTiN	P N S HN (µk10)
0	338	■	■	■	348	■	■	■
0.05	338-R05	■	■	■	348-R05	■	■	■
0.10	338-R10	■	■	■	348-R10	■	■	■
0.20	338-R20	■	■	■	348-R20	■	■	■
0.40	338-R40	■	■	■	348-R40	■	■	■

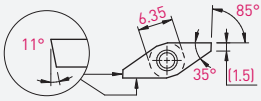
338VS / 348VS



R	L Art. N°	P M N S HTA	P M N HTiN	P N S HN (µk10)	R Art. N°	P M N S HTA	P M N HTiN	P N S HN (µk10)
0	338VS	■	■	■	348VS	■	■	■
0.10	338VS-R10	■	■	■	348VS-R10	■	■	■

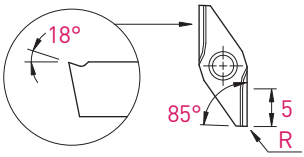
Tournage avant
Vorwärts drehen
Front turning

85°



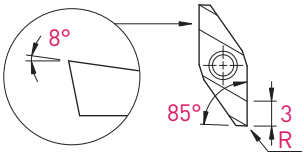
330 / 340

338VX / 348VX



R	L Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)	R Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)
0	338VX	■	■	■	348VX	■	■	■
0.05	338VX-R05	■	■	■	348VX-R05	■	■	■
0.10	338VX-R10	■	■	■	348VX-R10	■	■	■

338X / 348X



R	L Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)	R Art. N°	HTA (P M N S)	HTiN (P M N)	HN (µk10) (P N S)
0	338X	■	■	■	348X	■	■	■
0.10	338X-R10	■	■	■	348X-R10	■	■	■

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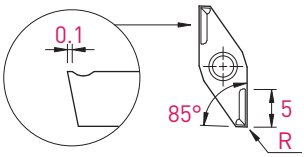


R	L Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P N)	R Art. N°	HTA (P M N)	HTiN (P M N)	HN (µk10) (P N)
0	339	■	■	■	349	■	■	■
0.10	339-R10	■	■	■	349-R10	■	■	■
0.20	339-R20	■	■	■	349-R20	■	■	■

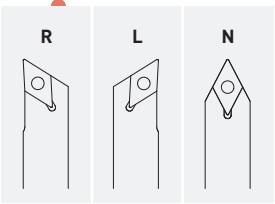
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

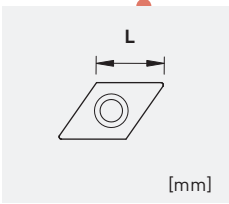
APPLITEC

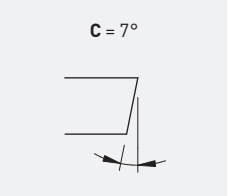
Index

Codification des porte-outils ISO-Line
ISO-Line Bezeichnungssystem für Halter
ISO-Line designation system for holders

Méthode de serrage / Klemmsystem / Clamping system	Forme de la plaquette / Plattenform / Insert shape	Géométrie du porte-outil / Halterform / Holder geometry	Angle de dépouille de la plaquette / WSP-Freiwinkel / Insert clearance angle	Direction de coupe / Schneidrichtung / Cut direction		Hauteur du porte-outil / Halter Höhe / Holder height	Largeur du porte-outil / Halter Breite / Holder width	Longueur du porte-outil / Halter Länge / Holder length		Dimension de la plaquette (L) / WSP Grösse (L) / Insert size (L)
S	D	J	C	R	–	12	12	G	–	11

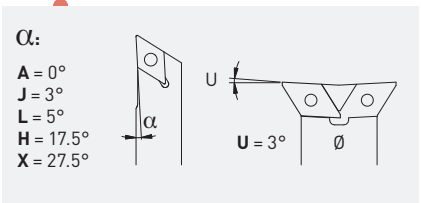


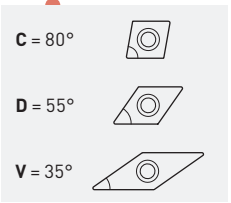


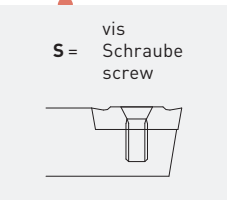


A x B (or Ø) [mm]
08 x 08
10 x 10
12 x 12
12.7 x 12.7 (1/2 in)
16 x 16
20 x 20
Ø: D10 / D20 / D25.4 (Ø1 in)

Length: [mm]
F = 75
G = 90
J = 110
X = Special







Compatibilité porte-outil - plaquette
WSP - Halter Kompatibilität
Holder - insert compatibility

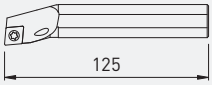
S	D	J	C	R	–	12	12	G	–	11
D	C	G	T	–	11	T3	04	–	FN	–

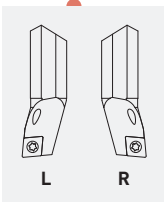
ISO-LINE

Codification des porte-outils ISO-Line
ISO-Line Bezeichnungssystem für Halter
ISO-Line designation system for holders

Méthode de serrage Klemmsystem Clamping system	Largeur du porte-outil Halter Breite Holder width	Longueur du porte-outil Halter Länge Holder length		Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Halterform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
A	12	K	–	S	C	L	C	R	–	06

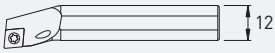
Longueur
Länge
Length
F = 80
H = 100
J = 110
K = 125
M = 150
Q = 180





C = 7°

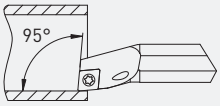
Ø queue
Schaft Ø
Shank Ø



L = 95°

Q = 107.5°

U = 93°



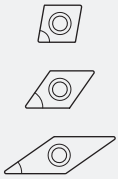
A = acier avec lubrification
Stahl mit Kühlung
Steel with coolant

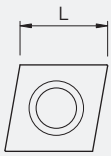
E = carbure avec lubrification
Harmetall mit Kühlung
Carbide with coolant

C = 80°

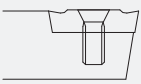
D = 55°

V = 35°





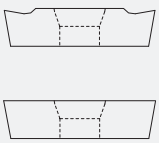
S = vis
Schraube
screw



Codification des plaquettes ISO-Line
ISO-Line Bezeichnungssystem für WSP
ISO-Line designation system for inserts

Forme de la plaquette / Plattenform / Insert shape	Angle de dépouille de la plaquette / WSP-Freiwinkel / Insert clearance angle	Classe de tolérance / Toleranz Klasse / Tolerance class	Brise-copeau / Spanbrecher / Chip breaker		Dimension de la plaquette (L) / WSP Grösse (L) / Insert size (L)	Epaisseur de la plaquette (E) / WSP Dicke (E) / Insert thickness (E)	Rayon de pointe de la plaquette / WSP Eckenradius / Insert corner radius		Exécution d'arête et direction de coupe / Schneidkante Ausführung und Schneidrichtung / Edge type and cutting direction		Géométrie de coupe / Spanformgeometrie / Cutting geometry
D	**C**	**G**	**T**	**–**	**11**	**T3**	**04**	**–**	**FN**	**–**	**X8**

T



W

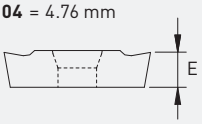
R:
003 = 0.03 mm
005 = 0.05 mm
008 = 0.08 mm
01 = 0.1 mm
015 = 0.15 mm
02 = 0.2 mm
04 = 0.4 mm
08 = 0.8 mm

cf.: Géométrie de coupe
Spanformgeometrie
Cutting geometry

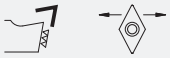
G = ±0.025 mm

M = ±0.05 mm

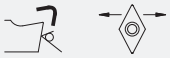
02 = 2.38 mm
03 = 3.18 mm
T3 = 3.97 mm
04 = 4.76 mm



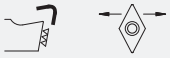
FN



EN



ENP



FL / FR

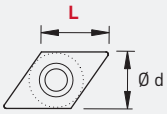
ELP / ERP

C = 7°

C = 80°

D = 55°

V = 35°



[mm]

L	Ø d [mm]
CC...**06** DC...**07** VC... **11**	6.350
VC... **13**	7.940
CC...**09** DC...**11** VC... **16**	9.525

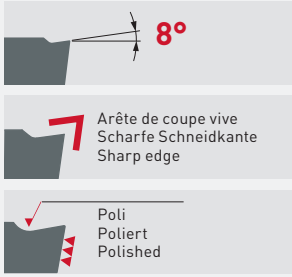
Géométries de coupe
Spanformgeometrien
Cutting geometries

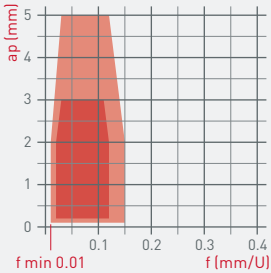
G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Finishing

FN-X8



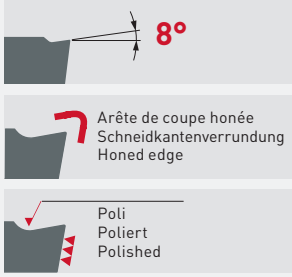


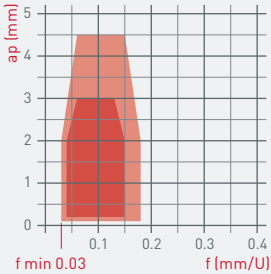
P	★★★★★
M	★★★★
N	★★★★
S	★★★

CCGT	DCGT	VCGT
p. 7.19	p. 7.37	p. 7.54

Semi-finishing / Finishing

ENP-X8



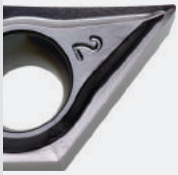


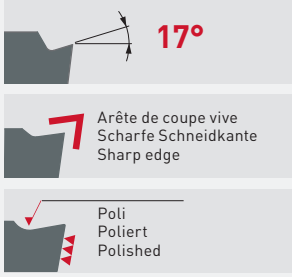
P	★★★★★
M	★★★
N	★★★
S	★★★

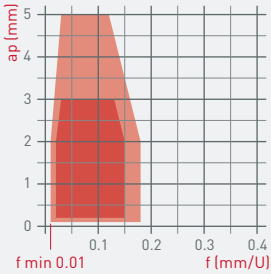
CCGT	DCGT	VCGT
p. 7.19	p. 7.37	p. 7.54

Finishing

FN-X17





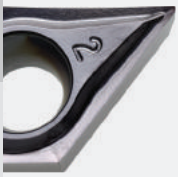


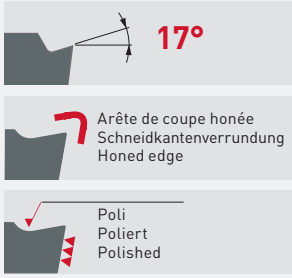
P	★★★
M	★★★★★
N	★★★★
S	★★★★★

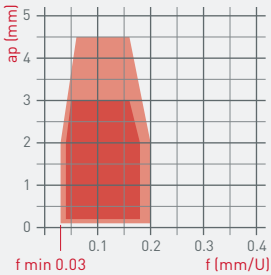
CCGT	DCGT	VCGT
p. 7.20	p. 7.38	p. 7.55

Semi-finishing / Finishing

ENP-X17







P	★★★
M	★★★★★
N	★★★
S	★★★★

CCGT	DCGT	VCGT
p. 7.20	p. 7.38	p. 7.55

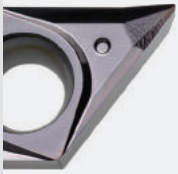
Géométries de coupe
Spanformgeometrien
Cutting geometries

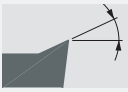
G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Finishing

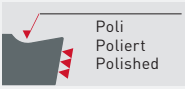
FN-X25



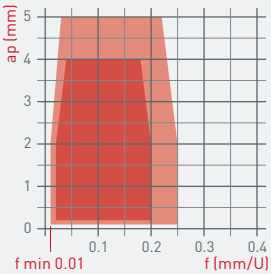


25°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



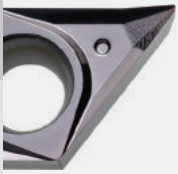
P	
M	★★★
N	★★★★★
S	★★★★

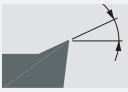
CCGT DCGT VCGT

p. 7.21 p. 7.39 p. 7.56

Semi-finishing
Finishing

ENP-X25

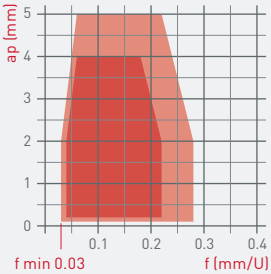




25°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



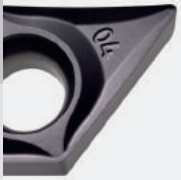
P	
M	★★★
N	★★★★★
S	★★★★

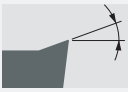
CCGT DCGT VCGT

p. 7.21 p. 7.39 p. 7.56

Semi-finishing
Finishing

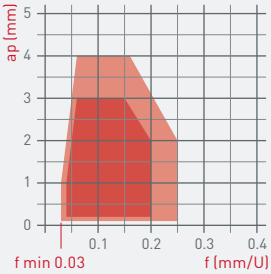
ENP-X20





20°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	
M	★★★★★
N	★★★
S	★★★★★

CCGT DCGT VCGT

p. 7.22 p. 7.40 p. 7.57

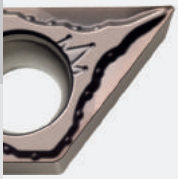
Géométries de coupe
Spanformgeometrien
Cutting geometries

M
tolerance class

Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

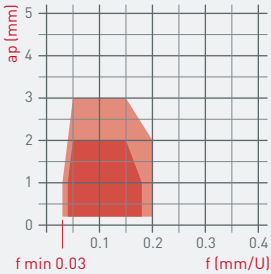
Semi-finishing
Finishing

EN-XF3



12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★
M	★★★★★
N	★★★
S	★★★

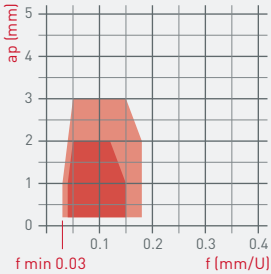
CCMT	DCMT	VCMT
p. 7.23	p. 7.41	p. 7.58

Semi-finishing
Finishing

EN-XF2

6°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

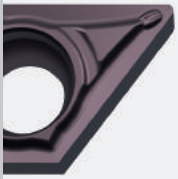


P	★★★★★
M	★★★
N	
S	★★★

CCMT	DCMT	VCMT
p. 7.23	p. 7.41	p. 7.58

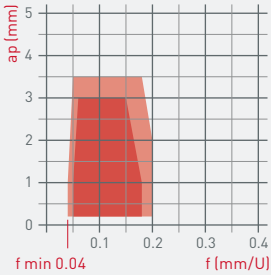
Semi-finishing

EN-MF2



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★
M	★★★★
N	★★★
S	★★★

CCMT	DCMT
p. 7.23	p. 7.41

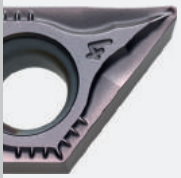
Géométries de coupe
Spanformgeometrien
Cutting geometries

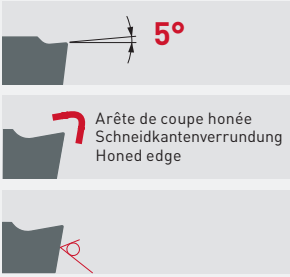
M
tolerance class

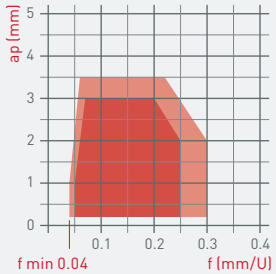
Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

Semi-finishing

EN-MF





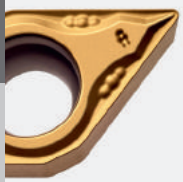


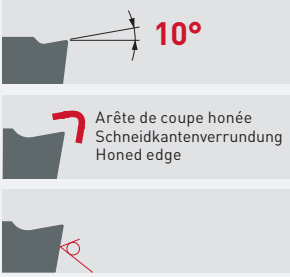
P	★★★★★
M	★★★
N	
S	

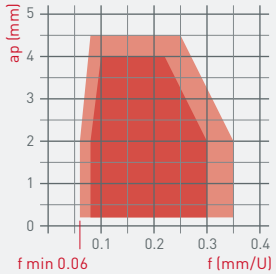
CCMT	DCMT	VCMT
p. 7.24	p. 7.42	p. 7.59

Roughing / Semi-finishing

EN-HF3





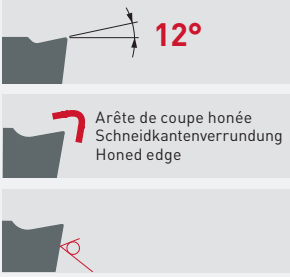


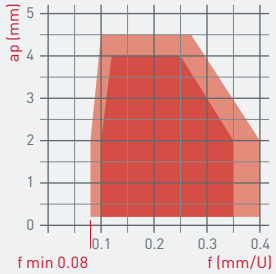
P	★★★★★
M	★★★★★
N	
S	★★★

CCMT	DCMT
p. 7.24	p. 7.42

Roughing / Semi-finishing

EN-HF





P	★★★★★
M	★★★★★
N	
S	

CCMT	DCMT	VCMT
p. 7.24	p. 7.42	p. 7.59

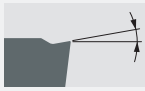
Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

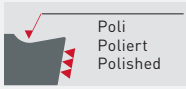
Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Super-finishing
Finishing

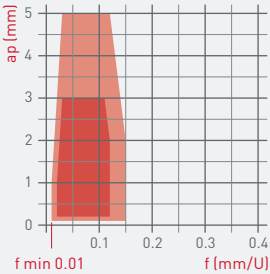
FL/FR-X10



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



P	★★★★
M	★★★★★
N	★★★★
S	★★★★

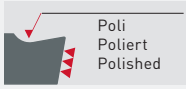
VCGT

p. 7.52

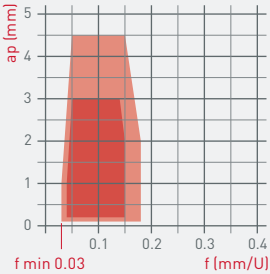
Semi-finishing
Finishing

ELP/ERP-X10

Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished



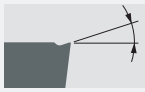
P	★★★★★
M	★★★★
N	★★★
S	★★★

VCGT

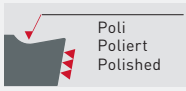
p. 7.52

Super-finishing
Finishing

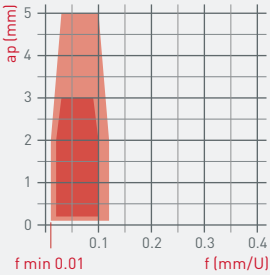
FN-K18



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



P	★★★★
M	★★★★★
N	★★★★
S	★★★★

VCGT

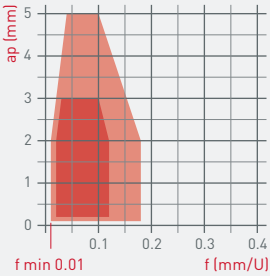
p. 7.53

Finishing

FN-0

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P	★★★
M	
N	★★★
S	

VCGW

p. 7.53

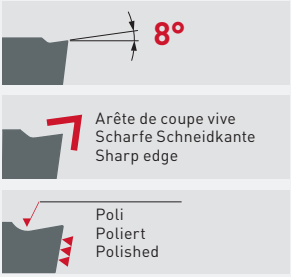
Géometries de coupe
Spanformgeometrien
Cutting geometries

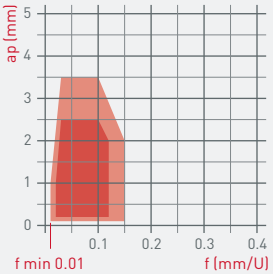
G / M
tolerance class

CERMET

Finishing

FN-X8
CERMET



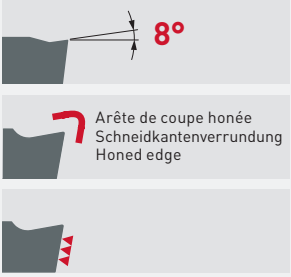


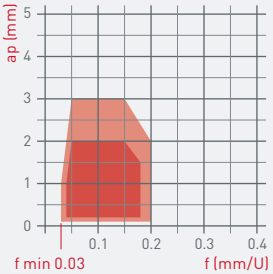
P ★★★★★
M ★★★
N
S

CCGT p. 7.25 | DCGT p. 7.43 | VCGT p. 7.60

Semi-finishing / Finishing

ENP-KX
CERMET



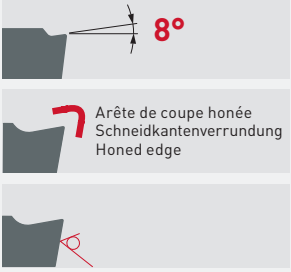


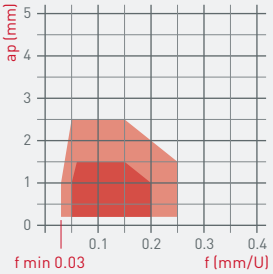
P ★★★★★
M ★★★
N
S

CCGT p. 7.25 | DCGT p. 7.43

Semi-finishing

EN-KM
CERMET





P ★★★★★
M ★★★
N
S

CCMT p. 7.26 | DCMT p. 7.44

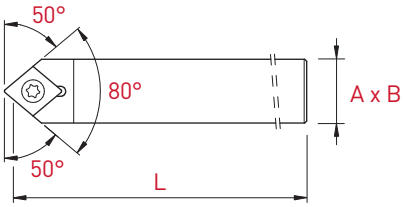
Nuances
Sorten
Grades

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + PVD										
TiAlN	★★★★★ ★★★★★ ★★★★ ★★★★	■	■	■	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■■□	■■■■□	■■■■□	PVD	
HTA	★★★★★ ★★★★★ ★★★★ ★★★★	■			FN-X8 FN-X17 FN-X25 L/R-X10 FN-K18 FN-0	■■■■■	■■■□□	■■■■□	PVD	
TiN	★★★★ ★★★★ ★★★★★	■	■	■	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■□□	■■■■□	■■■□□	PVD	High resistance to edge build up
HTiN	★★★★ ★★★★ ★★★★★	■			FN-K18 FN-0	■■■■□	■■■□□	■■■□□	PVD	High resistance to edge build up
TAC	★★★★★ ★★★★★ ★★★★ ★★★★	■	■	■	EN-XF3 EN-XF2 EN-MF2 EN-HF	■■■■□	■■■■□	■■■■□	PVD	
HTAC	★★★★★ ★★★★★ ★★★★ ★★★★	■	■		EN-XF3 EN-XF2 EN-MF2	■■■■■	■■■□□	■■■■□	PVD	
TiX	★★★★★ ★★★★★ ★★★			■	EN-HF3	■■■□□	■■■■□	■■■□□	PVD	Easy wear out control with TiN top layer
HTiX	★★★★★ ★★★★★ ★★★★ ★★★		■	■	ENP-X20 EN-HF3	■■■■□	■■■□□	■■■□□	PVD	Easy wear out control with TiN top layer
Tmax	★★★★★ ★★★★★ ★★★★ ★★★★		■	■	EN-MF EN-HF	■■■■□	■■■■□	■■■■□	PVD	
ZTA	★★★★★ ★★★ ★★★★★	■	■		ENP-X20	■■■■□	■■■■□	■■■■□	PVD	perfect for titanium alloys & superalloys
TiAlX	★★★★ ★★★★ ★★★★★	■	■		X8 R-X10 X17 X25	■■■■□	■■■■□	■■■■□	PVD	perfect for titanium alloys & superalloys
HTAX	★★★★ ★★★★ ★★★★★	■			X8 R-X10 X17 X25	■■■■■	■■■□□	■■■■□	PVD	perfect for titanium alloys & superalloys

Nuances
Sorten
Grades

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + CVD										
Ti4	★★★★★ ★★★		■	■	EN-MF EN-HF3 EN-HF	■■■■□	■■■■□	■■■■■	CVD	
Ti5	★★★★★ ★★★		■	■	EN-MF2 EN-HF	■■■■□	■■■■□	■■■■■	CVD	Easy wear out control with TiN top layer
HTi5	★★★★★ ★★★		■	■	EN-XF2 EN-MF2 EN-HF	■■■■■	■■■□□	■■■■■	CVD	Easy wear out control with TiN top layer
Ti6	★★★ ★★★★★ ★★★★		■	■	EN-HF3	■■■■□	■■■■□	■■■■■	CVD	
Carbide uncoated										
K10	★★★ ★★★	■			FN-X8 FN-X17 FN-X25 ELP-X10/ERP-X10 FN-K18 FN-0	■■■□□	■■■□□	■■□□□	uncoated	
K20	★★ ★★	■			FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 ELP-X10/ERP-X10	■■□□□	■■■■□	■■□□□	uncoated	
CERMET										
CTA	★★★★★ ★★★	■			FN-X8	■■■■□	■■■■□	■■■■■	CERMET +PVD	
CT7	★★★★★ ★★★	■	■	■	ENP-KX EN-KM	■■■■□	■■■■□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
HCT7	★★★★★ ★★★	■	■		ENP-KX EN-KM	■■■■■	■■■□□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
CN6	★★★★	■			FN-X8 ENP-KX EN-KM	■■□□□	■■■■□	■■■■□	CERMET uncoated	

SCM



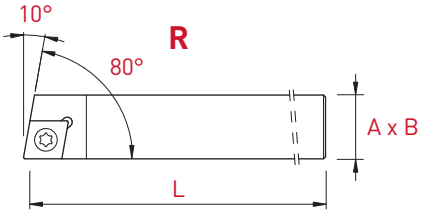
Plaquettes WSP Inserts	A x B	L	Art. N°
CC..-0602..	8 x 8	115	**SCMCN-0808X-06**
	10 x 10	115	**SCMCN-1010X-06**
	12 x 12	130	**SCMCN-1212X-06**
	12 x 12	90	**SCMCN-1212G-06**
	12.7 x 12.7	130	**SCMCN-12.7X-06**
	16 x 16	130	**SCMCN-1616X-06**
	16 x 16	75	**SCMCN-1616F-06**
CC..-09T3..	12 x 12	130	**SCMCN-1212X-09**
	12 x 12	90	**SCMCN-1212G-09**
	12.7 x 12.7	130	**SCMCN-12.7X-09**
	16 x 16	130	**SCMCN-1616X-09**
	16 x 16	75	**SCMCN-1616F-09**
	20 x 20	120	**SCMCN-2020X-09**

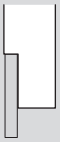
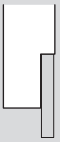
Porte-outils
Halter
Holders

80°

SCA

SCA



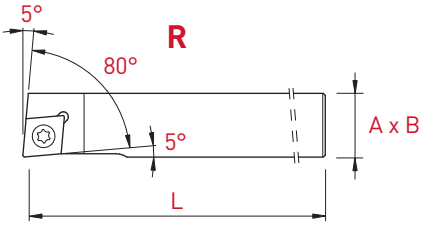
Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
CC..-0602..	8 x 8	115	**SCACL-0808X-06**	**SCACR-0808X-06**
	10 x 10	115	**SCACL-1010X-06**	**SCACR-1010X-06**
	12 x 12	130	**SCACL-1212X-06**	**SCACR-1212X-06**
	12 x 12	90	**SCACL-1212G-06**	**SCACR-1212G-06**
	12.7 x 12.7	130	**SCACL-12.7X-06**	**SCACR-12.7X-06**
	16 x 16	130	**SCACL-1616X-06**	**SCACR-1616X-06**
	16 x 16	75	**SCACL-1616F-06**	**SCACR-1616F-06**
CC..-09T3..	12 x 12	130	**SCACL-1212X-09**	**SCACR-1212X-09**
	12 x 12	90	**SCACL-1212G-09**	**SCACR-1212G-09**
	12.7 x 12.7	130	**SCACL-12.7X-09**	**SCACR-12.7X-09**
	16 x 16	130	**SCACL-1616X-09**	**SCACR-1616X-09**
	16 x 16	75	**SCACL-1616F-09**	**SCACR-1616F-09**
	20 x 20	120	**SCACL-2020X-09**	**SCACR-2020X-09**

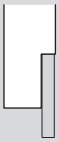
Porte-outils
Halter
Holders

80°

SCL

SCL



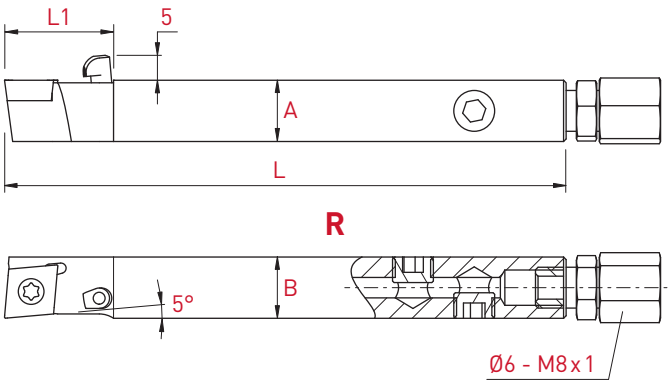
Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
CC..-0602..	8 x 8	115	**SCLCL-0808X-06**	**SCLCR-0808X-06**
	10 x 10	115	**SCLCL-1010X-06**	**SCLCR-1010X-06**
	12 x 12	130	**SCLCL-1212X-06**	**SCLCR-1212X-06**
	12 x 12	90	**SCLCL-1212G-06**	**SCLCR-1212G-06**
	12.7 x 12.7	130	**SCLCL-12.7X-06**	**SCLCR-12.7X-06**
	16 x 16	130	**SCLCL-1616X-06**	**SCLCR-1616X-06**
	16 x 16	75	**SCLCL-1616F-06**	**SCLCR-1616F-06**
CC..-09T3..	12 x 12	130	**SCLCL-1212X-09**	**SCLCR-1212X-09**
	12 x 12	90	**SCLCL-1212G-09**	**SCLCR-1212G-09**
	12.7 x 12.7	130	**SCLCL-12.7X-09**	**SCLCR-12.7X-09**
	16 x 16	130	**SCLCL-1616X-09**	**SCLCR-1616X-09**
	16 x 16	75	**SCLCL-1616F-09**	**SCLCR-1616F-09**
	20 x 20	120	**SCLCL-2020X-09**	**SCLCR-2020X-09**

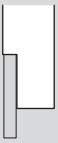
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

80°

SCL-JET

SCL



Plaquettes WSP Inserts	A x B	L	L1	L  Art. N°	R  Art. N°
CC..-0602..	10 x 10	110	21	**SCLCL-1010J-06-JET**	**SCLCR-1010J-06-JET**
	12 x 12	110	21	**SCLCL-1212J-06-JET**	**SCLCR-1212J-06-JET**
	12.7 x 12.7	110	21	**SCLCL-12.7J-06-JET**	**SCLCR-12.7J-06-JET**
	16 x 16	110	21	**SCLCL-1616J-06-JET**	**SCLCR-1616J-06-JET**
CC..-09T3..	12 x 12	110	21	**SCLCL-1212J-09-JET**	**SCLCR-1212J-09-JET**
	12.7 x 12.7	110	21	**SCLCL-12.7J-09-JET**	**SCLCR-12.7J-09-JET**
	16 x 16	110	21	**SCLCL-1616J-09-JET**	**SCLCR-1616J-09-JET**
	20 x 20	110	21	**SCLCL-2020J-09-JET**	**SCLCR-2020J-09-JET**

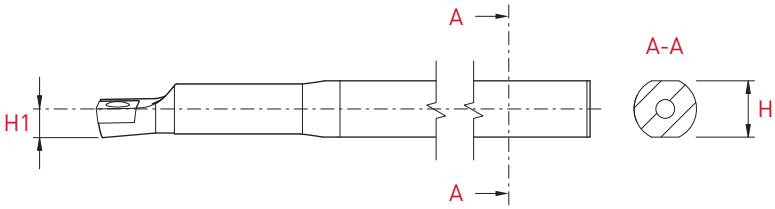
Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders

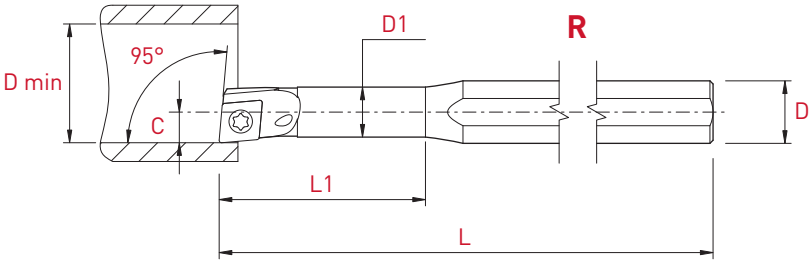
80°

A-SCLCR/L

new

SCL





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	D1	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602..	8	8	6	4	4	100	25	7	**A0608H-SCLCL-06**	**A0608H-SCLCR-06**
	10	12	8	6	5	110	32	9	**A0810J-SCLCL-06**	**A0810J-SCLCR-06**
	12	14	10	7	6	125	38	11	**A1012K-SCLCL-06**	**A1012K-SCLCR-06**

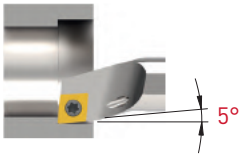
Pour barres d'alésage For boring bar Für Borstange	Pièces de rechange Ersatzteile Spare parts	
	Art. N°	Art. N°
A0608H_ / A0810J_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

Porte-outils intérieurs
Innenhalter
Internal holders

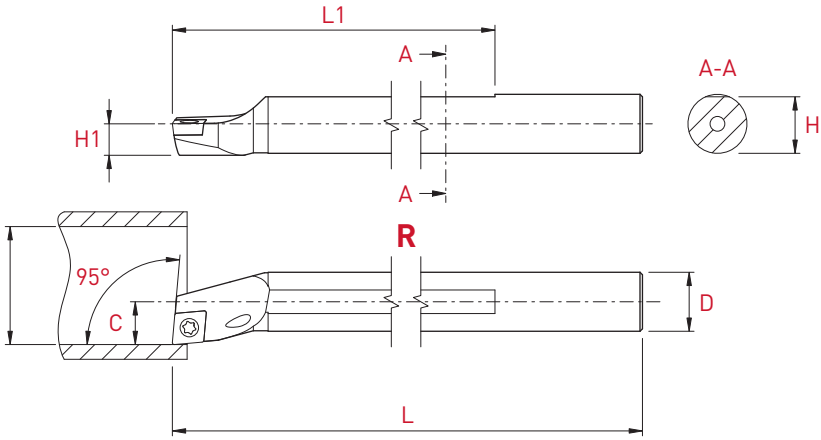
80°

A-SCLCR/L
E-SCLCR/L

new

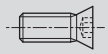
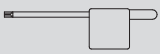


SCL



	Acier / Stahl / Steel							L	R
Plaquettes WSP Inserts	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602	8	11	5	4	80	74	7.5	**A08F-SCLCL-06**	**A08F-SCLCR-06**
	10	13	7	5	100	85	9.5	**A10H-SCLCL-06**	**A10H-SCLCR-06**
	12	16	9	6	125	95	11.5	**A12K-SCLCL-06**	**A12K-SCLCR-06**
CC..-09T3	16	20	11	8	150	117	15.5	**A16M-SCLCL-09**	**A16M-SCLCR-09**

	Carbure de tungstène / Hartmetall / Solid carbide								
	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC..-0602	8	9	5	4	125	-	7.5	**E08K-SCLCL-06**	**E08K-SCLCR-06**
	10	11	6	5	125	-	9.5	**E10K-SCLCL-06**	**E10K-SCLCR 06**
	12	13	8	6	150	-	11.5	**E12M-SCLCL 06**	**E12M-SCLCR 06**

Pour barres d'alésage For boring bar Für Borstange	Pièces de rechange Ersatzteile Spare parts	
		
	Art. N°	Art. N°
A08F_ / E08K_	**V-M2.5X4.8-T8**	**C-T8**
A10H_ /E10H_	**V-M2.5X5.8-T8**	**C-T8**
A16M_	**V-M3.5X7.2-T15-ISO**	**C-T15**

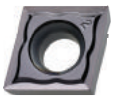
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

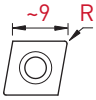
CCGT-X8

CCGT FN-X8

		PVD			non revêtu unbeschichtet uncoated	
		P M N S	P M N S	P M N	N S	N S
R	Art. N°	TiAlN	HTA	TiN	K10	K20
0.05	CCGT-0602005-FN-X8	■	■	■	■	■
0.1	CCGT-060201-FN-X8	■	■	■	■	■
0.2	CCGT-060202-FN-X8	■	■	■	■	■
0.4	CCGT-060204-FN-X8	■	■	■	■	■
0.05	CCGT-09T3005-FN-X8	■	■	■	■	■
0.1	CCGT-09T301-FN-X8	■	■	■	■	■
0.2	CCGT-09T302-FN-X8	■	■	■	■	■
0.4	CCGT-09T304-FN-X8	■	■	■	■	■



CCGT ENP-X8



	PVD		non revêtu unbeschichtet uncoated
	P M N S	P M N	N
R	TiAlN	TiN	K20
0.05	CCGT-0602005-ENP-X8	■	■	■
0.1	CCGT-060201-ENP-X8	■	■	■
0.2	CCGT-060202-ENP-X8	■	■	■
0.4	CCGT-060204-ENP-X8	■	■	■
0.05	CCGT-09T3005-ENP-X8	■	■	■
0.1	CCGT-09T301-ENP-X8	■	■	■
0.2	CCGT-09T302-ENP-X8	■	■	■
0.4	CCGT-09T304-ENP-X8	■	■	■

■ = disponible / verfügbar / available

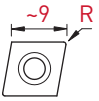
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X17

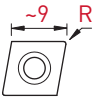
CCGT FN-X17

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N S)	non revêtu unbeschichtet uncoated K20 (N S)
0.05	CCGT-0602005-FN-X17	■	■	■	■	■
0.1	CCGT-060201-FN-X17	■	■	■	■	■
0.2	CCGT-060202-FN-X17	■	■	■	■	■
0.4	CCGT-060204-FN-X17	■	■	■	■	■
0.05	CCGT-09T3005-FN-X17	■	■	■	■	■
0.1	CCGT-09T301-FN-X17	■	■	■	■	■
0.2	CCGT-09T302-FN-X17	■	■	■	■	■
0.4	CCGT-09T304-FN-X17	■	■	■	■	■
0.8	CCGT-09T308-FN-X17	■	■	■	■	■



CCGT ENP-X17

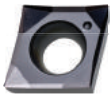
R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K20 (N)
0.05	CCGT-0602005-ENP-X17	■	■	■
0.1	CCGT-060201-ENP-X17	■	■	■
0.2	CCGT-060202-ENP-X17	■	■	■
0.4	CCGT-060204-ENP-X17	■	■	■
0.05	CCGT-09T3005-ENP-X17	■	■	■
0.1	CCGT-09T301-ENP-X17	■	■	■
0.2	CCGT-09T302-ENP-X17	■	■	■
0.4	CCGT-09T304-ENP-X17	■	■	■
0.8	CCGT-09T308-ENP-X17	■	■	■



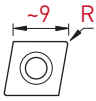
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

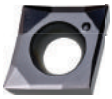
CCGT-X25



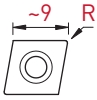
CCGT FN-X25



R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N)	non revêtu unbeschichtet uncoated K20 (N)
0.05	CCGT-0602005-FN-X25	■	■	■	■	■
0.1	CCGT-060201-FN-X25	■	■	■	■	■
0.2	CCGT-060202-FN-X25	■	■	■	■	■
0.4	CCGT-060204-FN-X25	■	■	■	■	■
0.05	CCGT-09T3005-FN-X25	■	■	■	■	■
0.1	CCGT-09T301-FN-X25	■	■	■	■	■
0.2	CCGT-09T302-FN-X25	■	■	■	■	■
0.4	CCGT-09T304-FN-X25	■	■	■	■	■
0.8	CCGT-09T308-FN-X25	■	■	■	■	■



CCGT ENP-X25



R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K20 (N)
0.05	CCGT-0602005-ENP-X25	■	■	■
0.1	CCGT-060201-ENP-X25	■	■	■
0.2	CCGT-060202-ENP-X25	■	■	■
0.4	CCGT-060204-ENP-X25	■	■	■
0.05	CCGT-09T3005-ENP-X25	■	■	■
0.1	CCGT-09T301-ENP-X25	■	■	■
0.2	CCGT-09T302-ENP-X25	■	■	■
0.4	CCGT-09T304-ENP-X25	■	■	■
0.8	CCGT-09T308-ENP-X25	■	■	■

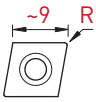
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

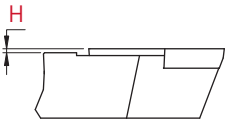
80°

CCGT-X20

CCGT
ENP-X20



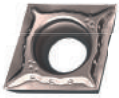
R	H	Art. N°	PVD ZTA (M N S)	PVD HTiX (M N S)
0.1	0.2	CCGT-060201-ENP-X20	■	
0.2	0.2	CCGT-060202-ENP-X20	■	■
0.4	0.2	CCGT-060204-ENP-X20	■	■
0.1	0.25	CCGT-09T301-ENP-X20	■	
0.2	0.25	CCGT-09T302-ENP-X20	■	■
0.4	0.25	CCGT-09T304-ENP-X20	■	■
0.8	0.25	CCGT-09T308-ENP-X20	■	■



Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCMT-XF3
CCMT-XF2
CCMT-MF2

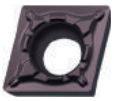


CCMT EN-XF3

	R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)
~6 R	0.2	CCMT-060202-EN-XF3	■	■
	0.4	CCMT-060204-EN-XF3	■	■
~9 R	0.2	CCMT-09T302-EN-XF3	■	■
	0.4	CCMT-09T304-EN-XF3	■	■

CCMT EN-XF2

	R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD HTi5 (P M)
~6 R	0.2	CCMT-060202-EN-XF2	■	■	■
	0.4	CCMT-060204-EN-XF2	■	■	■
~9 R	0.2	CCMT-09T302-EN-XF2	■	■	■
	0.4	CCMT-09T304-EN-XF2	■	■	■



CCMT EN-MF2

	R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD Ti5 (P M)	CVD HTi5 (P M)
~6 R	0.2	CCMT-060202-EN-MF2	■	■	■	■
	0.4	CCMT-060204-EN-MF2	■	■	■	■
~9 R	0.2	CCMT-09T302-EN-MF2	■	■	■	■
	0.4	CCMT-09T304-EN-MF2	■	■	■	■
	0.8	CCMT-09T308-EN-MF2	■	■	■	■

■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

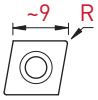
80°

CCMT-MF
CCMT-HF3
CCMT-HF

CCMT EN-MF

R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	CCMT-060202-EN-MF	■	■
0.4	CCMT-060204-EN-MF	■	■
0.2	CCMT-09T302-EN-MF	■	■
0.4	CCMT-09T304-EN-MF	■	■

CCMT EN-HF3



R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M S Ti6
0.2	CCMT-060202-EN-HF3	■	■	■
0.4	CCMT-060204-EN-HF3	■	■	■
0.2	CCMT-09T302-EN-HF3	■	■	■
0.4	CCMT-09T304-EN-HF3	■	■	■
0.8	CCMT-09T308-EN-HF3	■	■	■

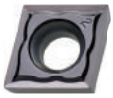
CCMT EN-HF

R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
0.2	CCMT-060202-EN-HF		■		■	■
0.4	CCMT-060204-EN-HF	■	■	■	■	■
0.8	CCMT-060208-EN-HF	■	■	■	■	■
0.2	CCMT-09T302-EN-HF		■		■	■
0.4	CCMT-09T304-EN-HF	■	■	■	■	■
0.8	CCMT-09T308-EN-HF	■	■	■	■	■

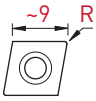
Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

80°

CCGT-X8
CCGT-KX



CCGT FN-X8

	R	Art. N°	CERMET PVD P M CTA	CERMET non revêtu unbeschichtet uncoated P CN6
	0.05	CCGT-0602005-FN-X8	■	■
	0.1	CCGT-060201-FN-X8	■	■
	0.2	CCGT-060202-FN-X8	■	■
	0.05	CCGT-09T3005-FN-X8	■	■
	0.1	CCGT-09T301-FN-X8	■	■
	0.2	CCGT-09T302-FN-X8	■	■
	0.4	CCGT-09T304-FN-X8	■	■

CCGT ENP-KX

	R	Art. N°	CERMET PVD P M CT7	CERMET PVD P M HCT7	CERMET non revêtu unbeschichtet uncoated P CN6
	0.1	CCGT-060201-ENP-KX	■	■	■
	0.2	CCGT-060202-ENP-KX	■	■	■
	0.4	CCGT-060204-ENP-KX	■	■	■
	0.1	CCGT-09T301-ENP-KX	■	■	■
	0.2	CCGT-09T302-ENP-KX	■	■	■
	0.4	CCGT-09T304-ENP-KX	■	■	■

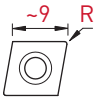
■ = disponible / verfügbar / available

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

80°

CCMT-KM

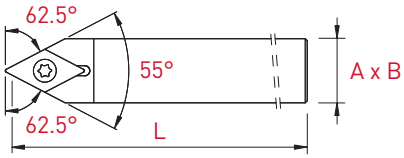
CCMT EN-KM



		CERMET		
		PVD		non revêtu unbeschichtet uncoated
		P M	P M	P
R	Art. N°	CT7	HCT7	CN6
0.2	CCMT-060202-EN-KM	■	■	■
0.4	CCMT-060204-EN-KM	■	■	■
0.2	CCMT-09T302-EN-KM	■	■	■
0.4	CCMT-09T304-EN-KM	■	■	■
0.8	CCMT-09T308-EN-KM	■	■	■

■ = disponible / verfügbar / available

SDN



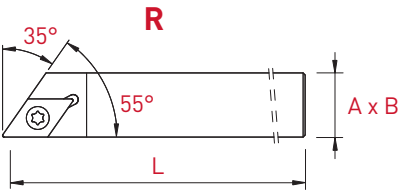
Plaquettes WSP Inserts	A x B	L	Art. N°
DC..-0702..	8 x 8	115	**SDNCN-0808X-07**
	10 x 10	115	**SDNCN-1010X-07**
	12 x 12	130	**SDNCN-1212X-07**
	12 x 12	90	**SDNCN-1212G-07**
	12.7 x 12.7	130	**SDNCN-12.7X-07**
	16 x 16	130	**SDNCN-1616X-07**
	16 x 16	75	**SDNCN-1616F-07**
DC..-11T3..	12 x 12	130	**SDNCN-1212X-11**
	12 x 12	90	**SDNCN-1212G-11**
	12.7 x 12.7	130	**SDNCN-12.7X-11**
	16 x 16	130	**SDNCN-1616X-11**
	16 x 16	75	**SDNCN-1616F-11**
	20 x 20	120	**SDNCN-2020X-11**

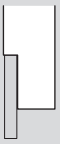
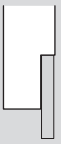
Porte-outils
Halter
Holders

55°

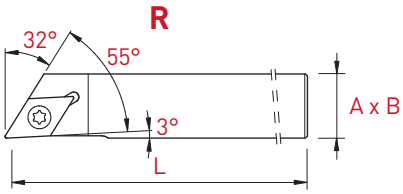
SDA

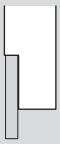
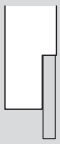
SDA



Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
DC..-0702..	8 x 8	115	SDACL-0808X-07	SDACR-0808X-07
	10 x 10	115	SDACL-1010X-07	SDACR-1010X-07
	12 x 12	130	SDACL-1212X-07	SDACR-1212X-07
	12 x 12	90	SDACL-1212G-07	SDACR-1212G-07
	12.7 x 12.7	130	SDACL-12.7X-07	SDACR-12.7X-07
	16 x 16	130	SDACL-1616X-07	SDACR-1616X-07
	16 x 16	75	SDACL-1616F-07	SDACR-1616F-07
DC..-11T3..	12 x 12	130	SDACL-1212X-11	SDACR-1212X-11
	12 x 12	90	SDACL-1212G-11	SDACR-1212G-11
	12.7 x 12.7	130	SDACL-12.7X-11	SDACR-12.7X-11
	16 x 16	130	SDACL-1616X-11	SDACR-1616X-11
	16 x 16	75	SDACL-1616F-11	SDACR-1616F-11
	20 x 20	120	SDACL-2020X-11	SDACR-2020X-11

SDJ



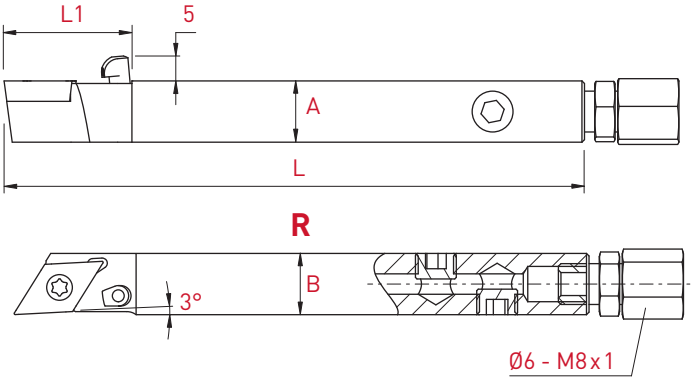
Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
DC..-0702..	8 x 8	115	SDJCL-0808X-07	SDJCR-0808X-07
	10 x 10	115	SDJCL-1010X-07	SDJCR-1010X-07
	12 x 12	130	SDJCL-1212X-07	SDJCR-1212X-07
	12 x 12	90	SDJCL-1212G-07	SDJCR-1212G-07
	12.7 x 12.7	130	SDJCL-12.7X-07	SDJCR-12.7X-07
	16 x 16	130	SDJCL-1616X-07	SDJCR-1616X-07
	16 x 16	75	SDJCL-1616F-07	SDJCR-1616F-07
	20 x 20	120	SDJCL-2020X-07	SDJCR-2020X-07
DC..-11T3..	12 x 12	130	SDJCL-1212X-11	SDJCR-1212X-11
	12 x 12	90	SDJCL-1212G-11	SDJCR-1212G-11
	12.7 x 12.7	130	SDJCL-12.7X-11	SDJCR-12.7X-11
	16 x 16	130	SDJCL-1616X-11	SDJCR-1616X-11
	16 x 16	75	SDJCL-1616F-11	SDJCR-1616F-11
	20 x 20	120	SDJCL-2020X-11	SDJCR-2020X-11

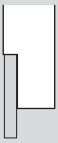
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

55°

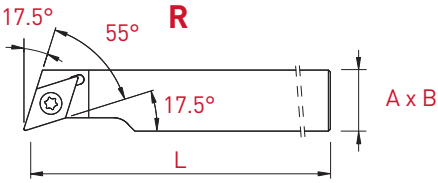
SDJ-JET

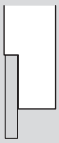
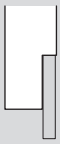
SDJ



Plaquettes WSP Inserts	A x B	L	L1	L  Art. N°	R  Art. N°
DC..-0702..	10 x 10	110	20	SDJCL-1010J-07-JET	SDJCR-1010J-07-JET
	12 x 12	110	20	SDJCL-1212J-07-JET	SDJCR-1212J-07-JET
	12.7 x 12.7	110	20	SDJCL-12.7J-07-JET	SDJCR-12.7J-07-JET
	16 x 16	110	20	SDJCL-1616J-07-JET	SDJCR-1616J-07-JET
	20 x 20	110	20	SDJCL-2020J-07-JET	SDJCR-2020J-07-JET
DC..-11T3..	12 x 12	110	23	SDJCL-1212J-11-JET	SDJCR-1212J-11-JET
	12.7 x 12.7	110	23	SDJCL-12.7J-11-JET	SDJCR-12.7J-11-JET
	16 x 16	110	23	SDJCL-1616J-11-JET	SDJCR-1616J-11-JET
	20 x 20	110	23	SDJCL-2020J-11-JET	SDJCR-2020J-11-JET

SDH

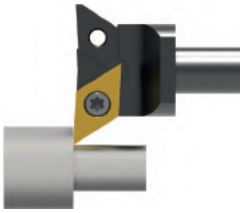


Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
DC..-0702..	10 x 10	115	**SDHCL-1010X-07**	**SDHCR-1010X-07**
	12 x 12	130	**SDHCL-1212X-07**	**SDHCR-1212X-07**
	12 x 12	90	**SDHCL-1212G-07**	**SDHCR-1212G-07**
	12.7 x 12.7	130	**SDHCL-12.7X-07**	**SDHCR-12.7X-07**
	16 x 16	130	**SDHCL-1616X-07**	**SDHCR-1616X-07**
	16 x 16	75	**SDHCL-1616F-07**	**SDHCR-1616F-07**
DC..-11T3..	16 x 16	130	**SDHCL-1616X-11**	**SDHCR-1616X-11**
	16 x 16	75	**SDHCL-1616F-11**	**SDHCR-1616F-11**
	20 x 20	120	**SDHCL-2020X-11**	**SDHCR-2020X-11**

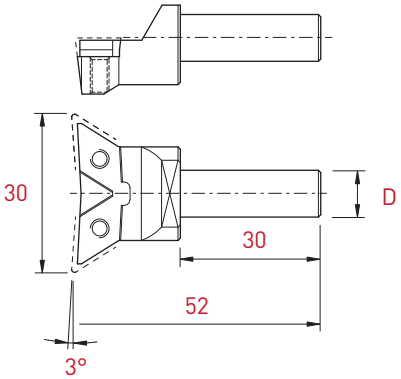
Porte-outils
Halter
Holders

55°

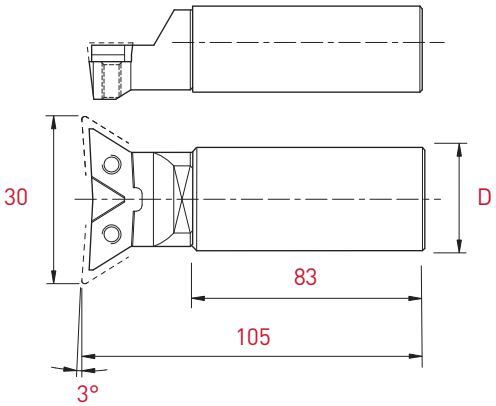
SDU



SDU



Plaquettes WSP Inserts	D	Art. N°
DC..-11T3..	10	**SDUC-D10X-11**



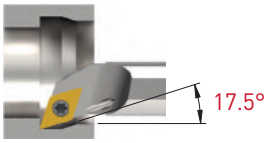
Plaquettes WSP Inserts	D	Art. N°
DC..-11T3..	20	**SDUC-D20X-11**
	25.4	**SDUC-D25.4X-11**

Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders

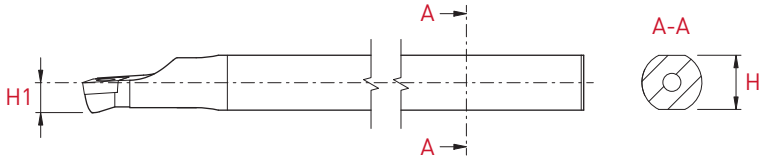
55°

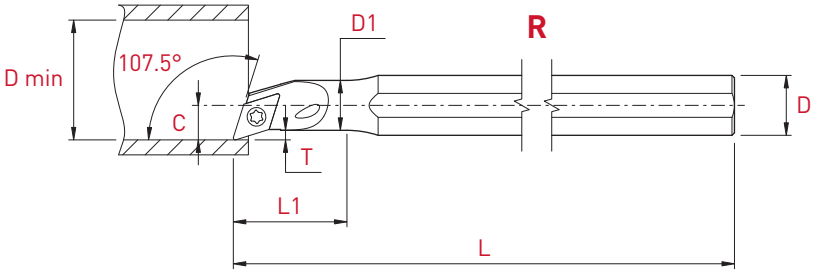
A-SDQCR/L

new



SDQ





	Acier / Stahl / Steel									L	R
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	12.5	8	2.4	7	5	100	22	9	**A0810H-SDQCL-07**	**A0810H-SDQCR-07**
	12	15.5	10	2.9	9	6	125	28	11	**A1012K-SDQCL-07**	**A1012K-SDQCR-07**

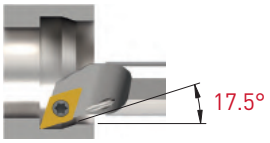
Pour barres d'alésage For boring bar Für Borstange	Pièces de rechange Ersatzteile Spare parts	
	Art. N°	Art. N°
A0810H_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

Porte-outils intérieurs
Innenhalter
Internal holders

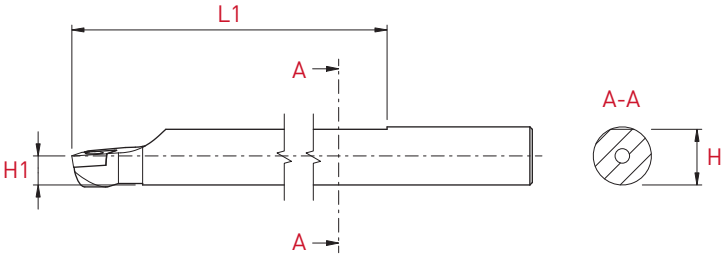
55°

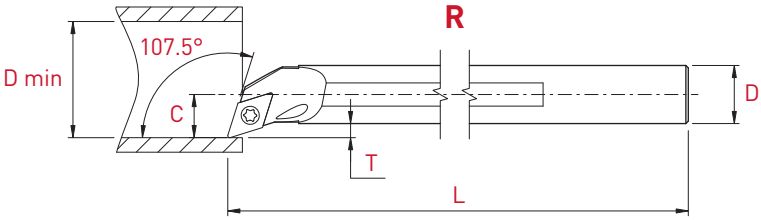
A-SDQCR/L
E-SDQCR/L

new



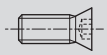
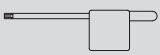
SDQ





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	2.4	7	4.5	100	85	9	A10H-SDQCL-07	A10H-SDQCR-07
	12	17	2.9	9	6	125	95	11.5	A12K-SDQCL-07	A12K-SDQCR-07
	16	21	2.9	11	8	150	117	15.5	A16M-SDQCL-07	A16M-SDQCR-07

	Carbure de tungstène / Hartmetall / Solid carbide									
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	13	2.4	7.5	5	125	-	9.5	E10K-SDQCL-07	E10K-SDQCR-07
	12	17	2.9	9	6	150	-	11.5	E12M-SDQCL-07	E12M-SDQCR-07

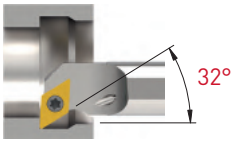
Pièces de rechange Ersatzteile Spare parts	
	
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8

Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders

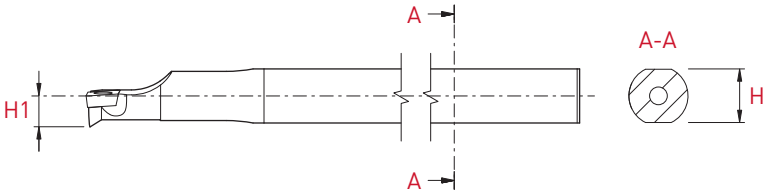
55°

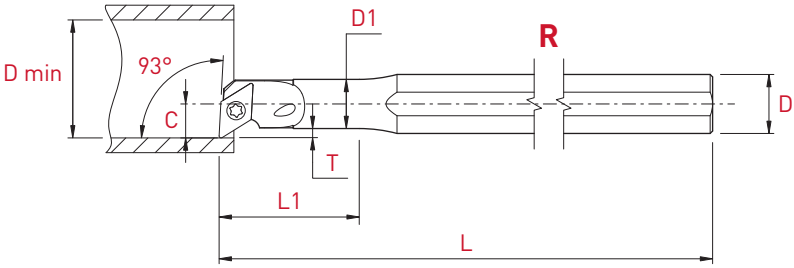
A-SDUCR/L

new



SDU





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	H	Art. N°	Art. N°
DC..-0702	10	12.5	7	1.9	5	100	22	9	**A0810H-SDUCL-07**	**A0810H-SDUCR-07**
	12	15.5	9	2.9	6	125	28	11	**A1012K-SDUCL-07**	**A1012K-SDUCR-07**

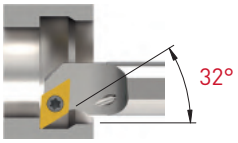
Pour barres d'alésage For boring bar Für Borstange	Pièces de rechange Ersatzteile Spare parts	
	Art. N°	Art. N°
A0810H_	**V-M2.5X4.8-T8**	**C-T8**
A1012K_	**V-M2.5X5.8-T8**	

Porte-outils intérieurs
Innenhalter
Internal holders

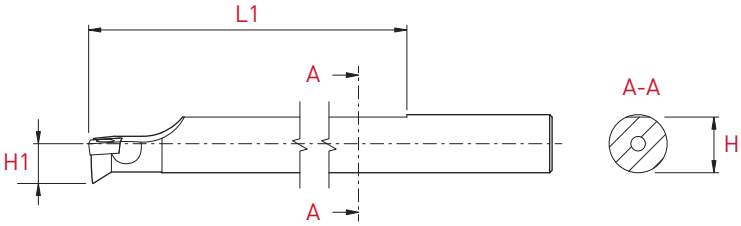
55°

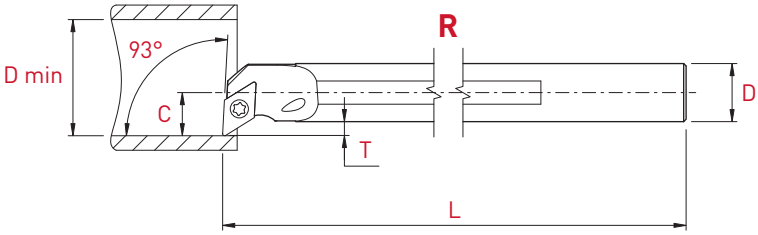
A-SDUCR/L
E-SDUCR/L

new



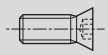
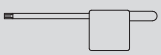
SDU





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	100	85	9.5	A10H-SDUCL-07	A10H-SDUCR-07
	12	17	2.9	9	6	125	95	11.5	A12K-SDUCL-07	A12K-SDUCR-07
	16	21	2.9	11	8	150	117	15.5	A16M-SDUCL-07	A16M-SDUCR-07

	Carbure de tungstène / Hartmetall / Solid carbide									
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	125	-	9.5	E10K-SDUCL-07	E10K-SDUCR-07
	12	17	2.9	9	6	150	-	11.5	E12M-SDUCL-07	E12M-SDUCR-07

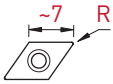
Pièces de rechange Ersatzteile Spare parts	
	
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8

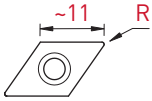
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

DCGT-X8

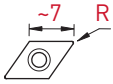
DCGT FN-X8

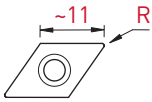




		PVD					non revêtu unbeschichtet uncoated	
		P M N S	P M N S	P M S	P M S	P M N	N S	N S
R	Art. N°	TiAlN	HTA	TiAlX (new)	HTAX (new)	TiN	K10	K20
0.05	DCGT-0702005-FN-X8	■	■	■	■	■	■	■
0.08	DCGT-0702008-FN-X8	■	■	■	■		■	■
0.1	DCGT-070201-FN-X8	■	■	■	■	■	■	■
0.15	DCGT-0702015-FN-X8	■	■	■	■		■	■
0.2	DCGT-070202-FN-X8	■	■	■	■	■	■	■
0.4	DCGT-070204-FN-X8	■	■	■	■	■	■	■
0.05	DCGT-11T3005-FN-X8	■	■	■	■	■	■	■
0.08	DCGT-11T3008-FN-X8	■	■	■	■		■	■
0.1	DCGT-11T301-FN-X8	■	■	■	■	■	■	■
0.15	DCGT-11T3015-FN-X8	■	■	■	■		■	■
0.2	DCGT-11T302-FN-X8	■	■	■	■	■	■	■
0.4	DCGT-11T304-FN-X8	■	■	■	■	■	■	■

DCGT ENP-X8





	PVD		non revêtu unbeschichtet uncoated
	P M N S	P M N	N
R	TiAlN	TiN	K20
0.05	DCGT-0702005-ENP-X8	■	■	■
0.08	DCGT-0702008-ENP-X8	■		■
0.1	DCGT-070201-ENP-X8	■	■	■
0.15	DCGT-0702015-ENP-X8	■		■
0.2	DCGT-070202-ENP-X8	■	■	■
0.4	DCGT-070204-ENP-X8	■	■	■
0.05	DCGT-11T3005-ENP-X8	■	■	■
0.08	DCGT-11T3008-ENP-X8	■		■
0.1	DCGT-11T301-ENP-X8	■	■	■
0.15	DCGT-11T3015-ENP-X8	■		■
0.2	DCGT-11T302-ENP-X8	■	■	■
0.4	DCGT-11T304-ENP-X8	■	■	■

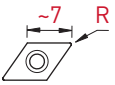
■ = disponible / verfügbar / available

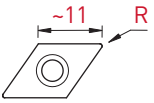
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

DCGT-X17

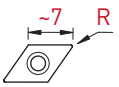
DCGT FN-X17

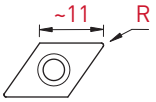




R	Art. N°	PVD					non revêtu unbeschichtet uncoated	
		P M N S	P M N S	P M S	P M S	P M N	N S	N S
		TiAlN	HTA	TiAlX new	HTAX new	TiN	K10	K20
0.05	DCGT-0702005-FN-X17	■	■	■	■	■	■	■
0.08	DCGT-0702008-FN-X17	■	■	■	■		■	■
0.1	DCGT-070201-FN-X17	■	■	■	■	■	■	■
0.15	DCGT-0702015-FN-X17	■	■	■	■		■	■
0.2	DCGT-070202-FN-X17	■	■	■	■	■	■	■
0.4	DCGT-070204-FN-X17	■	■	■	■	■	■	■
0.05	DCGT-11T3005-FN-X17	■	■	■	■	■	■	■
0.08	DCGT-11T3008-FN-X17	■	■	■	■		■	■
0.1	DCGT-11T301-FN-X17	■	■	■	■	■	■	■
0.15	DCGT-11T3015-FN-X17	■	■	■	■		■	■
0.2	DCGT-11T302-FN-X17	■	■	■	■	■	■	■
0.4	DCGT-11T304-FN-X17	■	■	■	■	■	■	■
0.8	DCGT-11T308-FN-X17	■	■	■	■	■	■	■

DCGT ENP-X17





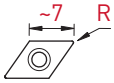
R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		P M N S	P M N	N
		TiAlN	TiN	K20
0.05	DCGT-0702005-ENP-X17	■	■	■
0.08	DCGT-0702008-ENP-X17	■		■
0.1	DCGT-070201-ENP-X17	■	■	■
0.15	DCGT-0702015-ENP-X17	■		■
0.2	DCGT-070202-ENP-X17	■	■	■
0.4	DCGT-070204-ENP-X17	■	■	■
0.05	DCGT-11T3005-ENP-X17	■	■	■
0.08	DCGT-11T3008-ENP-X17	■		■
0.1	DCGT-11T301-ENP-X17	■	■	■
0.15	DCGT-11T3015-ENP-X17	■		■
0.2	DCGT-11T302-ENP-X17	■	■	■
0.4	DCGT-11T304-ENP-X17	■	■	■
0.8	DCGT-11T308-ENP-X17	■	■	■

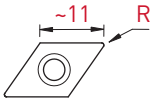
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

DCGT-X25

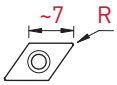
DCGT FN-X25

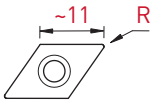




		PVD			non revêtu unbeschichtet uncoated	
		P M N S	P M N S	P M N	N	N
R	Art. N°	TiAlN	HTA	TiN	K10	K20
0.05	DCGT-0702005-FN-X25	■	■	■	■	■
0.1	DCGT-070201-FN-X25	■	■	■	■	■
0.2	DCGT-070202-FN-X25	■	■	■	■	■
0.4	DCGT-070204-FN-X25	■	■	■	■	■
0.05	DCGT-11T3005-FN-X25	■	■	■	■	■
0.1	DCGT-11T301-FN-X25	■	■	■	■	■
0.2	DCGT-11T302-FN-X25	■	■	■	■	■
0.4	DCGT-11T304-FN-X25	■	■	■	■	■
0.8	DCGT-11T308-FN-X25	■	■	■	■	■

DCGT ENP-X25





		PVD			non revêtu unbeschichtet uncoated
		P M N S	P M S	P M N	N
R	Art. N°	TiAlN	TiAlX new	TiN	K20
0.05	DCGT-0702005-ENP-X25	■	■	■	■
0.1	DCGT-070201-ENP-X25	■	■	■	■
0.2	DCGT-070202-ENP-X25	■	■	■	■
0.4	DCGT-070204-ENP-X25	■	■	■	■
0.05	DCGT-11T3005-ENP-X25	■	■	■	■
0.1	DCGT-11T301-ENP-X25	■	■	■	■
0.2	DCGT-11T302-ENP-X25	■	■	■	■
0.4	DCGT-11T304-ENP-X25	■	■	■	■
0.8	DCGT-11T308-ENP-X25	■	■	■	■

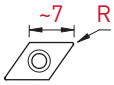
■ = disponible / verfügbar / available

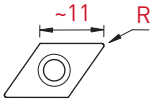
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

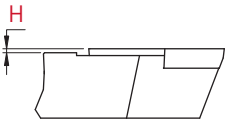
DCGT-X20

DCGT ENP-X20





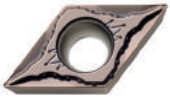
R	H	Art. N°	PVD ZTA (M N S)	PVD HTiX (M N S)
0.1	0.2	DCGT-070201-ENP-X20	■	
0.2	0.2	DCGT-070202-ENP-X20	■	■
0.4	0.2	DCGT-070204-ENP-X20	■	■
0.1	0.25	DCGT-11T301-ENP-X20	■	
0.2	0.25	DCGT-11T302-ENP-X20	■	■
0.4	0.25	DCGT-11T304-ENP-X20	■	■
0.8	0.25	DCGT-11T308-ENP-X20	■	■



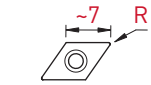
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

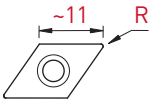
55°

DCMT-XF3
DCMT-XF2
DCMT-MF2

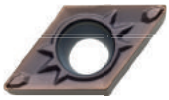


DCMT EN-XF3

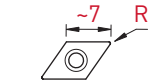


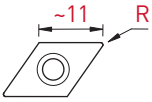


R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)
0.2	DCMT-070202-EN-XF3	■	■
0.4	DCMT-070204-EN-XF3	■	■
0.2	DCMT-11T302-EN-XF3	■	■
0.4	DCMT-11T304-EN-XF3	■	■



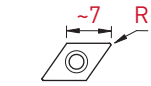
DCMT EN-XF2

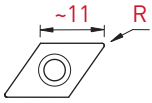




R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD HTi5 (P M)
0.2	DCMT-070202-EN-XF2	■	■	■
0.4	DCMT-070204-EN-XF2	■	■	■
0.2	DCMT-11T302-EN-XF2	■	■	■
0.4	DCMT-11T304-EN-XF2	■	■	■

DCMT EN-MF2





R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD Ti5 (P M)	CVD HTi5 (P M)
0.2	DCMT-070202-EN-MF2	■	■	■	■
0.4	DCMT-070204-EN-MF2	■	■	■	■
0.2	DCMT-11T302-EN-MF2	■	■	■	■
0.4	DCMT-11T304-EN-MF2	■	■	■	■
0.8	DCMT-11T308-EN-MF2	■	■	■	■

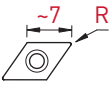
■ = disponible / verfügbar / available

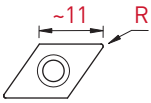
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

DCMT-MF
DCMT-HF3
DCMT-HF

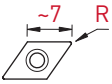
DCMT EN-MF

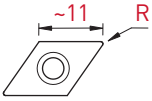




R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	DCMT-070202-EN-MF	■	■
0.4	DCMT-070204-EN-MF	■	■
0.2	DCMT-11T302-EN-MF	■	■
0.4	DCMT-11T304-EN-MF	■	■

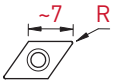
DCMT EN-HF3

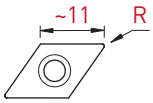




R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M Ti6
0.2	DCMT-070202-EN-HF3	■	■	■
0.4	DCMT-070204-EN-HF3	■	■	■
0.2	DCMT-11T302-EN-HF3	■	■	■
0.4	DCMT-11T304-EN-HF3	■	■	■
0.8	DCMT-11T308-EN-HF3	■	■	■

DCMT EN-HF





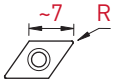
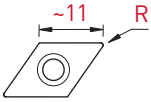
R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
0.2	DCMT-070202-EN-HF		■		■	■
0.4	DCMT-070204-EN-HF	■	■	■	■	■
0.8	DCMT-070208-EN-HF	■	■	■	■	■
0.2	DCMT-11T302-EN-HF		■		■	■
0.4	DCMT-11T304-EN-HF	■	■	■	■	■
0.8	DCMT-11T308-EN-HF	■	■	■	■	■

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

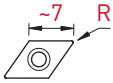
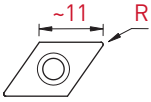
55°

DCGT-X8
DCGT-KX

DCGT FN-X8

	R	Art. N°	CERMET PVD P M CTA	CERMET non revêtu unbeschichtet uncoated P CN6
	0.05	DCGT-0702005-FN-X8	■	■
	0.1	DCGT-070201-FN-X8	■	■
	0.2	DCGT-070202-FN-X8	■	■
	0.05	DCGT-11T3005-FN-X8	■	■
	0.1	DCGT-11T301-FN-X8	■	■
	0.2	DCGT-11T302-FN-X8	■	■
	0.4	DCGT-11T304-FN-X8	■	■

DCGT ENP-KX

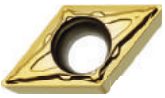
	R	Art. N°	CERMET PVD P M CT7	CERMET PVD P M HCT7	CERMET non revêtu unbeschichtet uncoated P CN6
	0.1	DCGT-070201-ENP-KX	■	■	■
	0.2	DCGT-070202-ENP-KX	■	■	■
	0.4	DCGT-070204-ENP-KX	■	■	■
	0.1	DCGT-11T301-ENP-KX	■	■	■
	0.2	DCGT-11T302-ENP-KX	■	■	■
	0.4	DCGT-11T304-ENP-KX	■	■	■

■ = disponible / verfügbar / available

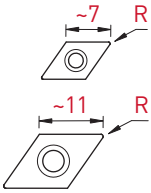
Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

55°

DCMT-KM



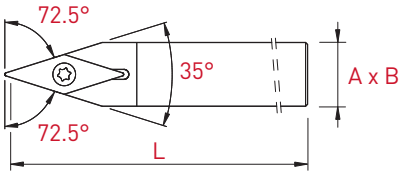
DCMT EN-KM



R	Art. N°	CERMET PVD P M CT7	CERMET PVD P M HCT7	CERMET non revêtu unbeschichtet uncoated P CN6
0.2	DCMT-070202-EN-KM	■	■	■
0.4	DCMT-070204-EN-KM	■	■	■
0.2	DCMT-11T302-EN-KM	■	■	■
0.4	DCMT-11T304-EN-KM	■	■	■
0.8	DCMT-11T308-EN-KM	■	■	■

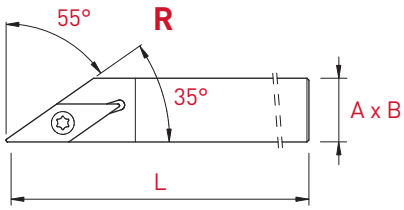
■ = disponible / verfügbar / available

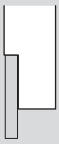
SVV



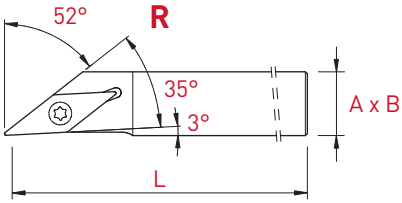
Plaquettes WSP Inserts	A x B	L	Art. N°
VC..-1103..	8 x 8	115	**SVVCN-0808X-11**
	10 x 10	115	**SVVCN-1010X-11**
	12 x 12	130	**SVVCN-1212X-11**
	12 x 12	90	**SVVCN-1212G-11**
	12.7 x 12.7	130	**SVVCN-12.7X-11**
	16 x 16	130	**SVVCN-1616X-11**
	16 x 16	75	**SVVCN-1616F-11**
	20 x 20	120	**SVVCN-2020X-11**
VC..-1303..	8 x 10	115	**SVVCN-0810X-13**
	10 x 10	115	**SVVCN-1010X-13**
	12 x 12	130	**SVVCN-1212X-13**
	12 x 12	90	**SVVCN-1212G-13**
	12.7 x 12.7	130	**SVVCN-12.7X-13**
	16 x 16	130	**SVVCN-1616X-13**
	16 x 16	75	**SVVCN-1616F-13**
	20 x 20	120	**SVVCN-2020X-13**
VC..-1604..	12 x 12	130	**SVVCN-1212X-16**
	12 x 12	90	**SVVCN-1212G-16**
	12.7 x 12.7	130	**SVVCN-12.7X-16**
	16 x 16	130	**SVVCN-1616X-16**
	16 x 16	75	**SVVCN-1616F-16**
	20 x 20	120	**SVVCN-2020X-16**

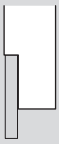
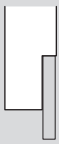
SVA



Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
VC..-1103..	8 x 8	115	**SVACL-0808X-11**	**SVACR-0808X-11**
	10 x 10	115	**SVACL-1010X-11**	**SVACR-1010X-11**
	12 x 12	130	**SVACL-1212X-11**	**SVACR-1212X-11**
	12 x 12	90	**SVACL-1212G-11**	**SVACR-1212G-11**
	12.7 x 12.7	130	**SVACL-12.7X-11**	**SVACR-12.7X-11**
	16 x 16	130	**SVACL-1616X-11**	**SVACR-1616X-11**
	16 x 16	75	**SVACL-1616F-11**	**SVACR-1616F-11**
	20 x 20	120	**SVACL-2020X-11**	**SVACR-2020X-11**
VC..-1604..	12 x 12	130	**SVACL-1212X-16**	**SVACR-1212X-16**
	12 x 12	90	**SVACL-1212G-16**	**SVACR-1212G-16**
	12.7 x 12.7	130	**SVACL-12.7X-16**	**SVACR-12.7X-16**
	16 x 16	130	**SVACL-1616X-16**	**SVACR-1616X-16**
	16 x 16	75	**SVACL-1616F-16**	**SVACR-1616F-16**
	20 x 20	120	**SVACL-2020X-16**	**SVACR-2020X-16**

SVJ



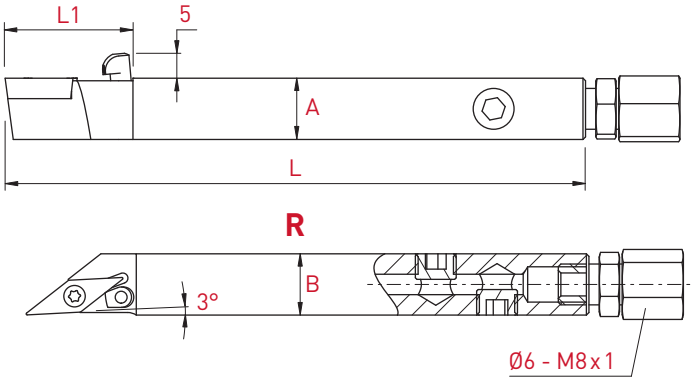
Plaquettes WSP Inserts	A x B	L	L  Art. N°	R  Art. N°
VC..-1103..	8 x 8	115	SVJCL-0808X-11	SVJCR-0808X-11
	10 x 10	115	SVJCL-1010X-11	SVJCR-1010X-11
	12 x 12	130	SVJCL-1212X-11	SVJCR-1212X-11
	12 x 12	90	SVJCL-1212G-11	SVJCR-1212G-11
	12.7 x 12.7	130	SVJCL-12.7X-11	SVJCR-12.7X-11
	16 x 16	130	SVJCL-1616X-11	SVJCR-1616X-11
	16 x 16	75	SVJCL-1616F-11	SVJCR-1616F-11
	20 x 20	120	SVJCL-2020X-11	SVJCR-2020X-11
VC..-1303..	8 x 10	115	SVJCL-0810X-13	SVJCR-0810X-13
	10 x 10	115	SVJCL-1010X-13	SVJCR-1010X-13
	12 x 12	130	SVJCL-1212X-13	SVJCR-1212X-13
	12 x 12	90	SVJCL-1212G-13	SVJCR-1212G-13
	12.7 x 12.7	130	SVJCL-12.7X-13	SVJCR-12.7X-13
	16 x 16	130	SVJCL-1616X-13	SVJCR-1616X-13
	16 x 16	75	SVJCL-1616F-13	SVJCR-1616F-13
	20 x 20	120	SVJCL-2020X-13	SVJCR-2020X-13
VC..-1604..	12 x 12	130	SVJCL-1212X-16	SVJCR-1212X-16
	12 x 12	90	SVJCL-1212G-16	SVJCR-1212G-16
	12.7 x 12.7	130	SVJCL-12.7X-16	SVJCR-12.7X-16
	16 x 16	130	SVJCL-1616X-16	SVJCR-1616X-16
	16 x 16	75	SVJCL-1616F-16	SVJCR-1616F-16
	20 x 20	120	SVJCL-2020X-16	SVJCR-2020X-16

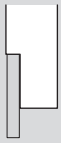
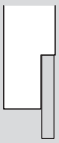
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

35°

SVJ-JET

SVJ



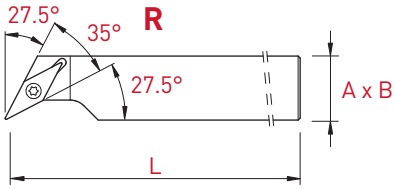
Plaquettes WSP Inserts	A x B	L	L1	L  Art. N°	R  Art. N°
VC..-1103..	10 x 10	110	21	SVJCL-1010J-11-JET	SVJCR-1010J-11-JET
	12 x 12	110	21	SVJCL-1212J-11-JET	SVJCR-1212J-11-JET
	12.7 x 12.7	110	21	SVJCL-12.7J-11-JET	SVJCR-12.7J-11-JET
	16 x 16	110	21	SVJCL-1616J-11-JET	SVJCR-1616J-11-JET
	20 x 20	110	21	SVJCL-2020J-11-JET	SVJCR-2020J-11-JET
VC..-1303..	10 x 10	110	26	SVJCL-1010J-13-JET	SVJCR-1010J-13-JET
	12 x 12	110	26	SVJCL-1212J-13-JET	SVJCR-1212J-13-JET
	12.7 x 12.7	110	26	SVJCL-12.7J-13-JET	SVJCR-12.7J-13-JET
	16 x 16	110	26	SVJCL-1616J-13-JET	SVJCR-1616J-13-JET
	20 x 20	110	26	SVJCL-2020J-13-JET	SVJCR-2020J-13-JET
VC..-1604..	12 x 12	110	30	SVJCL-1212J-16-JET	SVJCR-1212J-16-JET
	12.7 x 12.7	110	30	SVJCL-12.7J-16-JET	SVJCR-12.7J-16-JET
	16 x 16	110	30	SVJCL-1616J-16-JET	SVJCR-1616J-16-JET
	20 x 20	110	30	SVJCL-2020J-16-JET	SVJCR-2020J-16-JET

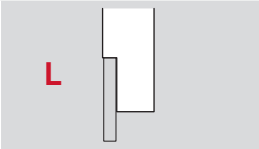
Porte-outils
Halter
Holders

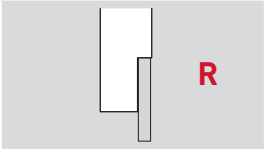
35°

SVX

SVX







Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC..-1103..	16 x 16	130	**SVXCL-1616X-11**	**SVXCR-1616X-11**
	16 x 16	75	**SVXCL-1616F-11**	**SVXCR-1616F-11**
	20 x 20	120	**SVXCL-2020X-11**	**SVXCR-2020X-11**

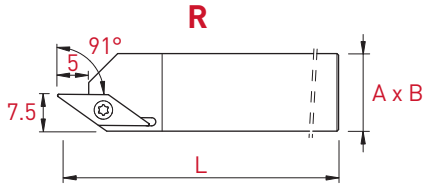
Porte-outils
Halter
Holders

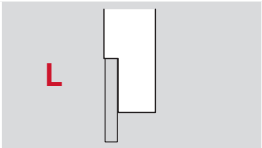
35°

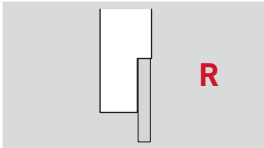
SV-CL/R

SV-CL/R

tournage arrière
rückwärts drehen
back turning



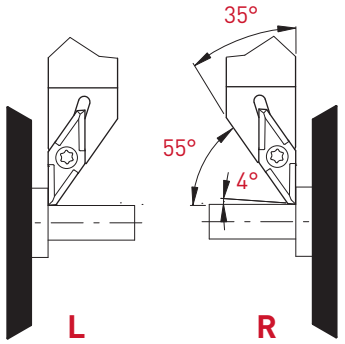




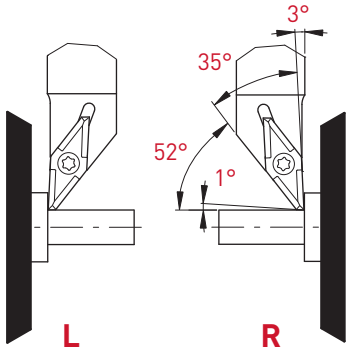
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC**G**..-1103..	12 x 12	130	**SV-CL-1212X-11**	**SV-CR-1212X-11**
	12 x 12	90	**SV-CL-1212G-11**	**SV-CR-1212G-11**
	12.7 x 12.7	130	**SV-CL-12.7X-11**	**SV-CR-12.7X-11**
	16 x 16	130	**SV-CL-1616X-11**	**SV-CR-1616X-11**
	16 x 16	75	**SV-CL-1616F-11**	**SV-CR-1616F-11**
	20 x 20	120	**SV-CL-2020X-11**	**SV-CR-2020X-11**

Porte-outils compatibles avec plaquettes VCGT ELP/ERP-FL/FR-X10°
Passende Halter zu den Wendeplatten VCGT ELP/ERP-FL/FR-X10°
Holders compatible with inserts VCGT ELP/ERP-FL/FR-X10°

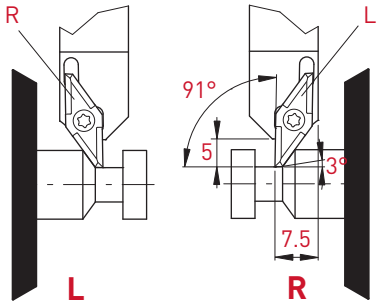
35°



	Art. N°
R	SVACR-...-11
L	SVACL-...-11



	Art. N°
R	SVJCR-...-11
L	SVJCL-...-11



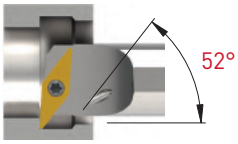
	Art. N°
R	SV-CR-...-11
L	SV-CL-...-11

Porte-outils intérieurs
Innenhalter
Internal holders

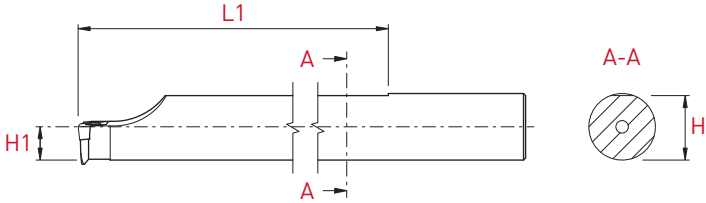
35°

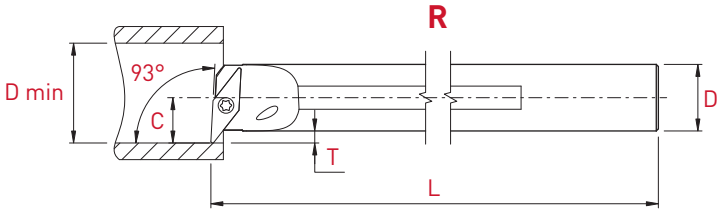
A-SVUCR/L

new

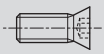
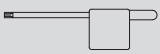


SVU





	Acier / Stahl / Steel								L	R
Plaquettes WSP Inserts	D	Dmin	T	C	H1	L	L1	H	Art. N°	Art. N°
VC..-1103	16	21	3.1	11	8	150	118	15.5	**A16M-SVUCL-11**	**A16M-SVUCR-11**

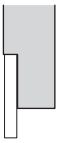
Pièces de rechange Ersatzteile Spare parts	
	
Art. N°	Art. N°
V-M2.5X5.8-T8	**C-T8**

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

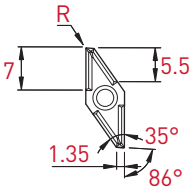
VCGT-L/R-X10

VCGT FL / FR-X10



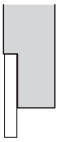
L

R

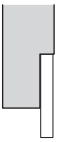


R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiAlX (P M S)	PVD HTAX (P M S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N S)	non revêtu unbeschichtet uncoated K20 (N S)
0.03	VCGT-1103003-FL-X10	■	■			■	■	■
0.08	VCGT-1103008-FL-X10	■	■			■	■	■
0.1	VCGT-110301-FL-X10	■	■			■	■	■
0.2	VCGT-110302-FL-X10	■	■			■	■	■
0.03	VCGT-1103003-FR-X10	■	■	■	■	■	■	■
0.08	VCGT-1103008-FR-X10	■	■	■	■	■	■	■
0.1	VCGT-110301-FR-X10	■	■	■	■	■	■	■
0.2	VCGT-110302-FR-X10	■	■	■	■	■	■	■

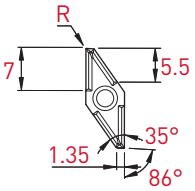
VCGT ELP/ERP-X10



L



R



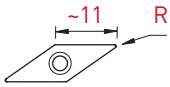
R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiAlX (P M S)	PVD HTAX (P M S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N S)	non revêtu unbeschichtet uncoated K20 (N S)
0.03	VCGT-1103003-ELP-X10	■	■			■	■	■
0.08	VCGT-1103008-ELP-X10	■	■			■	■	■
0.1	VCGT-110301-ELP-X10	■	■			■	■	■
0.2	VCGT-110302-ELP-X10	■	■			■	■	■
0.03	VCGT-1103003-ERP-X10	■	■	■	■	■	■	■
0.08	VCGT-1103008-ERP-X10	■	■	■	■	■	■	■
0.1	VCGT-110301-ERP-X10	■	■	■	■	■	■	■
0.2	VCGT-110302-ERP-X10	■	■	■	■	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

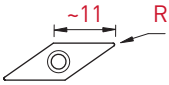
VCGT-K18
VCGW-0

VCGT FN-K18



R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		P M N S	P M N	N S
		HTA	HTiN	K10
0.05	VCGT-1103005-FN-K18	■	■	■
0.1	VCGT-110301-FN-K18	■	■	■
0.2	VCGT-110302-FN-K18	■	■	■
0.4	VCGT-110304-FN-K18	■	■	■

VCGW FN-0



R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		P N	P N	N
		HTA	HTiN	K10
0.05	VCGW-1103005-FN-0	■	■	■
0.1	VCGW-110301-FN-0	■	■	■
0.2	VCGW-110302-FN-0	■	■	■
0.4	VCGW-110304-FN-0	■	■	■

■ = disponible / verfügbar / available

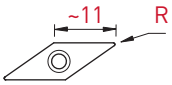
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

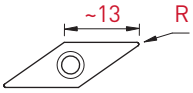
35°

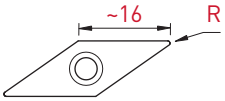
VCGT-X8

VCGT FN-X8

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiAlX new (P M S)	PVD HTAX new (P M S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N S)	non revêtu unbeschichtet uncoated K20 (N S)
0.05	VCGT-1103005-FN-X8	■	■	■	■	■	■	■
0.08	VCGT-1103008-FN-X8	■	■	■	■		■	■
0.1	VCGT-110301-FN-X8	■	■	■	■	■	■	■
0.15	VCGT-1103015-FN-X8	■	■	■	■		■	■
0.2	VCGT-110302-FN-X8	■	■	■	■	■	■	■
0.4	VCGT-110304-FN-X8	■	■	■	■	■	■	■
0.05	VCGT-1303005-FN-X8	■	■			■	■	■
0.1	VCGT-130301-FN-X8	■	■			■	■	■
0.2	VCGT-130302-FN-X8	■	■			■	■	■
0.4	VCGT-130304-FN-X8	■	■			■	■	■
0.05	VCGT-1604005-FN-X8	■	■			■	■	■
0.1	VCGT-160401-FN-X8	■	■			■	■	■
0.2	VCGT-160402-FN-X8	■	■			■	■	■
0.4	VCGT-160404-FN-X8	■	■			■	■	■

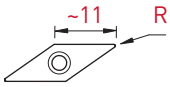


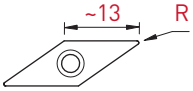


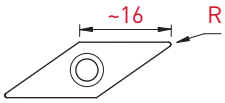


VCGT ENP-X8

R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K20 (N)
0.05	VCGT-1103005-ENP-X8	■	■	■
0.08	VCGT-1103008-ENP-X8	■		■
0.1	VCGT-110301-ENP-X8	■	■	■
0.15	VCGT-1103015-ENP-X8	■		■
0.2	VCGT-110302-ENP-X8	■	■	■
0.4	VCGT-110304-ENP-X8	■	■	■
0.05	VCGT-1303005-ENP-X8	■		■
0.1	VCGT-130301-ENP-X8	■		■
0.2	VCGT-130302-ENP-X8	■		■
0.4	VCGT-130304-ENP-X8	■		■
0.05	VCGT-1604005-ENP-X8	■	■	■
0.1	VCGT-160401-ENP-X8	■	■	■
0.2	VCGT-160402-ENP-X8	■	■	■
0.4	VCGT-160404-ENP-X8	■	■	■







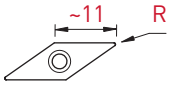
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

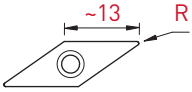
35°

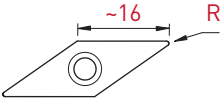
VCGT-X17

VCGT FN-X17

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD HTAX (P M S) new	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N S)	non revêtu unbeschichtet uncoated K20 (N S)
0.05	VCGT-1103005-FN-X17	■	■	■	■	■	■
0.08	VCGT-1103008-FN-X17	■	■	■		■	■
0.1	VCGT-110301-FN-X17	■	■	■	■	■	■
0.15	VCGT-1103015-FN-X17	■	■	■		■	■
0.2	VCGT-110302-FN-X17	■	■	■	■	■	■
0.4	VCGT-110304-FN-X17	■	■	■	■	■	■
0.05	VCGT-1303005-FN-X17	■	■		■	■	■
0.1	VCGT-130301-FN-X17	■	■		■	■	■
0.2	VCGT-130302-FN-X17	■	■		■	■	■
0.4	VCGT-130304-FN-X17	■	■		■	■	■
0.05	VCGT-1604005-FN-X17	■	■		■	■	■
0.1	VCGT-160401-FN-X17	■	■		■	■	■
0.2	VCGT-160402-FN-X17	■	■		■	■	■
0.4	VCGT-160404-FN-X17	■	■		■	■	■
0.8	VCGT-160408-FN-X17	■	■		■	■	■

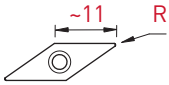


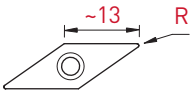


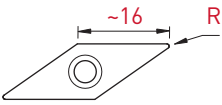


VCGT ENP-X17

R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K20 (N)
0.05	VCGT-1103005-ENP-X17	■	■	■
0.08	VCGT-1103008-ENP-X17	■		■
0.1	VCGT-110301-ENP-X17	■	■	■
0.15	VCGT-1103015-ENP-X17	■		■
0.2	VCGT-110302-ENP-X17	■	■	■
0.4	VCGT-110304-ENP-X17	■	■	■
0.05	VCGT-1303005-ENP-X17	■		■
0.1	VCGT-130301-ENP-X17	■		■
0.2	VCGT-130302-ENP-X17	■		■
0.4	VCGT-130304-ENP-X17	■		■
0.05	VCGT-1604005-ENP-X17	■	■	■
0.1	VCGT-160401-ENP-X17	■	■	■
0.2	VCGT-160402-ENP-X17	■	■	■
0.4	VCGT-160404-ENP-X17	■	■	■
0.8	VCGT-160408-ENP-X17	■	■	■







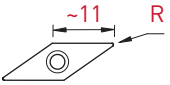
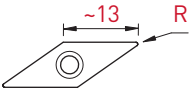
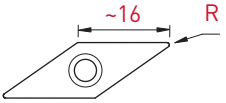
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

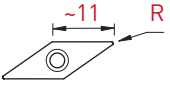
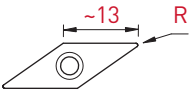
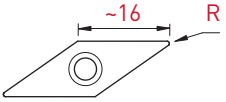
35°

VCGT-X25

VCGT FN-X25

	R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K10 (N)	non revêtu unbeschichtet uncoated K20 (N)
	0.05	VCGT-1103005-FN-X25	■	■	■	■	■
	0.1	VCGT-110301-FN-X25	■	■	■	■	■
	0.2	VCGT-110302-FN-X25	■	■	■	■	■
	0.4	VCGT-110304-FN-X25	■	■	■	■	■
	0.05	VCGT-1303005-FN-X25	■	■	■	■	■
	0.1	VCGT-130301-FN-X25	■	■	■	■	■
	0.2	VCGT-130302-FN-X25	■	■	■	■	■
	0.4	VCGT-130304-FN-X25	■	■	■	■	■
	0.8	VCGT-130308-FN-X25	■	■	■	■	■
	0.05	VCGT-1604005-FN-X25	■	■	■	■	■
	0.1	VCGT-160401-FN-X25	■	■	■	■	■
	0.2	VCGT-160402-FN-X25	■	■	■	■	■
	0.4	VCGT-160404-FN-X25	■	■	■	■	■
	0.8	VCGT-160408-FN-X25	■	■	■	■	■

VCGT ENP-X25

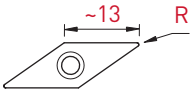
	R	Art. N°	PVD TiAlN (P M N S)	PVD TiAlX (P M S) new	PVD TiN (P M N)	non revêtu unbeschichtet uncoated K20 (N)
	0.05	VCGT-1103005-ENP-X25	■	■	■	■
	0.1	VCGT-110301-ENP-X25	■	■	■	■
	0.2	VCGT-110302-ENP-X25	■	■	■	■
	0.4	VCGT-110304-ENP-X25	■	■	■	■
	0.05	VCGT-1303005-ENP-X25	■			■
	0.1	VCGT-130301-ENP-X25	■			■
	0.2	VCGT-130302-ENP-X25	■			■
	0.4	VCGT-130304-ENP-X25	■			■
	0.8	VCGT-130308-ENP-X25	■			■
	0.05	VCGT-1604005-ENP-X25	■		■	■
	0.1	VCGT-160401-ENP-X25	■		■	■
	0.2	VCGT-160402-ENP-X25	■		■	■
	0.4	VCGT-160404-ENP-X25	■		■	■
	0.8	VCGT-160408-ENP-X25	■		■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

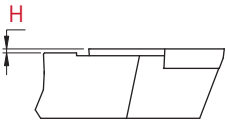
35°

VCGT-X20

VCGT ENP-X20



R	H	Art. N°	PVD ZTA	PVD HTiX
0.2	0.25	VCGT-130302-ENP-X20	■	■
0.4	0.25	VCGT-130304-ENP-X20	■	■
0.8	0.25	VCGT-130308-ENP-X20	■	■



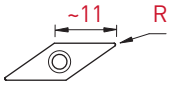
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

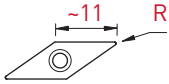
VCMT-XF3
VCMT-XF2

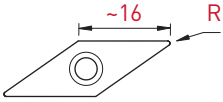
VCMT EN-XF3



R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)
0.2	VCMT-110302-EN-XF3	■	■
0.4	VCMT-110304-EN-XF3	■	■

VCMT EN-XF2





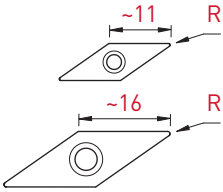
R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD HTi5 (P M)
0.2	VCMT-110302-EN-XF2	■	■	■
0.4	VCMT-110304-EN-XF2	■	■	■
0.4	VCMT-160404-EN-XF2	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

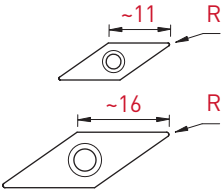
VCMT-MF
VCMT-HF

VCMT EN-MF



R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	VCMT-110302-EN-MF	■	■
0.4	VCMT-110304-EN-MF	■	■
0.4	VCMT-160404-EN-MF	■	■

VCMT EN-HF



R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.4	VCMT-110304-EN-HF	■	■
0.8	VCMT-110308-EN-HF	■	■
0.4	VCMT-160404-EN-HF	■	■
0.8	VCMT-160408-EN-HF	■	■

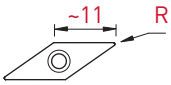
■ = disponible / verfügbar / available

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

35°

VCGT-X8

VCGT FN-X8

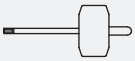


R	Art. N°	CERMET PVD CTA	CERMET non revêtu unbeschichtet uncoated CN6
		P M	P
0.05	VCGT-1103005-FN-X8	■	■
0.1	VCGT-110301-FN-X8	■	■
0.2	VCGT-110302-FN-X8	■	■
0.4	VCGT-110304-FN-X8	■	■

■ = disponible / verfügbar / available

ISO-LINE

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories

	Porte-outils Halter Holders	Vis Schrauben Screw	Clé Schlüssel Key	 Option	Serrage Drehmoment Torque
Vis et clés de rechange **Ersatzschrauben und Schlüsseln** **Spare screws and keys**	Series SC...-06 Series SD...-07 Series SV...-11	**V-M2.5X7.8-T8** 	**C-T8** 	**SET-NM-TX8**	1.3 Nm
	Series SV...-13	**V-M3X7.7.3-T8-ISO** 			2.0 Nm
	Series SC...-09 Series SD...-11 Series SV...-16	**V-M4X9-T15-ISO** 	**C-T15** 	**SET-NM-TX15**	3.0 Nm

	L Pour réf. For ref. Für Ref	 *	 *	 *
		Art. N°	**Art. N°**	**Art. N°**
Pièces de rechange JET **Ersatzteile JET** **Spare parts JET**	S...L-10...-JET	**JJL-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...L-12...-JET S...L-12.7...-JET	**JJL-4X14-D1.5**		
	S...L-16...-JET S...L-20...-JET	**JJL-4X17-D1.5**		
	R Pour réf. For ref. Für Ref	 *	 *	 *
		Art. N°	**Art. N°**	**Art. N°**
	S...R-10...-JET	**JJR-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...R-12...-JET S...R-12.7...-JET	**JJR-4X14-D1.5**		
	S...R-16...-JET S...R-20...-JET	**JJR-4X17-D1.5**		

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

ISO-Line G tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel			
			Acier de décolletage / Automatenstahl / Free-cutting steel		Acier faiblement allié / Leicht legierter Stahl / Low alloyed steel		Acier fortement allié / Hochlegierter Stahl / High alloyed steel		Austénitique / Austenitisch / Austenitic		Martensitique / Martensitisch / Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
FN-X8	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	N	HN										
ENP-X8	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
FN-X17	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10			60-140	0.01-0.15	60-140	0.01-0.15
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12					60-120	0.01-0.15	60-120	0.01-0.15
	N	HN										
ENP-X17	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.15	60-140	0.03-0.18
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.01-0.15	60-120	0.03-0.18
	N	HN										
FN-X25	TiAlN	HTA							60-140	0.01-0.12		
	TiN								60-120	0.01-0.12		
	N	HN										
ENP-X25	TiAlN	HTA							60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN								60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
ENP-X20	ZTA								60-140	0.03-0.18	60-140	0.03-0.18
		HTiX							60-140	0.03-0.18	60-140	0.03-0.18

G tolerance class Special 35° VC..-11												
FL / FR-X10	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	N	HN										
ELP/ERP-X10	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX	HTAX	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
FN-K18		HTA	80-180	0.01-0.10	60-150	0.01-0.10			60-140	0.01-0.10	60-140	0.01-0.10
		HTiN	80-170	0.01-0.10	60-140	0.01-0.10			60-120	0.01-0.10	60-120	0.01-0.10
		HN										
FN-0		HTA	80-150	0.01-0.10								
		HTiN	80-140	0.01-0.10								
		HN										

★★★★★ ★★★★ ★★★

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15			30-60	0.01-0.12	40-70	0.01-0.10
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.18	150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15						
120-2000	0.01-0.18	150-1500	0.01-0.15	80-250	0.01-0.12	100-300	0.01-0.15	30-70	0.01-0.12				
		150-800	0.03-0.18	80-300	0.03-0.15					30-60	0.03-0.12	40-70	0.03-0.10
		150-800	0.03-0.18	80-300	0.03-0.15								
		150-800	0.03-0.18	80-250	0.03-0.15								
		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-70	0.01-0.15	40-80	0.01-0.12
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.25	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.25	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	40-80	0.01-0.15				
		150-800	0.03-0.20	80-300	0.03-0.18					30-70	0.03-0.15	40-80	0.03-0.12
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
		150-800	0.03-0.20	80-300	0.03-0.18								
		150-800	0.03-0.20	80-250	0.03-0.18								
		150-1600	0.01-0.22	80-300	0.01-0.18					30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.30	150-1600	0.01-0.22	80-300	0.01-0.18								
120-2000	0.01-0.30	150-1500	0.01-0.22	80-250	0.01-0.18			30-70	0.01-0.12				
		150-800	0.03-0.25	80-300	0.03-0.20					30-60	0.03-0.12	40-70	0.03-0.10
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
		150-800	0.03-0.25	80-300	0.03-0.20								
		150-800	0.03-0.25	80-250	0.03-0.20								
		150-800	0.03-0.25	80-300	0.03-0.20					40-90	0.03-0.15	40-100	0.03-0.15
		150-800	0.03-0.25	80-300	0.03-0.20					40-80	0.03-0.15	40-90	0.03-0.15

		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-60	0.01-0.12	40-70	0.01-0.10
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.20	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.20	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	30-70	0.01-0.12				
		150-1600	0.03-0.20	80-300	0.03-0.18					30-60	0.03-0.12	40-70	0.03-0.10
										30-60	0.03-0.12	40-70	0.03-0.10
		150-1600	0.03-0.20	80-300	0.01-0.18								
		150-1500	0.03-0.20	80-250	0.01-0.18								
		150-1600	0.01-0.12	80-300	0.01-0.10					30-70	0.01-0.10	40-80	0.01-0.10
120-2200	0.01-0.15	150-1600	0.01-0.12	80-300	0.01-0.10								
120-2000	0.01-0.15	150-1500	0.01-0.12	80-250	0.01-0.10			40-80	0.01-0.10				
						100-400	0.01-0.18						
						100-400	0.01-0.18						
						100-300	0.01-0.18						

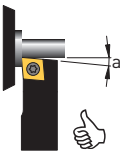
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

ISO-Line M tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel			
			Acier de décolletage / Automatenstahl / Free-cutting steel		Acier faiblement allié / Leicht legierter Stahl / Low alloyed steel		Acier fortement allié / Hochlegierter Stahl / High alloyed steel		Austénitique / Austenitisch / Austenitic		Martensitique / Martensitisch / Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
EN-XF3	TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
EN-XF2	TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
		HTi5	100-250	0.03-0.15	80-220	0.03-0.12	50-180	0.03-0.10	80-200	0.03-0.12	80-200	0.03-0.15
EN-MF2	TAC	HTAC	100-200	0.04-0.15	80-160	0.04-0.12	50-120	0.04-0.10	60-140	0.04-0.12	60-140	0.04-0.15
	Ti5	HTi5	100-250	0.04-0.15	80-220	0.04-0.12	50-180	0.04-0.10	80-200	0.04-0.12	80-200	0.04-0.15
EN-MF	Tmax		100-220	0.04-0.30	80-180	0.04-0.25	50-150	0.04-0.20	60-150	0.04-0.25	60-150	0.04-0.25
	Ti4		100-250	0.05-0.30	80-220	0.05-0.25	50-180	0.05-0.20	80-200	0.05-0.25	80-200	0.05-0.25
EN-HF3	TiX	HTiX	100-220	0.06-0.35	80-180	0.06-0.30	50-150	0.06-0.25	60-150	0.06-0.25	60-150	0.06-0.25
	Ti6		100-250	0.06-0.35	80-220	0.06-0.30	50-180	0.06-0.25	80-200	0.06-0.25	80-200	0.06-0.25
EN-HF	Tmax		100-220	0.08-0.40	80-180	0.08-0.35	50-150	0.08-0.30	60-150	0.08-0.30	60-150	0.08-0.30
	TAC		100-200	0.08-0.40	80-160	0.08-0.35	50-140	0.08-0.30	60-140	0.08-0.30	60-140	0.08-0.30
	Ti4		100-250	0.08-0.40	80-220	0.08-0.35	50-180	0.08-0.30	80-200	0.08-0.30	80-200	0.08-0.30
	Ti5	HTi5	100-280	0.08-0.40	80-250	0.08-0.35	50-200	0.08-0.30	80-220	0.08-0.30	80-220	0.08-0.30
ISO-Line CERMET												
FN-X8 CERMET	CTA		100-350	0.01-0.12	80-300	0.01-0.10	70-250	0.01-0.08	80-250	0.01-0.12	80-250	0.01-0.12
	CN6		100-300	0.01-0.12	80-250	0.01-0.10	70-200	0.01-0.08				
ENP-KX CERMET	CT7	HCT7	100-350	0.03-0.20	80-300	0.03-0.18	70-250	0.03-0.15	80-250	0.03-0.18	80-250	0.03-0.18
	CN6		100-300	0.03-0.20	80-250	0.03-0.18	70-200	0.03-0.15				
EN-KM CERMET	CT7	HCT7	100-350	0.03-0.25	80-300	0.03-0.20	70-250	0.03-0.18	80-250	0.03-0.20	80-250	0.03-0.20
	CN6		100-300	0.03-0.25	80-250	0.03-0.20	70-200	0.03-0.18				

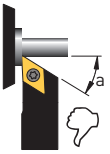
★★★★★ ★★★★ ★★★

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		120-1500	0.03-0.20	80-300	0.03-0.15	100-400	0.03-0.18			30-70	0.03-0.15	40-80	0.03-0.12
						100-400	0.03-0.18			30-70	0.03-0.15	40-80	0.03-0.12
		120-1500	0.04-0.20	80-300	0.04-0.15	100-400	0.04-0.18			30-70	0.04-0.15	40-80	0.04-0.12
										30-70	0.06-0.20	40-80	0.06-0.20

Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

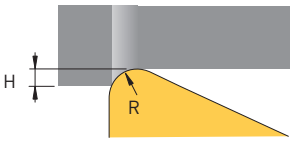


- pour un meilleur état de surface et une meilleure stabilité d'usinage, choisir une géométrie d'outil permettant un angle "a" le plus petit possible
- für bessere Oberflächegüte und Bearbeitungsstabilität, muss die Werkzeuggeometrie mit kleinstmöglichem Winkel "a" ausgewählt werden



- for a better surface finish and better machining stability, choose a tool geometry with angle "a" as small as possible

rapport hauteur de passe / rayon d'outil
Verhältnis zwischen Spantiefe und Werkzeugradius
machining depth / tool radius ratio



H min = 0.7 X R
R max = 1.4 X H

APPLITEC

Very rigid clamping system!

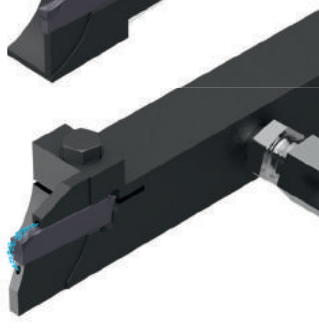
Porte-outils / Halter / Holders

H

Système de serrage monobloc
Einteiliges Klemmsystem
Monobloc top clamp system

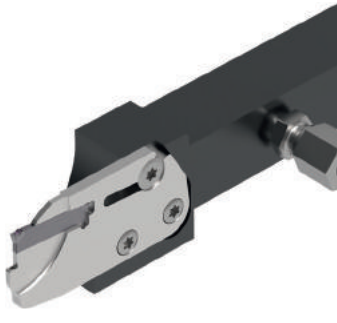
H JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



H-HM-JET
GWS-HM
MS-HM

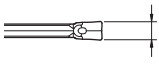
Porte-lames avec arrosage
Halter für Stechklinge mit Kühlung
Holder for parting-off blades with coolant

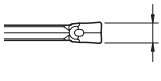


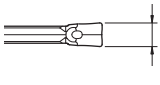
HM
HK
HUK

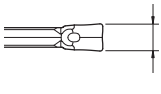
Lames
Stechklinge
Parting-off blades

Plaquettes / WSP / Inserts

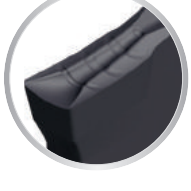
ET 15 =  1.5 mm — Ø max 32 mm

ET 20 =  2.0 mm

ET 25 =  2.5 mm — Ø max 44 mm

ET 30 =  3.0 mm

U



J

T

A

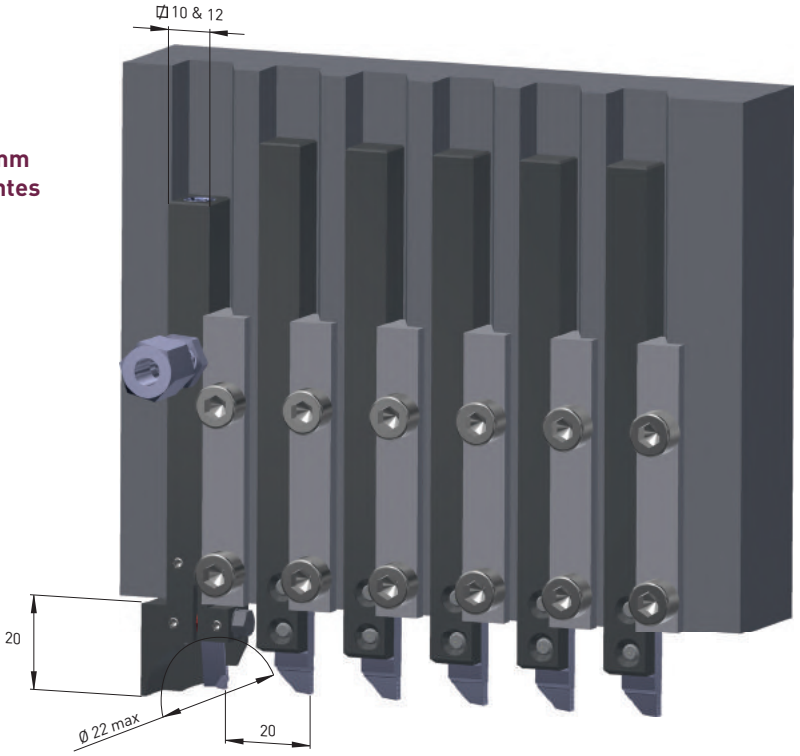
Index

Informations techniques
Technische Informationen
Technical information

Compact: seulement 20 mm pour les machines courantes

Kompakt: nur 20 mm für übliche Maschinen

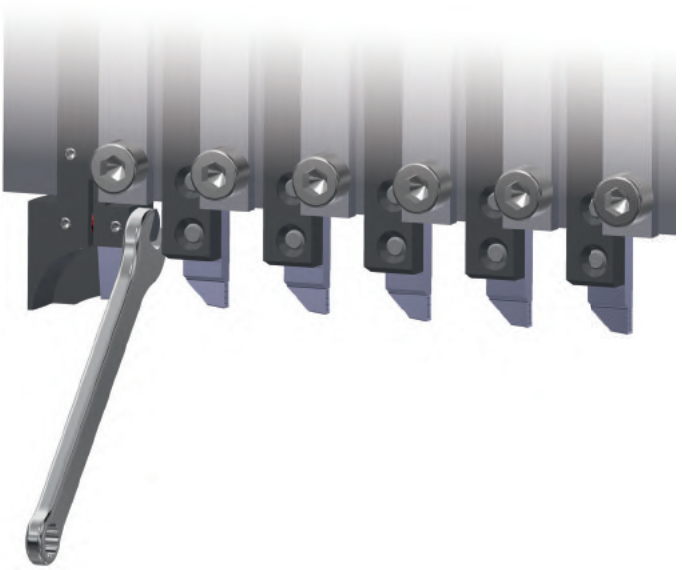
Compact: only 20 mm for current machines



Facilité d'accès

Zugangsleichtigkeit

Excellent accessibility



Changement de la plaquette sans démontage

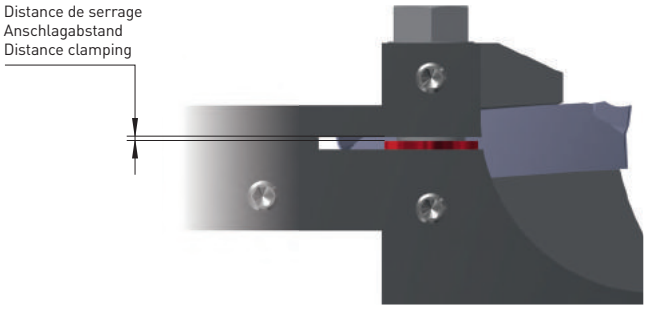
Veränderung der Platte ohne Zerlegung

Change of insert without disassembly

Butée de serrage

Spannungs-Anschlag

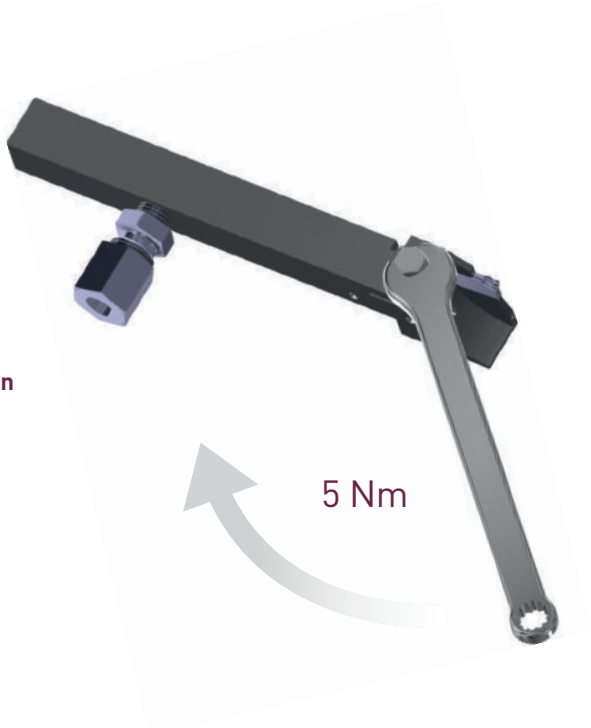
Clamping stop



Recommendations de serrage:
n'utiliser que la clé fournie

Spannungsempfehlungen:
nur den gelieferten Schlüssel benutzen

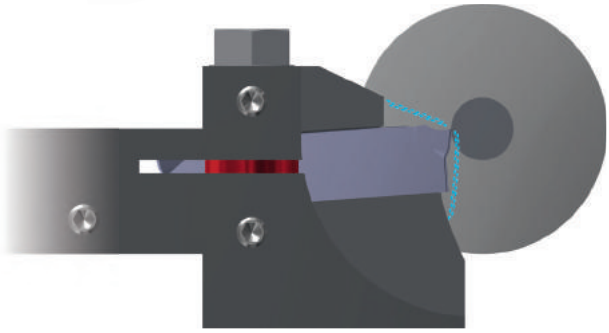
Tightening recommendation:
only use the delivered key



Support JET à double lubrification

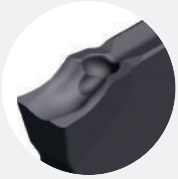
JET Halter mit doppeltem Schmierung

Jet holder with double lubrification



Géométries de coupe
Spanformgeometrie
Cutting geometries

UN
UL
UR



- géométrie positive universelle, faibles efforts de coupe
- bonne maîtrise du copeau
- 1er choix pour l'inox

- allgemeine Geometrie, geringe Schnittkräfte
- gute Spankontrolle
- 1. Wahl für rostfreiem Stahl

- all-round geometry, low cutting forces
- efficient chip control
- 1st choice for stainless steel

JN
JR

- géométrie universelle
- excellent rétrécissement du copeau pour un meilleur contrôle
- conseillé pour le tronçonnage de pièces à parois minces
- pour acier et inox

- allgemeine Geometrie
- ausgezeichnete Spanverschmälerung für eine bessere Spankontrolle
- für abstechen von dünnwandigen Teilen empfohlen
- für Stahl und rostfreiem Stahl

- all-round geometry
- very efficient arrow for a better chip control
- recommended for parting off of thin-walled parts
- for steel and stainless steel

TN
TR

- géométrie négative
- utilisation dans des conditions de rigidité optimale
- pour les matières à haute ténacité
- universel pour les aciers et inox

- negative Geometrie
- bei stabilen Verhältnissen einsetzbar
- für hohe widerstandsfähige Rohstoffe
- allgemein für Stahl und rostfreiem Stahl

- negative geometry
- use in solid cutting conditions
- for high toughness material
- universal for steel and stainless steel

AN
AR

- géométrie fortement positive
- roule-copeau poli avec arêtes de coupe vives
- 1er choix pour aluminium et matériaux non ferreux

- stark positive Geometrie
- geschliffene Spanrolle mit scharfe Schneidkanten
- 1. Wahl für Aluminium und Nichteisenmetalle

- very positive geometry
- polished chip roller with sharp cutting edge
- 1st choice for aluminium and non-ferrous materials

Nuances
Sorten
Grades

TiAlN

P, M, N, S

revêtement PVD
PVD Beschichtung
PVD coating

- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1er choix pour les avances faibles à modérées

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen
- beste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax

P, M

revêtement PVD
PVD Beschichtung
PVD coating

- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1er choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungswarmfestigkeit
- für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl bestens geeignet

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax

P, M

revêtement PVD
PVD Beschichtung
PVD coating

- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyenne à faible
- 1er choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- für die Bearbeitung in unterbrochenen Schnitte bestens geeignet

- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

ZTi6

P, M

revêtement CVD
CVD Beschichtung
CVD coating

- nuance très tenace
- grande résistance à la température
- 1er choix pour les aciers «haute température»
- secondairement pour les aciers inox

- sehr zähe Sorte
- hohe Bearbeitungswarmfestigkeit
- 1. Wahl für „hohe Temperatur" Stähle
- sekundär für rostfreie Stähle

- very strong grade
- good wear resistance
- 1st choice for "high temperature" steels
- secondarily for stainless steels

AS

N, S

revêtement PVD
PVD Beschichtung
PVD coating

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet

- grade for non-ferrous materials
- very low friction ratio
- first choice for aluminium up to 5% Si, copper and low alloyed titanium

N

N, S

non-revêtu
unbeschichtet
uncoated

- nuance non revêtue
- recommandé pour l'usinage des matières non-ferreuses
- titane, laiton, cuivre, aluminium sans silicium, plastique

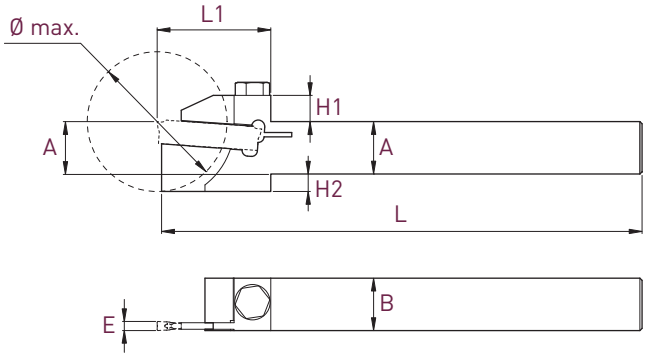
- unbeschichtete Sorte
- für die Bearbeitung von Nichteisenmetalle empfohlen
- Titan, Messing, Kupfer, Silicium freies Aluminium, Kunstoff

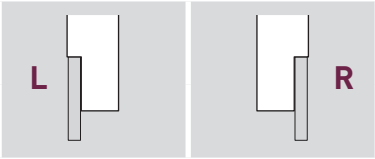
- uncoated grade
- recommended for machining of non-ferrous materials
- titanium, brass, bronze, aluminium without silicium, plastic

Porte-outils
Halter
Holders

Ø max 44 mm

H Series





Pièces de rechange
Ersatzteile
Spare parts

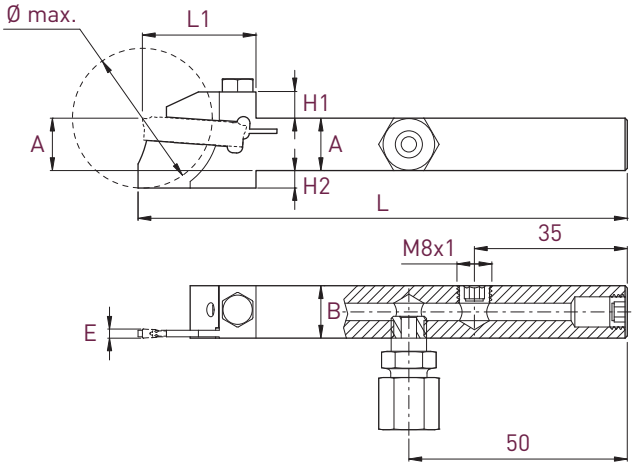
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°	Art. N°	Art. N°
E 1.5 **Type** ET15	10x12	110	22	20	5	6	**ET15-H1012L-D22**	**ET15-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET15-H1212L-D22**	**ET15-H1212R-D22**		
	12.7x12.7	110	22	20	5	3	**ET15-H12.7L-D22**	**ET15-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET15-H1212L-D32**	**ET15-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET15-H12.7L-D32**	**ET15-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET15-H1616L-D32**	**ET15-H1616R-D32**		
E 2.0 **Type** ET20	10x12	110	22	20	5	6	**ET20-H1012L-D22**	**ET20-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET20-H1212L-D22**	**ET20-H1212R-D22**		
	12.7x12.7	110	22	20	5	3	**ET20-H12.7L-D22**	**ET20-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET20-H1212L-D32**	**ET20-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET20-H12.7L-D32**	**ET20-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET20-H1616L-D32**	**ET20-H1616R-D32**		
	16x16	130	44	35	8	4	**ET20-H1616L-D44**	**ET20-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET20-H2020L-D44**	**ET20-H2020R-D44**		
E 2.5 **Type** ET25	10x12	110	22	20	5	6	**ET25-H1012L-D22**	**ET25-H1012R-D22**	**V-M5X20-6P6**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET25-H1212L-D22**	**ET25-H1212R-D22**		
	12.7x12.	110	22	20	5	3	**ET25-H12.7L-D22**	**ET25-H12.7R-D22**		
	12x12	110	32	26	6	4	**ET25-H1212L-D32**	**ET25-H1212R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET25-H12.7L-D32**	**ET25-H12.7R-D32**		
	16x16	110	32	26	6	-	**ET25-H1616L-D32**	**ET25-H1616R-D32**		
	16x16	130	44	35	8	4	**ET25-H1616L-D44**	**ET25-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET25-H2020L-D44**	**ET25-H2020R-D44**		
E 3.0 **Type** ET30	16x16	110	32	26	6	-	**ET30-H1616L-D32**	**ET30-H1616R-D32**	**V-M5X21-6P7**	**C-6PEX-7.0**
	16x16	130	44	35	8	4	**ET30-H1616L-D44**	**ET30-H1616R-D44**	**V-M5X27-6P7**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET30-H2020L-D44**	**ET30-H2020R-D44**		
	25x25	140	44	35	8	-	**ET30-H2525L-D44**	**ET30-H2525R-D44**		

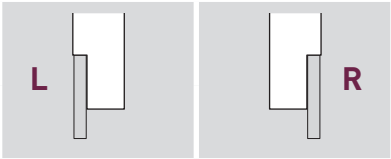
* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

Ø max 44 mm

H JET Series

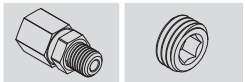




Pièces de rechange
Ersatzteile
Spare parts

Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°	Art. N°	Art. N°
E 2.0 **Type** ET20	10x12	110	22	20	5	6	**ET20-H1012L-JET22**	**ET20-H1012R-JET22**	**V-M5X20-6P6-J**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET20-H1212L-JET22**	**ET20-H1212R-JET22**		
	12.7x12.7	110	22	20	5	3	**ET20-H12.7L-JET22**	**ET20-H12.7R-JET22**		
	12x12	110	32	26	6	4	**ET20-H1212L-JET32**	**ET20-H1212R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET20-H12.7L-JET32**	**ET20-H12.7R-JET32**		
	16x16	110	32	26	6	-	**ET20-H1616L-JET32**	**ET20-H1616R-JET32**		
	16x16	130	44	35	8	4	**ET20-H1616L-JET44**	**ET20-H1616R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET20-H2020L-JET44**	**ET20-H2020R-JET44**		
E 2.5 **Type** ET25	10x12	110	22	20	5	6	**ET25-H1012L-JET22**	**ET25-H1012R-JET22**	**V-M5X20-6P6-J**	**C-6PEX-6.0**
	12x12	110	22	20	5	4	**ET25-H1212L-JET22**	**ET25-H1212R-JET22**		
	12.7x12.7	110	22	20	5	3	**ET25-H12.7L-JET22**	**ET25-H12.7R-JET22**		
	12x12	110	32	26	6	4	**ET25-H1212L-JET32**	**ET25-H1212R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	12.7x12.7	110	32	26	6	3	**ET25-H12.7L-JET32**	**ET25-H12.7R-JET32**		
	16x16	110	32	26	6	-	**ET25-H1616L-JET32**	**ET25-H1616R-JET32**		
	16x16	130	44	35	8	4	**ET25-H1616L-JET44**	**ET25-H1616R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET25-H2020L-JET44**	**ET25-H2020R-JET44**		
E 3.0 **Type** ET30	16x16	110	32	26	6	-	**ET30-H1616L-JET32**	**ET30-H1616R-JET32**	**V-M5X21-6P7-J**	**C-6PEX-7.0**
	16x16	130	44	35	8	4	**ET30-H1616L-JET44**	**ET30-H1616R-JET44**	**V-M5X27-6P7-J**	**C-6PEX-7.0**
	20x20	130	44	35	8	-	**ET30-H2020L-JET44**	**ET30-H2020R-JET44**		
	25x25	140	44	35	8	-	**ET30-H2525L-JET44**	**ET30-H2525R-JET44**		

Pièces de rechange
Ersatzteile
Spare parts



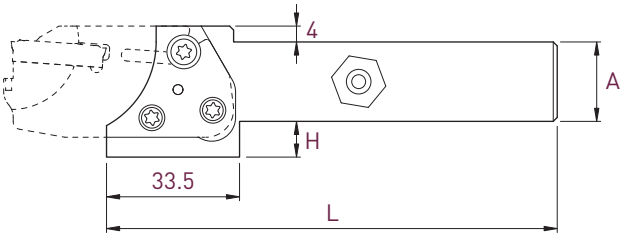
Art. N°	Art. N°
J-M8X1-D6	**JB-M8X1**

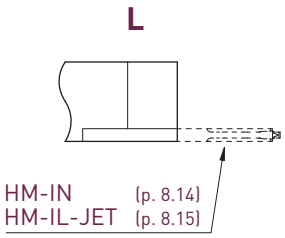
* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

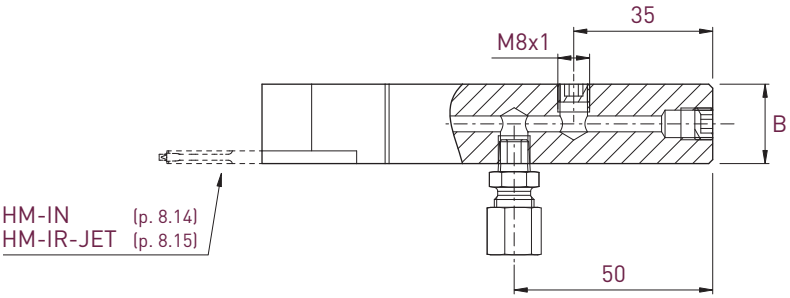
Porte-lames avec arrosage
Halter für Stechklinge mit Kühlung
Holder for parting-off blades with coolant

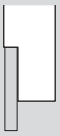
H-HM-JET Series

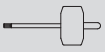
new







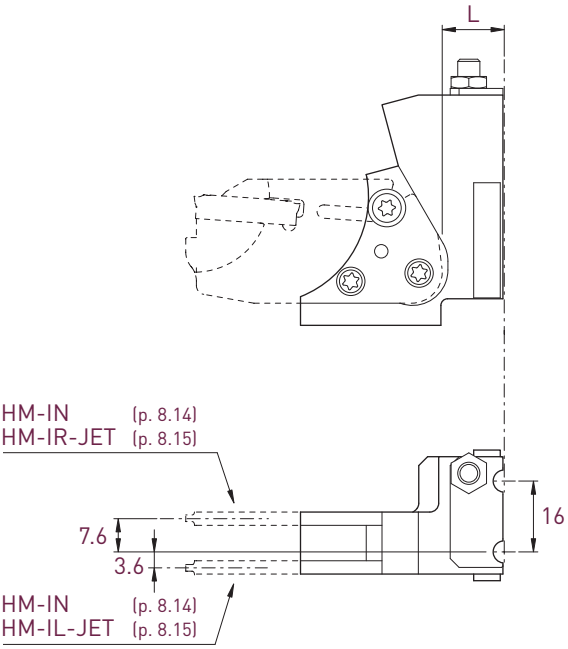
			L 	 R
A x B	L	H	Art. N°	Art. N°
16x16	113.5	13	**H1616L-HM-JET**	**H1616R-HM-JET**
20x20	113.5	9	**H2020L-HM-JET**	**H2020R-HM-JET**
25x25	138.5	4	**H2525L-HM-JET**	**H2525R-HM-JET**

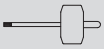
Pièces de rechange Ersatzteile Spare parts					
	Art. N°	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
	V-M5X10-T20IP	**V-M6X10-T20IP**	**J-M8X1-D6**	**JB-M8X1**	**C-T20IP**

Interface Göltenbodt

GWS02R-HM Series

new

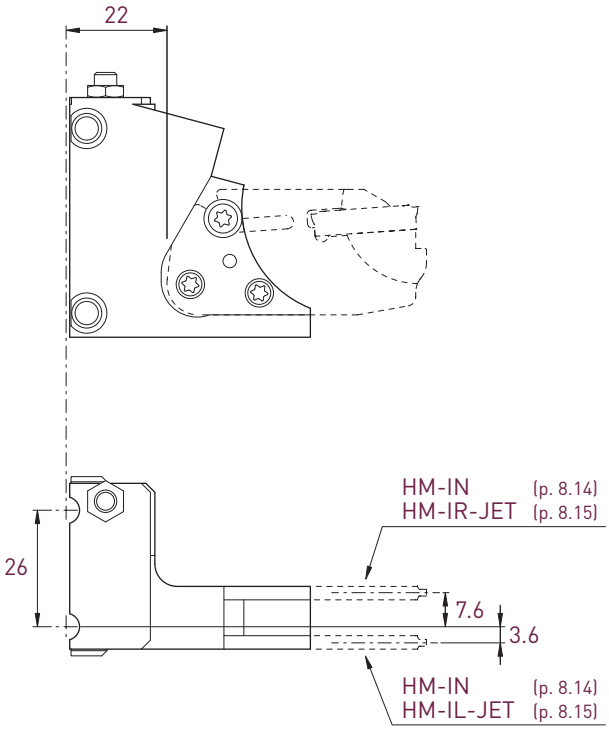


				Pièces de rechange Ersatzteile Spare parts		
						
Interface	Machine compatibility	L	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS02	AS14	14	**GWS02R-02001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	SAS16					
	SBS20					
	Others	22	**GWS02R-02002-HM-JET**			

Interface Göltenbodt

GWS41L-HM Series

new



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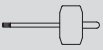
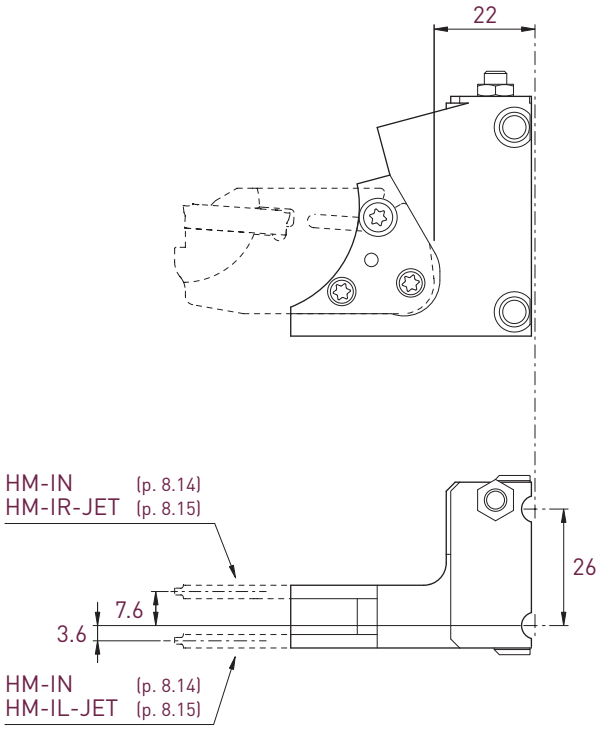
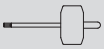
					
Interface	Machine compatibility	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS41	MultiSwiss 6X16	**GWS41L-41001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				

Interface Göltenbodt

GWS41R-HM Series

new

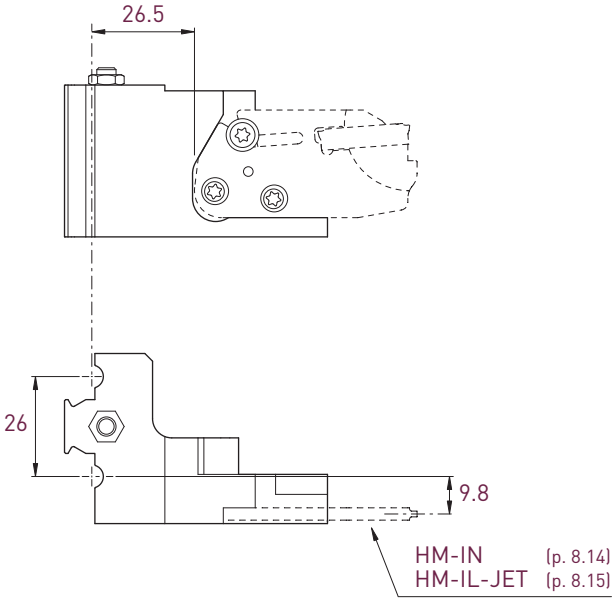


			Pièces de rechange Ersatzteile Spare parts		
					
Interface	Machine compatibility	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
GWS41	MultiSwiss 6X16	**GWS41R-41001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				

Interface Göltenbodt

GWS202L-HM Series

new



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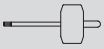
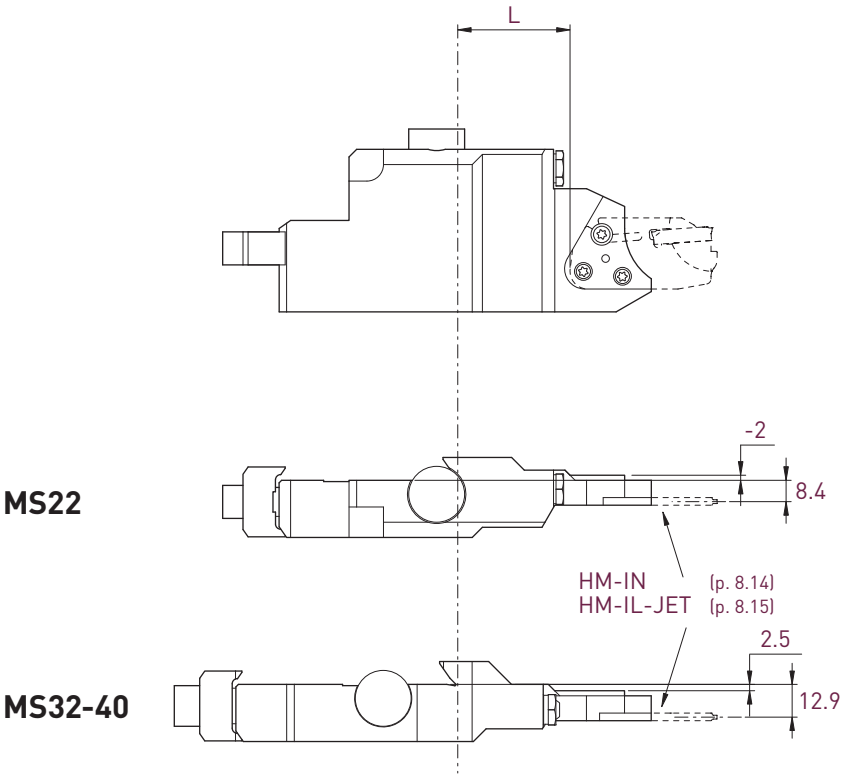
					
Interface	Machine compatibility	Art. N°	Art. N°	Art. N°	Art. N°
GWS202	MultiSwiss 6X32 MultiSwiss 8X26	**GWS202L-202001-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**

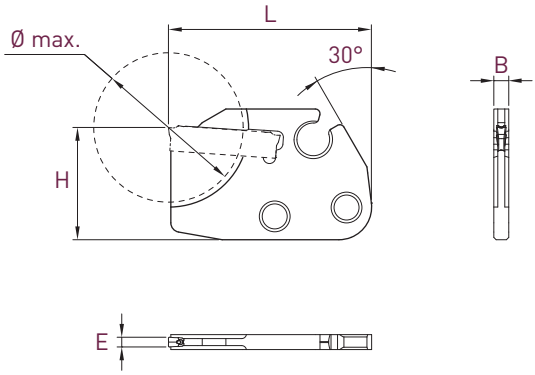
new



			Pièces de rechange Ersatzteile Spare parts		
					
Machine compatibility	L	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
MS22	44.2	**MS22-W5190231-HM-JET**	**V-M5X10-T20IP**	**V-M6X10-T20IP**	**C-T20IP**
MS32-40	45.5	**MS32-40-W5190233-HM-JET**			

Lames pour système modulaire
Stechklinge für modulares System
Parting-off blades for modular system

HM Series

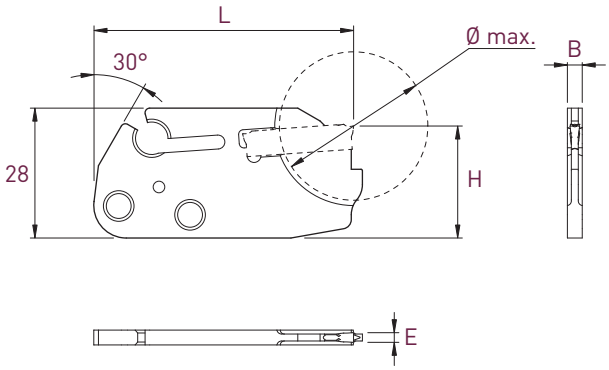


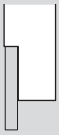
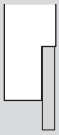
Plaquettes WSP Inserts	Ø max.	B	L	H	N Art. N°
E 1.5 **Type** ET15	20	3.2	43.5	24	**ET15-HM-IN-43-D20**
	32	3.2	43.5	24	**ET15-HM-IN-43-D32**
E 2.0 **Type** ET20	20	3.2	43.5	24	**ET20-HM-IN-43-D20**
	26	3.2	43.5	24	**ET20-HM-IN-43-D26**
	26	3.2	54	24	**ET20-HM-IN-54-D26**
	32	3.2	43.5	24	**ET20-HM-IN-43-D32**
E 3.0 **Type** ET30	32	3.2	43.5	24	**ET30-HM-IN-43-D32**

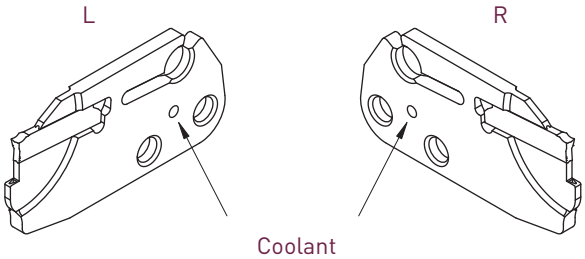
Lames avec arrosage intégré
Stechklinge mit integrierter Kühlmittelzufuhr
Parting-off blades with integrated coolant supply

HM-JET Series

new

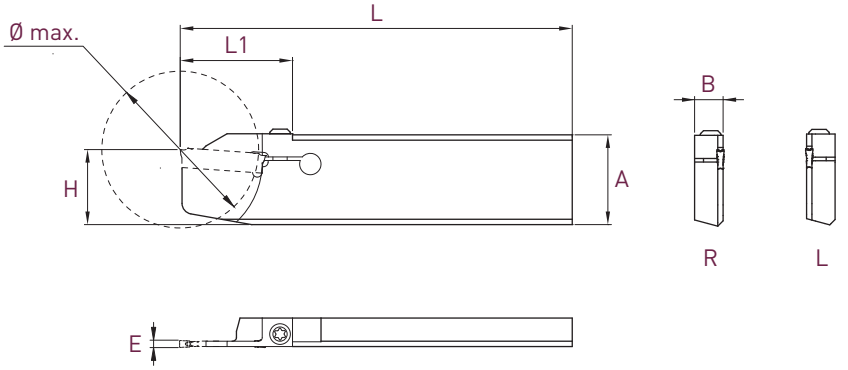


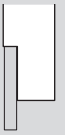
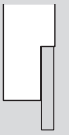
Plaquettes WSP Inserts	Ø max.	B	L	H	L  Art. N°	R  Art. N°
E 2.0 **Type** ET20	20	3.2	48.5	24	**ET20-HM-IL-48.5-JET20**	**ET20-HM-IR-48.5-JET20**
	24		48.5		**ET20-HM-IL-48.5-JET24**	**ET20-HM-IR-48.5-JET24**
	32		45.5		**ET20-HM-IL-45.5-JET32**	**ET20-HM-IR-45.5-JET32**
	32		56		**ET20-HM-IL-56-JET32**	**ET20-HM-IR-56-JET32**
	42		48.5		**ET20-HM-IL-48.5-JET42**	**ET20-HM-IR-48.5-JET42**
E 3.0 **Type** ET30	32	3.2	45.5	24	**ET30-HM-IL-45.5-JET32**	**ET30-HM-IR-45.5-JET32**
	44		48.5		**ET30-HM-IL-48.5-JET42**	**ET30-HM-IR-48.5-JET42**

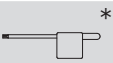


Lames de tronçonnage
Stechklinge
Parting-off blades

HK Series



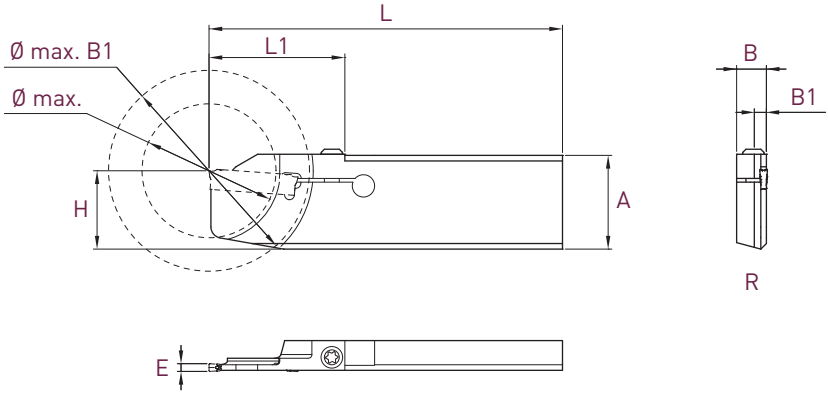
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	L  Art. N°	R  Art. N°
E 1.5 **Type** ET15	26x8	110	20	19.5	21	**ET15-HK-2608L-110-D20**	**ET15-HK-2608R-110-D20**
	26x8	110	32	25.5	21	**ET15-HK-2608L-110-D32**	**ET15-HK-2608R-110-D32**
E 2.0 **Type** ET20	26x8	110	32	25.5	21	**ET20-HK-2608L-110-D32**	**ET20-HK-2608R-110-D32**
	26x8	110	44	31.5	21	**ET20-HK-2608L-110-D44**	**ET20-HK-2608R-110-D44**

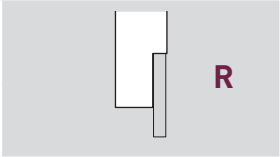
Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	**Art. N°**
	V-M4X14.5-T15-EVOCUT	**C-T15**

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

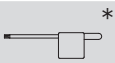
Lames de tronçonnage avec dégagement pour accès contre-broche
Stechklinge mit Aussparung für Gegenspindel Zugriff
Parting-off blades with recess for subspindle access

HK-RS Series





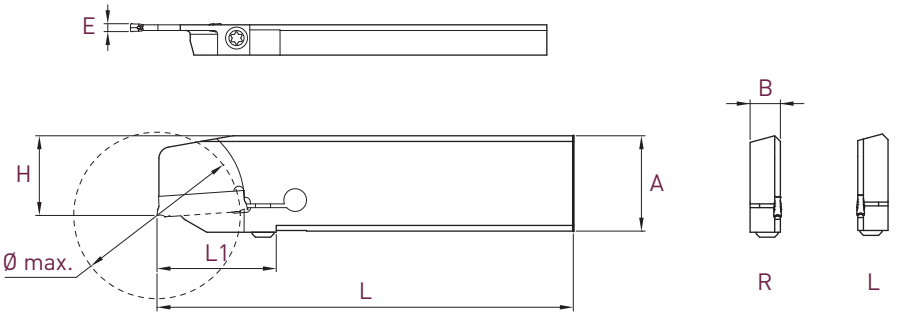
Plaquettes WSP Inserts	A x B	L	Ø max.	Ø max. B1	B1	L1	H	Art. N°
E 1.5 **Type** ET15	26x8	95	36	54	3.25	36.5	21	**ET15-HK-2608RS-95-D36**
E 2.0 **Type** ET20	26x8	95	36	54	3.25	36.5	21	**ET20-HK-2608RS-95-D36**

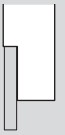
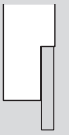
Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	**Art. N°**
	V-M4X14.5-T15-EVOCUT	**C-T15**

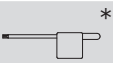
* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

Lames de tronçonnage inversées
Überkopf Stechklinge
Upside down parting-off blades

HUK Series



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	L  Art. N°	R  Art. N°
E 1.5 **Type** ET15	26x8	110	20	19.5	21	**ET15-HUK-2608L-110-D20**	**ET15-HUK-2608R-110-D20**
	26x8	110	32	25.5	21	**ET15-HUK-2608L-110-D32**	**ET15-HUK-2608R-110-D32**
E 2.0 **Type** ET20	26x8	110	32	25.5	21	**ET20-HUK-2608L-110-D32**	**ET20-HUK-2608R-110-D32**
	26x8	110	44	31.5	21	**ET20-HUK-2608L-110-D44**	**ET20-HUK-2608R-110-D44**

Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	**Art. N°**
	V-M4X14.5-T15-EVOCUT	**C-T15**

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade

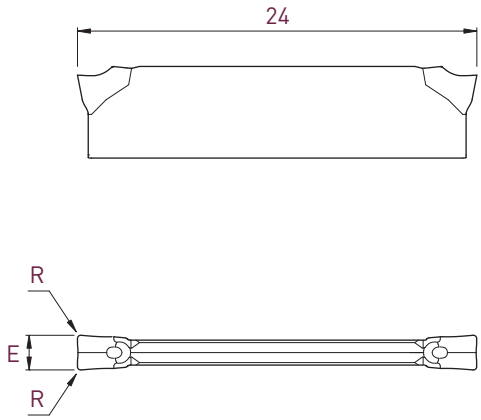
SWITCH-LINE

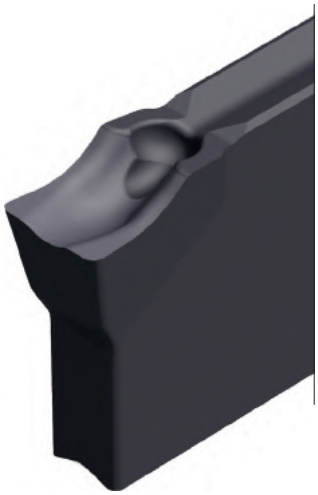
NEW

DISCOVER THE RANGE SWITCH-LINE IN CHAPTER 11 !

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

UN Series

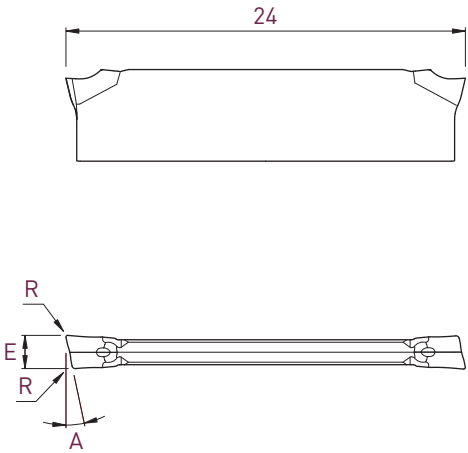


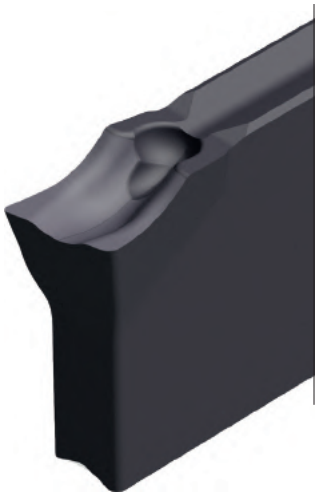


Type	E ±0.05	R	Art. N°	TiAlN (P M N S)	Tmax (P M)	Zmax (P M)	ZTi6 (P M)
ET15	1.35	0	ET15-UN-000F	■			
	1.5	0.2	ET15-UN-002	■	■	■	
ET20	1.85	0	ET20-UN-000F	■			
	2.0	0.2	ET20-UN-002	■	■	■	■
ET25	2.35	0	ET25-UN-000F	■			
	2.5	0.3	ET25-UN-003	■	■	■	■
ET30	2.85	0	ET30-UN-000F	■			
	3.0	0.3	ET30-UN-003	■	■	■	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

UL-UR Series



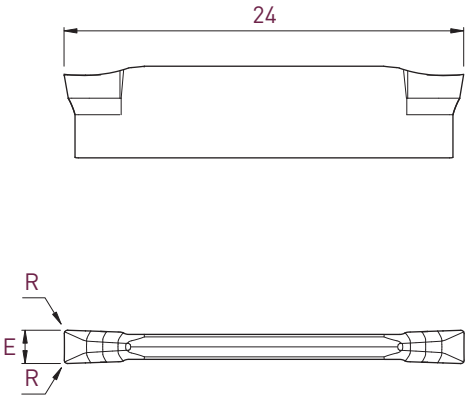


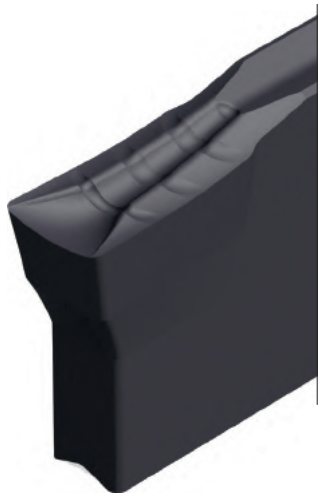
				UL				UR			
Type	E ±0.05	A	R	Art. N°	P M N S TiAlN	P M Tmax	P M Zmax	Art. N°	P M N S TiAlN	P M Tmax	P M Zmax
ET15	1.5	6°	0.2	-				ET15-UR-602	■	■	■
	1.35	8°	0	-				ET15-UR-800F	■		
	1.5	12°	0.1	-				ET15-UR-1201	■	■	■
	1.35	15°	0	ET15-UL-1500F	■			ET15-UR-1500F	■		
ET20	2.0	6°	0.2	-				ET20-UR-602	■	■	■
	1.85	8°	0	-				ET20-UR-800F	■		
	2.0	12°	0.1	-				ET20-UR-1201	■	■	■
	1.85	15°	0	ET20-UL-1500F	■			ET20-UR-1500F	■		
ET25	2.5	6°	0.2	-				ET25-UR-602	■	■	■
	2.35	8°	0	-				ET25-UR-800F	■		
	2.5	12°	0.1	-				ET25-UR-1201	■	■	■
	2.35	15°	0	ET25-UL-1500F	■			ET25-UR-1500F	■		
ET30	3.0	6°	0.3	-				ET30-UR-603	■	■	■
	2.85	8°	0	-				ET30-UR-800F	■		
	3.0	12°	0.2	-				ET30-UR-1202	■	■	■
	2.85	15°	0	ET30-UL-1500F	■			ET30-UR-1500F	■		

■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

JN Series

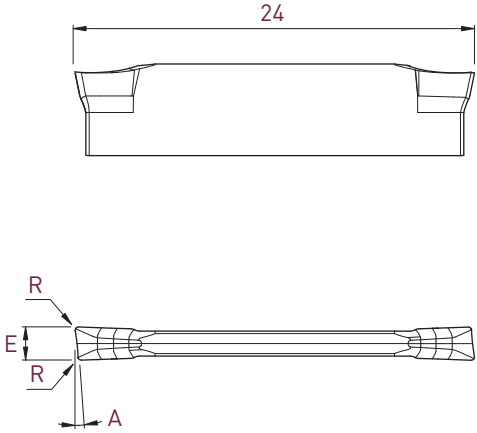


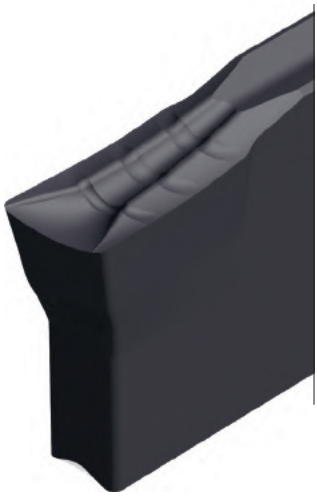


Type	E ±0.05	R	Art. N°	TiAlN (P M N S)	Tmax (P M)	Zmax (P M)	ZTi6 (P M)
ET15	1.5	0.2	ET15-JN-002	■	■	■	
ET20	2.0	0.2	ET20-JN-002	■	■	■	■
ET25	2.5	0.3	ET25-JN-003	■	■	■	■
ET30	3.0	0.3	ET30-JN-003	■	■	■	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

JR Series





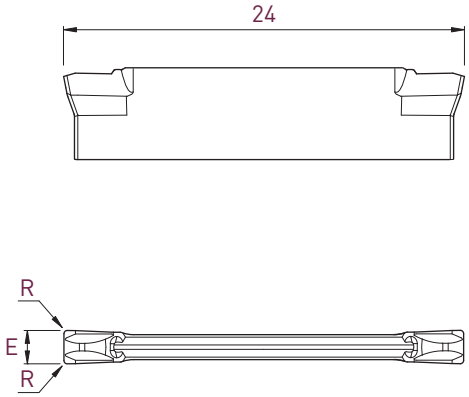
				JR			
Type	E ±0.05	A	R	Art. N°	P M N S TiAlN	P M Tmax	P M Zmax
ET15	1.5	6°	0.2	ET15-JR-602	■	■	■
ET20	2.0	6°	0.2	ET20-JR-602	■	■	■
ET25	2.5	6°	0.2	ET25-JR-602	■	■	■
ET30	3.0	6°	0.3	ET30-JR-603	■	■	■

■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

Negative geometry

TN Series

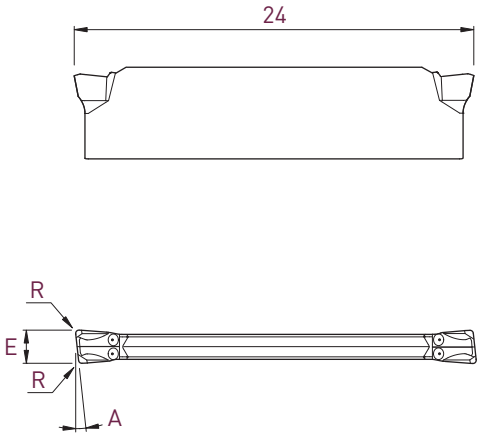


			TN				
				P M N	P M	P M	P M
Type	E ±0.05	R	Art. N°	TiAlN	Tmax	Zmax	ZTi6
ET20	2.0	0.2	ET20-TN-002	■	■	■	■
ET25	2.5	0.3	ET25-TN-003	■	■	■	■
ET30	3.0	0.3	ET30-TN-003	■	■	■	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

Negative geometry

TR Series

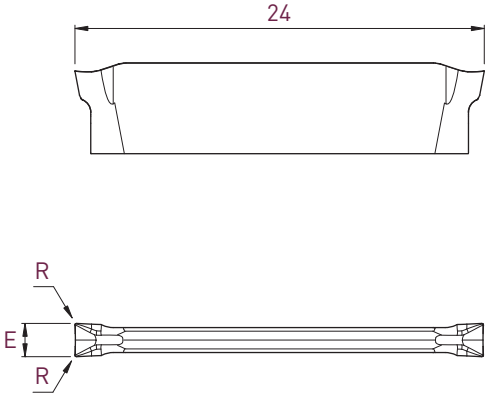


				TR				
Type	E ±0.05	A	R	Art. N°	TiAlN	Tmax	Zmax	ZTi6
ET20	2.0	6°	0.2	ET20-TR-602	■	■	■	
ET25	2.5	6°	0.2	ET25-TR-602	■	■	■	
ET30	3.0	6°	0.3	ET30-TR-603	■	■	■	■

■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

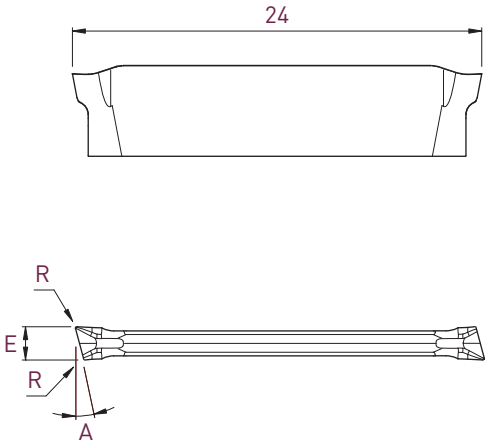
AN Series

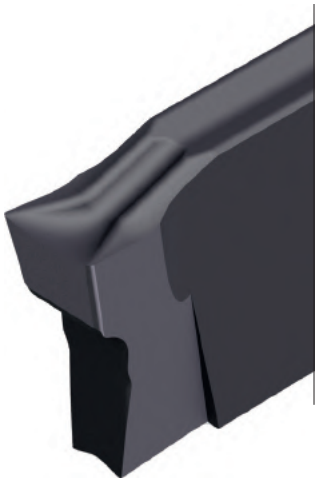


Type	E ±0.05	R	Art. N°	TiAlN (M N S)	AS (N S)	N (N S)
ET20	2.0	0.2	ET20-AN-002F	■	■	■
ET30	3.0	0.3	ET30-AN-003F	■	■	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

AR Series





				AR			
Type	E ±0.05	A	R	Art. N°	TiAlN (M N S)	AS (N S)	N (N S)
ET20	2.0	15°	0.1	ET20-AR-1501F	■	■	■
ET30	3.0	15°	0.2	ET30-AR-1502F	■	■	■

■ = disponible / verfügbar / available

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

			ET15	ET20	ET25	ET30	P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel	
							Acier de décolletage / Automatenstahl / Free-cutting steel		Acier faiblement allié / Leicht legierter Stahl / Low alloyed steel		Acier fortement allié / Legierter Stahl / High alloyed steel		Austénitique et martensitique / Austenitisch und martensitisch / Austenitic and martensitic	
							VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard / Standard Vorschub / Standard feed rate	UN	TiAlN	■	■	■	■	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	■	■	■	■	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	■	■	■	■	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
		ZTi6		■	■	■	110-200	0.04-0.08	80-160	0.04-0.08	70-140	0.04-0.08	70-160	0.04-0.08
	UR	TiAlN	■	■	■	■	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	■	■	■	■	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	■	■	■	■	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	JN	TiAlN	■	■	■	■	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	■	■	■	■	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	■	■	■	■	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
		ZTi6		■	■	■	110-200	0.04-0.08	80-160	0.04-0.08	70-140	0.04-0.08	70-160	0.04-0.08
	JR	TiAlN	■	■	■	■	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	■	■	■	■	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	■	■	■	■	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	TN	TiAlN		■	■	■	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		■	■	■	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax		■	■	■	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6		■	■	■	110-200	0.08-0.18	80-160	0.08-0.18	70-140	0.08-0.15	70-160	0.08-0.20
	TR	TiAlN		■	■	■	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		■	■	■	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax		■	■	■	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6				■	110-200	0.08-0.18	80-160	0.08-0.18	70-140	0.08-0.15	70-160	0.08-0.20
Avance modérée / Niedriger Vorschub ** / Low feed rate	UN-000F	TiAlN	■	■	■	■	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
	UR/ULF	TiAlN	■	■	■	■	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
	ANF	N		■		■								
		TiAlN		■		■							40-80	0.02-0.05
		AS		■		■								
	ARF	N		■		■								
		TiAlN		■		■							40-80	0.02-0.05
		AS		■		■								

* premier choix en cas de coupe interrompue
** arête de coupe vive

* beste Basis für unterbrochene Schnitte
** scharfe Schneidkante

* first choice for interrupted cut
** sharp cutting edge

<< EVOCUT-Line <<< Main menu

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
						150-300	0.05-0.20				
						150-300	0.05-0.20				
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	**0.02-0.06**	**100-200**	**0.01-0.05**	**100-250**	**0.01-0.05**	**100-300**	**0.02-0.06**	**50-120**	**0.01-0.06**	**50-120**	**0.01-0.06**
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	**0.02-0.06**	**100-200**	**0.01-0.05**	**100-250**	**0.01-0.05**	**100-300**	**0.02-0.06**	**50-120**	**0.01-0.06**	**50-120**	**0.01-0.06**

★★★★★ ★★★★ ★★★

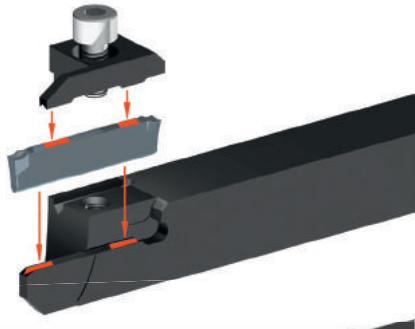
APPLITEC

Porte-outils / Halter / Holders

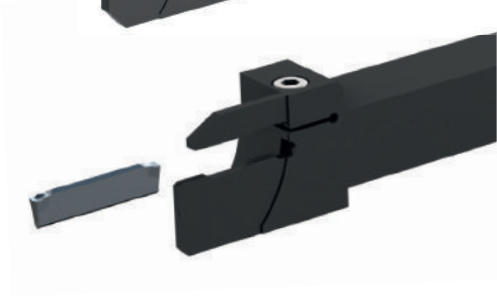
Very rigid clamping system!

H
Système de serrage à bride, version courte
Spannbrücke Klemmsystem, kurze Ausführung
Independent top clamp system, short version

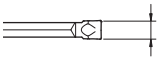
HX
Système de serrage à bride, version longue
Spannbrücke Klemmsystem, lange Ausführung
Independent top clamp system, long version

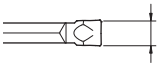


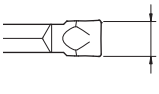
HZ
Porte-outils de grande capacité
Klemmhalter für grössere Durchmesser
High capacity tool holders



Plaquettes / WSP / Inserts

CUT 16 =  1.6 mm **Ø max 20 mm**

CUT 22 =  2.2 mm **Ø max 42 mm**

CUT 31 =  3.1 mm **Ø max 65 mm**

U

P

T

G

Index

Nuances
Sorten
Grades

TiAlN
revêtement PVD
PVD Beschichtung
PVD coating

- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1er choix pour les avances faibles à modérées

- für die Bearbeitung von Stahl, restfreiem Stahl und Titanlegierungen
- beste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax
revêtement PVD
PVD Beschichtung
PVD coating

- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1er choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungswarmfestigkeit
- für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl bestens geeignet

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax
revêtement PVD
PVD Beschichtung
PVD coating

- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyenne à faible
- 1er choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- für die Bearbeitung in unterbrochenen Schnitte bestens geeignet

- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

HTA
revêtement PVD
PVD Beschichtung
PVD coating

- très bonne résistance à l'usure
- pour le tronçonnage des aciers, aciers inoxydables et alliages de titane
- déconseillé en coupe interrompue

- sehr gute Verschleissfestigkeit
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierung bestens geeignet
- für unterbrochene Schnitte ungeeignet

- very good wear resistance
- first choice for steel, stainless steel and titanium alloys machining
- not suitable for interrupted cut

AS
revêtement PVD
PVD Beschichtung
PVD coating

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1er choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet

- grade for non-ferrous materials
- very low friction ratio
- first choice for Aluminium up to 5% Si, copper and low alloyed titanium

N
non revêtu
unbeschichtet
uncoated

- nuance pour les laitons, pour la géométrie PNW et PRW

- Sorte für Messing, für PNW und PRW Geometrie

- grade for brass, for PNW and PRW geometry

Géométries de coupe
Spanformgeometrie
Cutting geometries

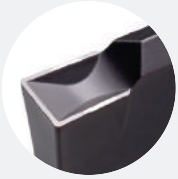
UN
UR
UL

- géométrie positive universelle, bonne maîtrise du copeau
- allgemeine Geometrie, sehr gute Spankontrolle
- all-round insert with efficient chip control

PN
PR

- géométrie légèrement positive pour les aciers, aciers au carbone, aciers alliés
- leicht positive Geometrie für Stahl, Kohlenstoffstahl, legiertem Stahl
- slightly positive geometry for steel, carbon steel, alloyed steel

PNW
PRW



- géométrie neutre pour les laitons
- neutrale Geometrie für Messinge
- neutral geometry for brasses

TN

- géométrie négative pour de fortes avances dans des conditions de rigidité favorable
- negative Geometrie für hohe Vorschübe in guten Stabilitätsfällen
- negative geometry for high feed rate in case of good stability

GN

- géométrie universelle pour fonçage-tournage, peut également être utilisée en tronçonnage
- allgemeine Geometrie zum einstechen-langdrehen, kann auch zum abstechen verwendet werden
- all-round insert for grooving and turning, can also be used for parting off

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

CUT 16

			P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel	
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	CUT16-UN-001	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.04-0.08	50-120	0.03-0.07
		Tmax	100-170	0.03-0.07	70-150	0.03-0.07	60-120	0.04-0.08	60-150	0.03-0.07
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
		HTA	70-120	0.03-0.05	60-100	0.03-0.05	50-90	0.03-0.05	50-100	0.03-0.06
		AS								
	CUT16-PR-801	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.03-0.07	50-120	0.03-0.07
		Tmax	100-170	0.03-0.07	70-150	0.03-0.07	60-120	0.03-0.07	60-150	0.03-0.07
	CUT16-PRW-801	N								
Avance modérée ** Niedriger Vorschub ** Low feed rate	CUT16-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT16-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT16-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								

** arête de coupe vive ** scharfe Schneidkante ** sharp cutting edge

CUT 16

	N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
	Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
	100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
	100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
	150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
							150-300	0.03-0.10				
							100-500	0.02-0.10				
	100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
	100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
	100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
	100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06

★★★★★ ★★★★ ★★★

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

CUT 22

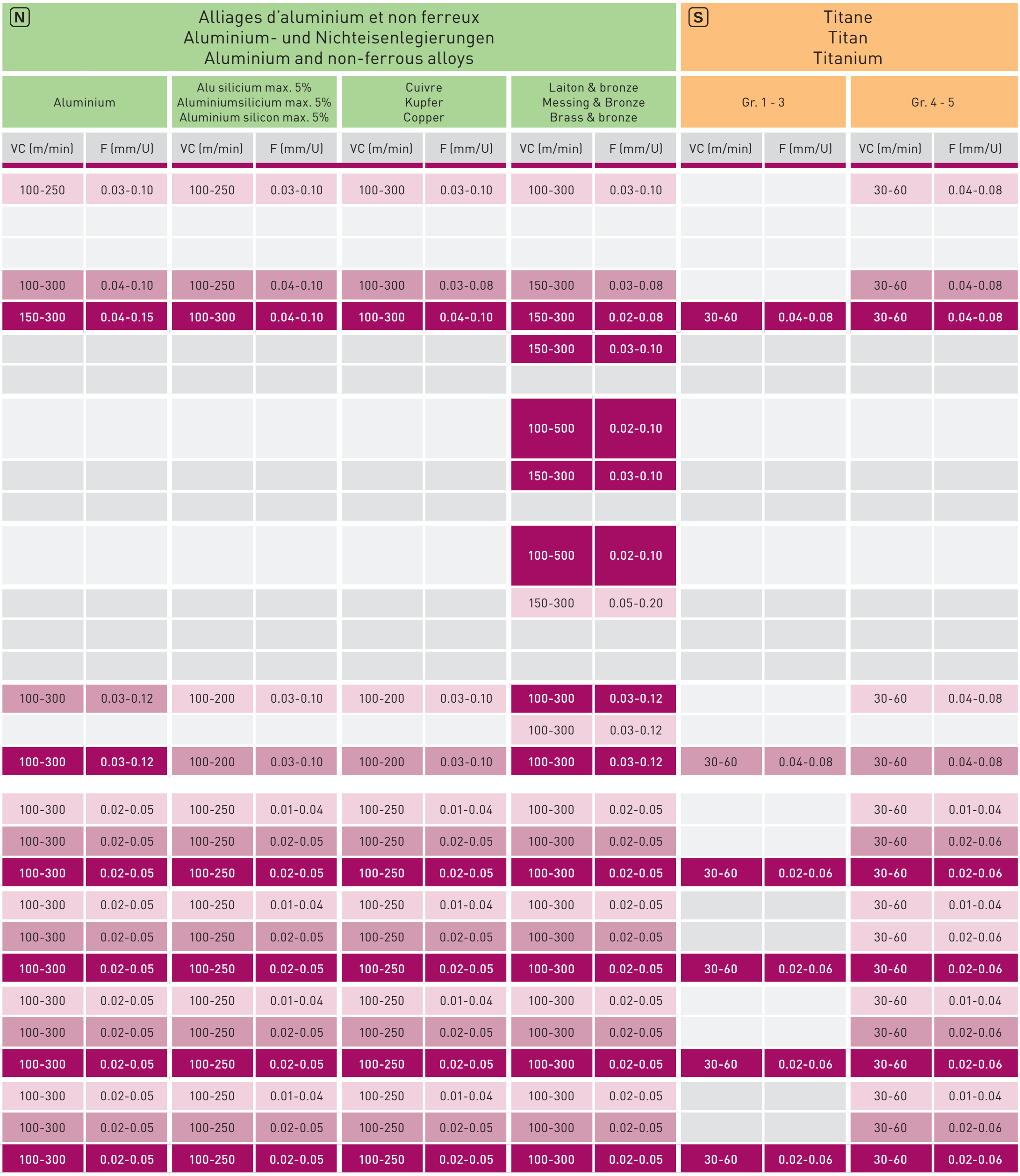
			P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel	
			Acier de décolletage / Automatenstahl / Free-cutting steel		Acier faiblement allié / Leicht legierter Stahl / Low alloyed steel		Acier fortement allié / Legierter Stahl / High alloyed steel		Austénitique et martensitique / Austenitisch und martensitisch / Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard / Standard Vorschub / Standard feed rate	CUT22-UN-002 / CUT22-UR-802	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
		HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06
		AS								
	CUT22-PN-002	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08		
		Tmax	100-170	0.04-0.10	70-150	0.04-0.10	60-120	0.04-0.10		
	CUT22-PNW-002	N								
	CUT22-PR-002	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
	CUT22-PRW-002	N								
	CUT22-TN-002	TiAlN	90-140	0.08-0.18	60-120	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15		
	CUT22-GN-002 ***	TiAlN	90-140	0.03-0.12	60-120	0.03-0.12	50-100	0.03-0.10	50-120	0.03-0.08
		Tmax	100-170	0.03-0.12	70-150	0.03-0.12	60-120	0.03-0.10	70-120	0.03-0.08
		AS								
Avance modérée ** / Niedriger Vorschub / Low feed rate	CUT22-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT22-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT22-UL/R-802F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT22-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								

* premier choix en cas de coupe interrompue
** arête de coupe vive
*** géométrie fonçage-tournage (évent. tronçonnage)

* beste Basis für unterbrochene Schnitte
** scharfe Schneidkante
*** Geometrie zum einstechen und drehen (event. abstechen)

* first choice for interrupted cut
** sharp cutting edge
*** geometry for grooving and turning (event. parting off)

CUT 22



N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
						150-300	0.03-0.10				
						100-500	0.02-0.10				
						150-300	0.03-0.10				
						100-500	0.02-0.10				
						150-300	0.05-0.20				
100-300	0.03-0.12	100-200	0.03-0.10	100-200	0.03-0.10	100-300	0.03-0.12			30-60	0.04-0.08
						100-300	0.03-0.12				
100-300	0.03-0.12	100-200	0.03-0.10	100-200	0.03-0.10	100-300	0.03-0.12	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06

★★★★★ ★★★★ ★★★

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

CUT 31

			P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel	
			Acier de décolletage / Automatenstahl / Free-cutting steel		Acier faiblement allié / Leicht legierter Stahl / Low alloyed steel		Acier fortement allié / Legierter Stahl / High alloyed steel		Austénitique et martensitique / Austenitisch und martensitisch / Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard / Standard Vorschub / Standard feed rate	CUT31-UN-002	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.10
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.10
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
		HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06
		AS								
	CUT31-PN-002	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08		
		Tmax	100-170	0.04-0.10	70-150	0.04-0.10	60-120	0.04-0.10		
	CUT31-PNW-002	N								
	CUT31-PR-802	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
	CUT31-PRW-802	N								
	CUT31-TN-002	TiAlN	90-140	0.08-0.20	60-120	0.08-0.20	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax	100-170	0.08-0.20	70-150	0.08-0.20	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax	80-130*	0.08-0.20	50-110*	0.08-0.20	50-90*	0.08-0.15		
	CUT31-GN-002 ***	TiAlN	90-140	0.04-0.15	60-120	0.04-0.15	50-100	0.04-0.10	50-120	0.04-0.10
		Tmax	100-170	0.04-0.15	70-150	0.04-0.15	60-120	0.04-0.10	70-120	0.04-0.10
		AS								
Avance modérée ** / Niedriger Vorschub / Low feed rate	CUT31-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT31-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT31-UL/R-802F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								
	CUT31-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		AS								

* premier choix en cas de coupe interrompue
** arête de coupe vive
*** géométrie fonçage-tournage (évent. tronçonnage)

* beste Basis für unterbrochene Schnitte
** scharfe Schneidkante
*** Geometrie zum einstechen und drehen (event. abstechen)

* first choice for interrupted cut
** sharp cutting edge
*** geometry for grooving and turning (event. parting off)

<< CUT-Line   <<< Main menu

CUT 31

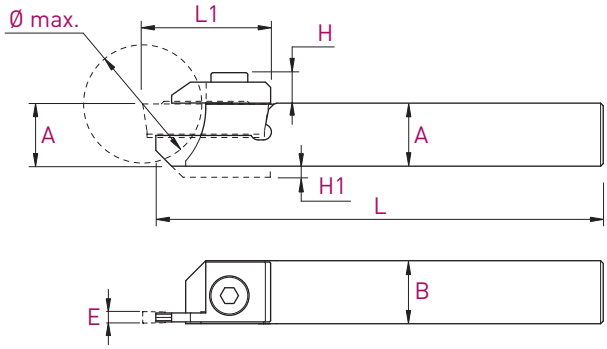
N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
						150-300	0.03-0.10				
						100-500	0.02-0.15				
						150-300	0.03-0.10				
						100-500	0.02-0.15				
						150-300	0.05-0.20				
100-300	0.04-0.15	100-200	0.04-0.10	100-200	0.04-0.10	100-300	0.04-0.15			30-60	0.04-0.08
						100-300	0.04-0.15				
100-300	0.04-0.15	100-200	0.04-0.10	100-200	0.04-0.10	100-300	0.04-0.15	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06

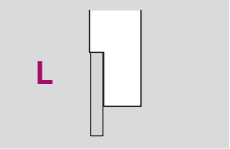
★★★★★   ★★★★   ★★★

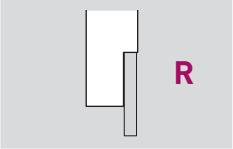
Porte-outils
Halter
Holders

Ø max 34 mm

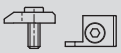
H Series







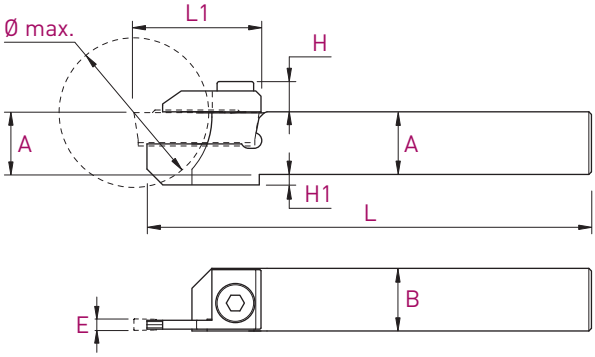
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 1.6 mm **Type** CUT16	8 x 10	115	16	19.5	6.2	2	**CUT16-H0810L**	**CUT16-H0810R**
	10 x 10	115	16	19.5	6.2	-	**CUT16-H1010L**	**CUT16-H1010R**
	12 x 12	130	16	19.5	6.2	-	**CUT16-H1212L**	**CUT16-H1212R**
	12 x 12	90	16	19.5	6.2	-	**CUT16-H1212L-90**	**CUT16-H1212R-90**
	12.7 x 12.7	130	16	19.5	6.2	-	**CUT16-H127127L**	**CUT16-H127127R**
	16 x 16	130	16	19.5	6.2	-	**CUT16-H1616L**	**CUT16-H1616R**
	20 x 20	120	16	19.5	6.2	-	**CUT16-H2020L**	**CUT16-H2020R**
E 2.2 mm **Type** CUT22	10 x 12	115	20	24	6.4	-	**CUT22-H1012L**	**CUT22-H1012R**
	12 x 12	130	20	24	6.4	-	**CUT22-H1212L**	**CUT22-H1212R**
	12 x 12	90	20	24	6.4	-	**CUT22-H1212L-90**	**CUT22-H1212R-90**
	12.7 x 12.7	130	20	24	6.4	-	**CUT22-H127127L**	**CUT22-H127127R**
	16 x 16	130	20	24	6.4	-	**CUT22-H1616L**	**CUT22-H1616R**
	20 x 20	120	20	24	6.4	-	**CUT22-H2020L**	**CUT22-H2020R**
E 3.1 mm **Type** CUT31	16 x 16	130	34	35	7.8	-	**CUT31-H1616L**	**CUT31-H1616R**
	20 x 20	120	34	35	7.8	-	**CUT31-H2020L**	**CUT31-H2020R**
	25 x 25	140	34	35	7.8	-	**CUT31-H2525L**	**CUT31-H2525R**

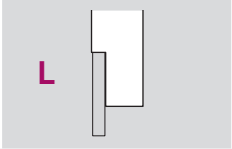
Pièces de rechange Ersatzteile Spare parts	L 	 R		Serrage Anzug Torque
	Art. N°	Art. N°	Art. N°	
CUT 16	**CUT16L-SET**	**CUT16R-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 22	**CUT22L-SET**	**CUT22R-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 31	**CUT31L-SET**	**CUT31R-SET**	**V-M5X10-BN7**	4.5 Nm

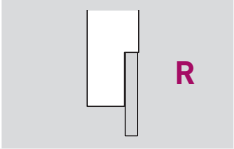
Porte-outils
Halter
Holders

Ø max 42 mm

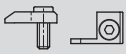
HX Series







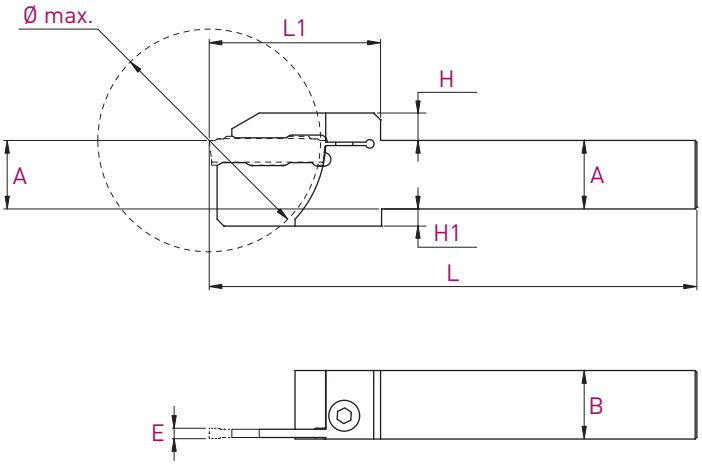
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 1.6 mm **Type** CUT16	10 x 12	115	20	21	6.2	2	**CUT16-H1012LX**	**CUT16-H1012RX**
	12 x 12	130	20	21	6.2	-	**CUT16-H1212LX**	**CUT16-H1212RX**
	12 x 12	90	20	21	6.2	-	**CUT16-H1212LX-90**	**CUT16-H1212RX-90**
	12.7 x 12.7	130	20	21	6.2	-	**CUT16-H127127LX**	**CUT16-H127127RX**
	16 x 16	130	20	21	6.2	-	**CUT16-H1616LX**	**CUT16-H1616RX**
	20 x 20	120	20	21	6.2	-	**CUT16-H2020LX**	**CUT16-H2020RX**
E 2.2 mm **Type** CUT22	10 x 12	115	26	25	6.4	4	**CUT22-H1012LX**	**CUT22-H1012RX**
	12 x 12	130	26	25	6.4	2	**CUT22-H1212LX**	**CUT22-H1212RX**
	12 x 12	90	26	25	6.4	2	**CUT22-H1212LX-90**	**CUT22-H1212RX-90**
	12.7 x 12.7	130	26	25	6.4	-	**CUT22-H127127LX**	**CUT22-H127127RX**
	16 x 16	130	26	25	6.4	-	**CUT22-H1616LX**	**CUT22-H1616RX**
	20 x 20	120	26	25	6.4	-	**CUT22-H2020LX**	**CUT22-H2020RX**
	25 x 25	140	26	25	6.4	-	**CUT22-H2525LX**	**CUT22-H2525RX**
E 3.1 mm **Type** CUT31	16 x 16	120	42	37	7.8	4	**CUT31-H1616LX**	**CUT31-H1616RX**
	20 x 20	120	42	37	7.8	-	**CUT31-H2020LX**	**CUT31-H2020RX**
	25 x 25	140	42	37	7.8	-	**CUT31-H2525LX**	**CUT31-H2525RX**

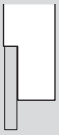
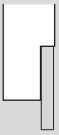
Pièces de rechange Ersatzteile Spare parts	L  Art. N°	 R Art. N°	 Art. N°	Serrage Anzug Torque
CUT 16	**CUT16LX-SET**	**CUT16RX-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 22	**CUT22LX-SET**	**CUT22RX-SET**	**V-M4X10-BN7**	3.5 Nm
CUT 31	**CUT31LX-SET**	**CUT31RX-SET**	**V-M5X10-BN7**	4.5 Nm

Porte-outils
Halter
Holders

Ø max 65 mm

HZ Series

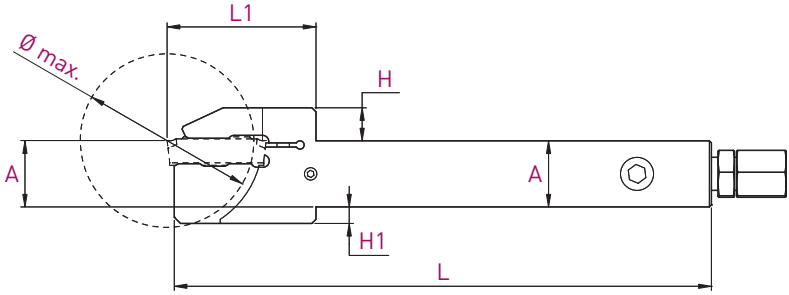


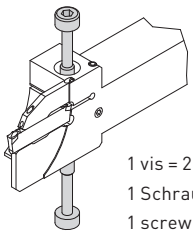
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	L  Art. N°	R  Art. N°
E 2.2 mm **Type** CUT22	16 x 16	130	32	30	7	-	**CUT22-H1616LZ-D32**	**CUT22-H1616RZ-D32**
	20 x 20	130	32	30	7	-	**CUT22-H2020LZ-D32**	**CUT22-H2020RZ-D32**
	16 x 16	130	42	35	7	4	**CUT22-H1616LZ-D42**	**CUT22-H1616RZ-D42**
	20 x 20	130	42	35	7	-	**CUT22-H2020LZ-D42**	**CUT22-H2020RZ-D42**
E 3.1 mm **Type** CUT31	20 x 20	140	52	44	8	5	**CUT31-H2020LZ-D52**	**CUT31-H2020RZ-D52**
	25 x 25	140	52	44	8	-	**CUT31-H2525LZ-D52**	**CUT31-H2525RZ-D52**
	20 x 20	140	65	50	8	5	**CUT31-H2020LZ-D65**	**CUT31-H2020RZ-D65**
	25 x 25	140	65	50	8	-	**CUT31-H2525LZ-D65**	**CUT31-H2525RZ-D65**

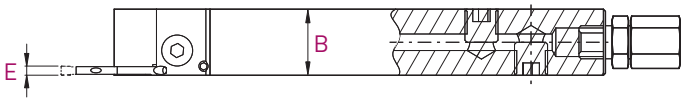
Pièces de rechange Ersatzteile Spare parts	 Art. N°	Serrage Anzug Torque
CUT 22	**V-M4X10-BN7**	3.5 Nm
CUT 31	**V-M5X10-BN7**	4.5 Nm

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

HZ-JET Series

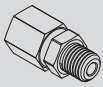






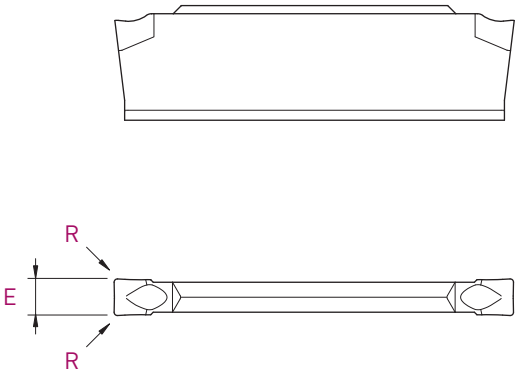
1 vis = 2 possibilités de serrage
1 Schraube = 2 Spannmöglichkeiten
1 screw = 2 clamp possibilities

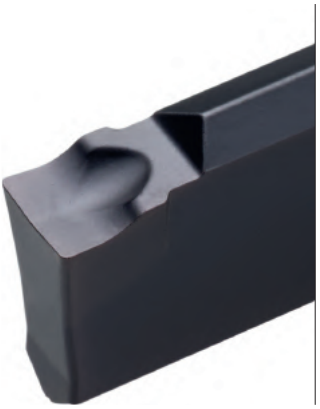
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 2.2 mm **Type** CUT22	16 x 16	130	42	36	8	4	**CUT22-H1616LZ-JET42**	**CUT22-H1616RZ-JET42**
	20 x 20	130	42	36	8	-	**CUT22-H2020LZ-JET42**	**CUT22-H2020RZ-JET42**
E 3.1 mm **Type** CUT31	16 x 16	140	65	49	9	9	**CUT31-H1616LZ-JET65**	**CUT31-H1616RZ-JET65**
	20 x 20	140	65	51	9	5	**CUT31-H2020LZ-JET65**	**CUT31-H2020RZ-JET65**
	25 x 25	140	65	51	9	-	**CUT31-H2525LZ-JET65**	**CUT31-H2525RZ-JET65**

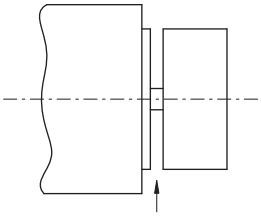
Pièces de rechange Ersatzteile Spare parts		Serrage Anzug Torque		
	Art. N°		**Art. N°**	**Art. N°**
CUT 22	**V-M4X22-CUT**	3.5 Nm	**J-M8X1-D6**	**JB-M8X1**
CUT 31	**V-M5X25-CUT**	4.5 Nm	**J-M8X1-D6**	**JB-M8X1**

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

UN Series





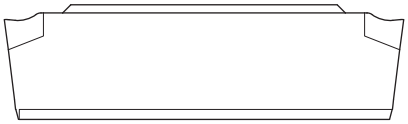


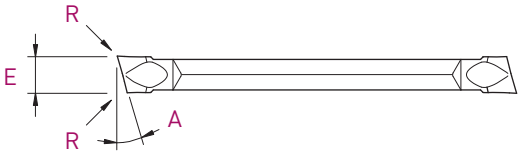
UN

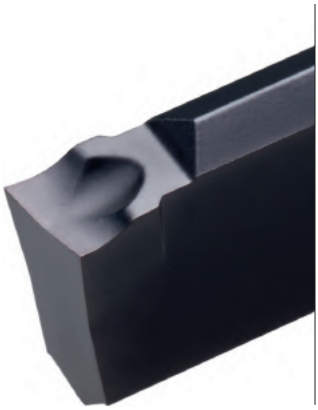
Type	E ±0.1	R	Art. N°	TiAlN	Tmax	Zmax	HTA	AS
CUT16	1.6	0.02	CUT16-UN-000F	■			■	■
	1.6	0.10	CUT16-UN-001	■	■	■	■	■
CUT22	2.2	0.02	CUT22-UN-000F	■			■	■
	2.2	0.20	CUT22-UN-002	■	■	■	■	■
CUT31	3.1	0.02	CUT31-UN-000F	■			■	■
	3.1	0.20	CUT31-UN-002	■	■	■	■	■

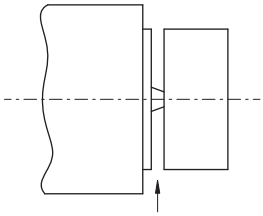
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

UL-UR Series







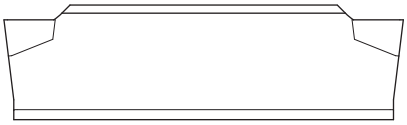


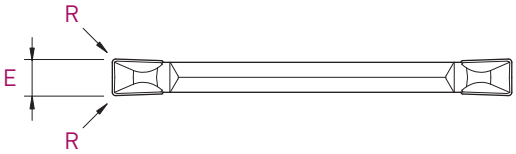
				UL				UR					
Type	E ±0.1	A	R	Art. N°	TiAlN	HTA	AS	Art. N°	TiAlN	Tmax	Zmax	HTA	AS
CUT16	1.6	8°	0.02	CUT16-UL-800F	■	■	■	CUT16-UR-800F	■			■	■
	1.6	15°	0.02	CUT16-UL-1500F	■	■	■	CUT16-UR-1500F	■			■	■
CUT22	2.2	8°	0.02	CUT22-UL-800F	■	■	■	CUT22-UR-800F	■			■	■
	2.2	8°	0.20	–				CUT22-UR-802		■	■		
	2.2	8°	0.20	CUT22-UL-802F	■	■	■	CUT22-UR-802F	■			■	■
	2.2	15°	0.02	CUT22-UL-1500F	■	■	■	CUT22-UR-1500F	■			■	■
CUT31	3.1	8°	0.02	CUT31-UL-800F	■	■	■	CUT31-UR-800F	■			■	■
	3.1	8°	0.20	CUT31-UL-802F	■	■	■	CUT31-UR-802F	■			■	■
	3.1	15°	0.02	CUT31-UL-1500F	■	■	■	CUT31-UR-1500F	■			■	■

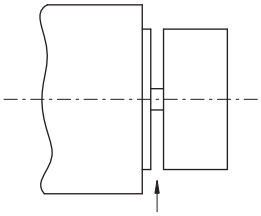
■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

PN Series





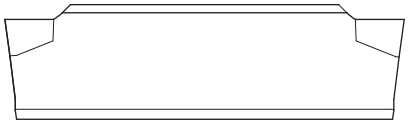


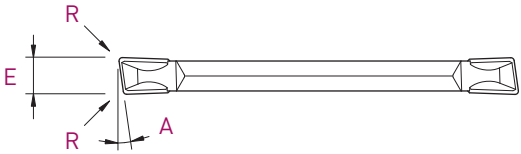
PN

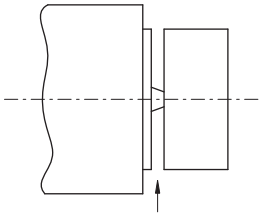
Type	E ±0.1	R	Art. N°	TiAlN	Tmax
CUT22	2.2	0.20	CUT22-PN-002	■	■
CUT31	3.1	0.20	CUT31-PN-002	■	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

PR Series







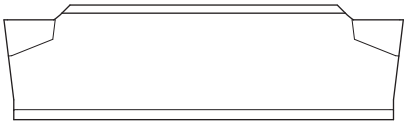
PR

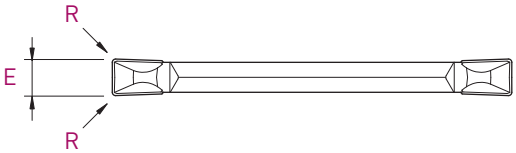
Type	E ±0.1	A	R	Art. N°	TiAlN	Tmax
CUT16	1.6	8°	0.10	CUT16-PR-801	■	■
CUT22	2.2	8°	0.20	CUT22-PR-802	■	■
CUT31	3.1	8°	0.20	CUT31-PR-802	■	■

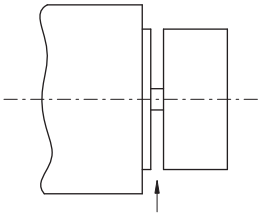
■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

PNW Series





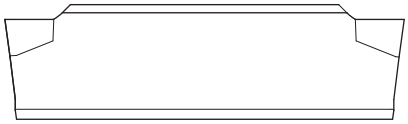


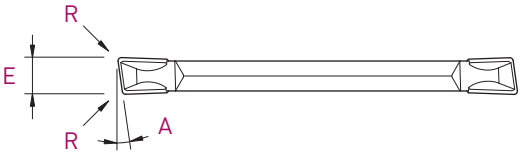
PNW

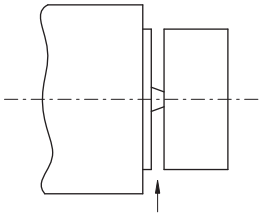
Type	E ±0.1	R	Art. N°	Z
CUT22	2.2	0.20	CUT22-PNW-002	■
CUT31	3.1	0.20	CUT31-PNW-002	■

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

PRW Series







PRW

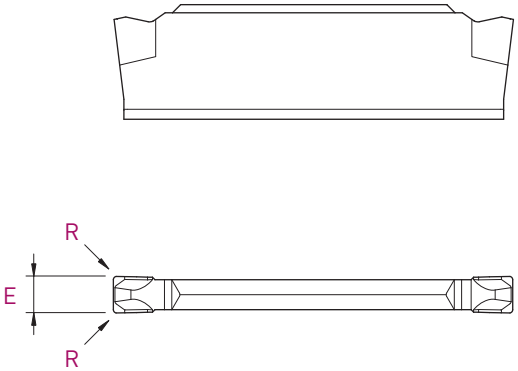
Type	E ±0.1	A	R	Art. N°	N
CUT16	1.6	8°	0.10	CUT16-PRW-801	■
CUT22	2.2	8°	0.20	CUT22-PRW-802	■
CUT31	3.1	8°	0.20	CUT31-PRW-802	■

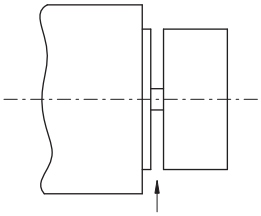
■ = disponible / verfügbar / available

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

Negative geometry

TN Series



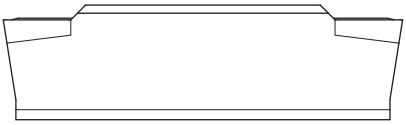


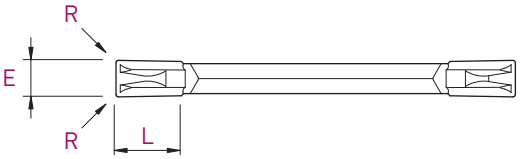
TN

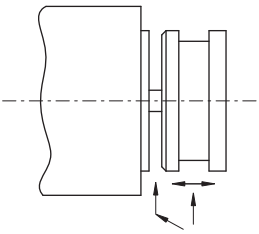
Type	E ±0.1	R	Art. N°	TiAlN	Tmax	Zmax
CUT22	2.2	0.20	CUT22-TN-002	■	■	■
CUT31	3.1	0.20	CUT31-TN-002	■	■	■

Plaquettes de fonçage, tournage et tronçonnage
WSP zum einstechen, drehen und abstechen
Solid carbide inserts for grooving, turning and cut off

GN Series



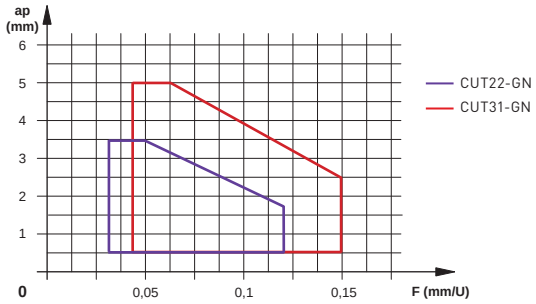


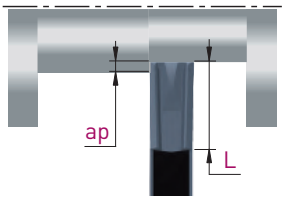


GN

Type	E ±0.1	L	R	Art. N°	TiAlN	Tmax	AS
CUT22	2.2	3.5	0.15	CUT22-GN-002	■	■	■
CUT31	3.1	5.0	0.15	CUT31-GN-002	■	■	■

Conseils d'utilisation pour plaquettes type GN
Anwendungsempfehlungen für GN-Wendeplatten
Application recommendations for GN inserts



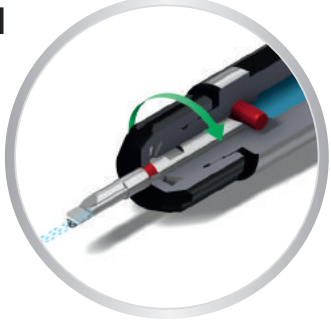


ap max = T dans matière à bonne usinabilité
ap max = T in Werkstoffe mit gute Zerspanbarkeit
ap max = T in material with good machinability

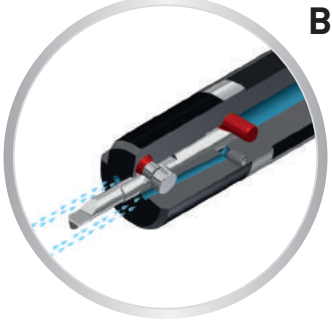
■ = disponible / verfügbar / available

APPLITEC

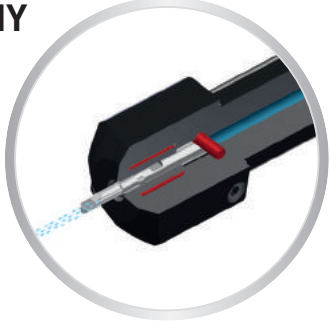
BH



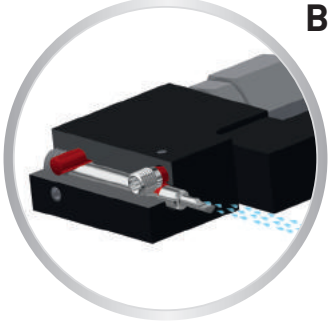
BHS



BHY



BHK



Index

Système de désignation des porte-outils
Halter Bezeichnungssystem
Holders designation system

BH-D / BHS
BHS-D / BHY-D

H HS HY

B H 4 – D 20 – 100

- 100: Longueur / Länge / Length
- 20: Ø/⧄ queue / Schaft Ø/⧄ / Shank Ø/⧄
- D: Queue cylindrique / Zylindrischer Schaft / Cylindrical shank
- 4: Ø alésage / Bohrung Ø / Bore Ø
- H: Porte-outils / Halter / Holders
- B: Ligne produit d'alésage / Innendrehen Produktlinie / Boring product line

Système de désignation des porte-outils
Halter Bezeichnungssystem
Holders designation system

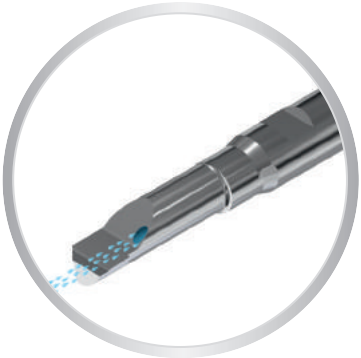
BHK

HK

B HK 4 N – 20 – 32R

- **B** – Ligne produit d'alésage / Innendrehen Produktlinie / Boring product line
- **HK** – Porte-outils / Halter / Holders
- **4** – Ø alésage / Bohrung Ø / Bore Ø
- **N** – Géométrie du porte-outil / Haltergeometrie / Tool holder geometry
- **20** – ⌀ queue / Schaft ⌀ / Shank ⌀
- **32R** – Barres d'alésages compatibles (longueur L3) / Kompatible Bohrstangen (Länge L3) / Compatible boring bars (length L3)

Système de désignation des barres d'alésage
Bohrstangen Bezeichnungssystem
Boring bars designation system



B F

B	B	4	R	–	25	–	75	–	BAX	–	R05	–	ZN

75: Longueur utile / Effective Nutzlänge / Length

ZN: Nuance / Sorte / Grade

25: Ø minimum / Minimal Ø / Minimum Ø

R05: Indication complémentaire / Zusätzliche Angabe / Additional indication

R = rayon / Radius / radius

BAX: Géométries de coupe / Schneidgeometrien / Cutting geometries

R: Exécution R/L / Ausführung R/L / Execution R/L

4: Ø queue / Schaft Ø / Shank Ø

B: B = arrosage intégré / B = integrieter Kühlmittelzufuhr / B = integrated coolant supply

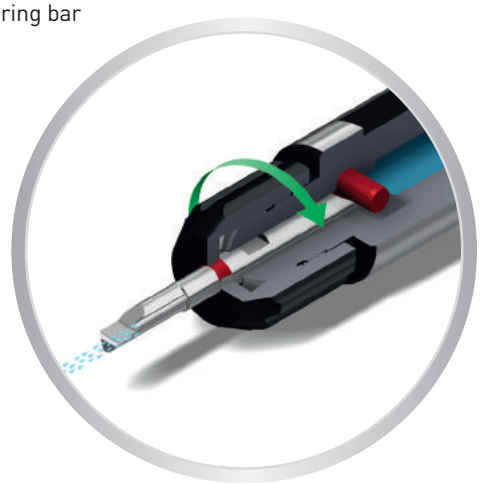
F = sans arrosage / F = ohne Kühlung / F = without coolant

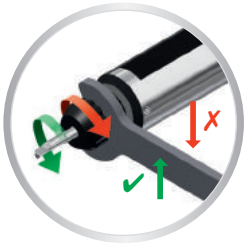
B: Ligne produit d'alésage / Innendrehen Produktlinie / Boring product line

Porte-outils avec écrou de serrage
Halter mit Spannmutter
Tool holders with clamping nut

BH-D

Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar

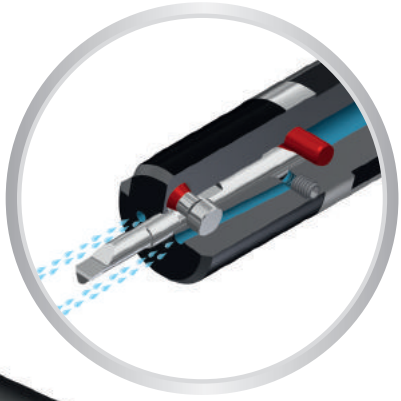




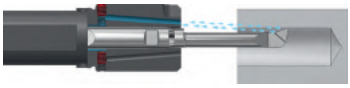
Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Tool holders with multiple coolant system

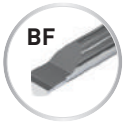
BHS-D

Système de serrage à vis transversale
Querverschraubungsspannsystem
Clamping system with transverse screw

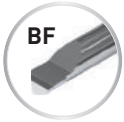


Arrosage sur l'arête de coupe
Kühlung auf der Schneidkante
Cooling on the cutting edge

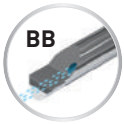




Arrosage favorisant l'évacuation des copeaux
Spanabfuhr fördernde Kühlung
Cooling for better chip outflow



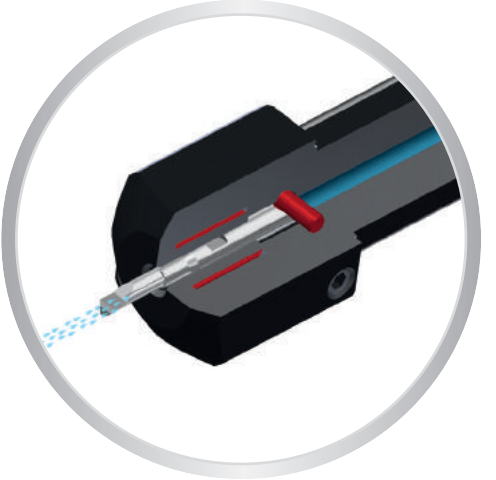
Arrosage par le centre de l'outil
Zentrale Kühlmittelzufuhr
Cooling through the center of the tool



Porte-outils à serrage hydraulique
Halter mit Hydro-Dehnspann-System
Tool holders with hydraulic clamping system

BHY

Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar



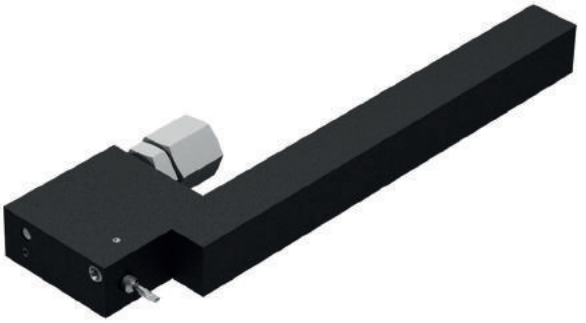
Excellente absorption des vibrations!
Ausgezeichnete Schwingungsdämpfung!
Excellent vibration absorbtion!

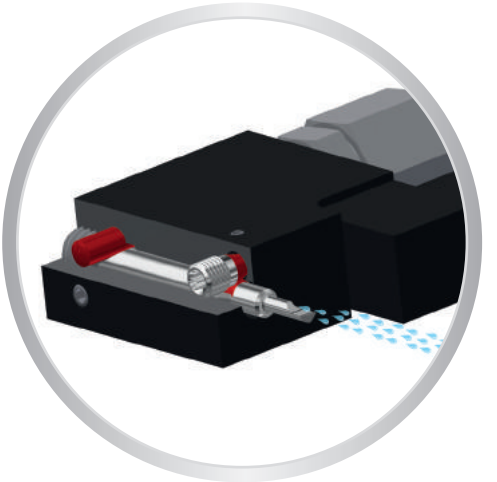
Porte-outils coudés
Gekröpfte Halter
Cranked tool holders

BHK

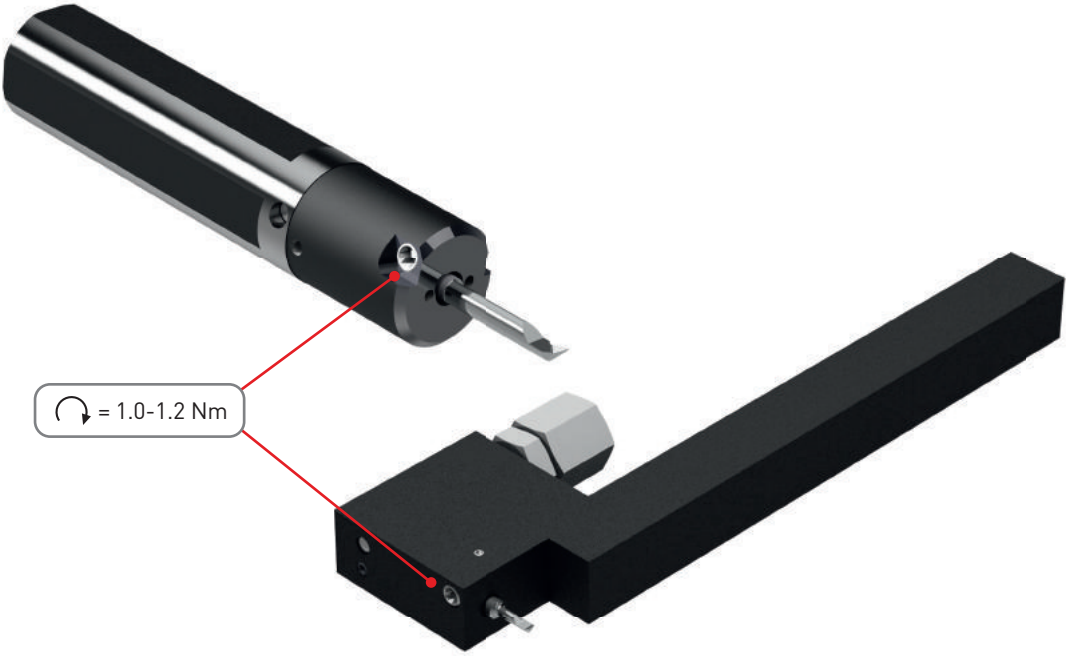
Système de serrage à vis transversale
Querverschraubungsspannsystem
Clamping system with transverse screw

Arrosage par la barre d'alésage
Kühlung durch die Bohrstange
Cooling through the boring bar





Accessoires de serrage
Spannzubehöre
Clamping accessories



Nous recommandons le serrage des porte-outils types BHS et BHK avec ce type de tournevis dynamométrique.

Wir empfehlen für das Anziehen der Halter Typ BHS und BHK diese Art von Drehmomentschraubendreher.

For holders type BHS and BHK clamping, we recommend this kind of torque screwdriver.

Art. N°
SET-NM1.2-TX8

Nuances
Sorten
Grades

P M N S

ZTAF

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

- nuance universelle pour l'usinage des aciers, aciers inoxydables, aciers alliés, alliage de titane
- bonne résistance à la température

- Universalsorte für die Bearbeitung von Stahl, rostfreiem Stahl, Stahllegierung, Titanlegierung
- gute Warmfestigkeit

- universal grade for steel, stainless steel, alloyed steel, titanium alloys
- good heat resistance

P M S

ZTAXF

ZN + revêtement PVD
ZN + PVD Beschichtung
ZN + PVD coating

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes: Inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant: Chrome Nickel, Vanadium, Molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen: Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend: Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing: Chrome-nickel, Vanadium, Molybdenum, ...

P N S

ZN

non revêtu
unbeschichtet
uncoated

- nuance de base micro-grain tenace
- 1er choix pour l'usinage des métaux non ferreux

- zähe Basis Feinkornsorte
- beste Wahl für die Bearbeitung von Nichteisenmetalle

- tough base micro-grain grade
- first choice for non-ferrous materials

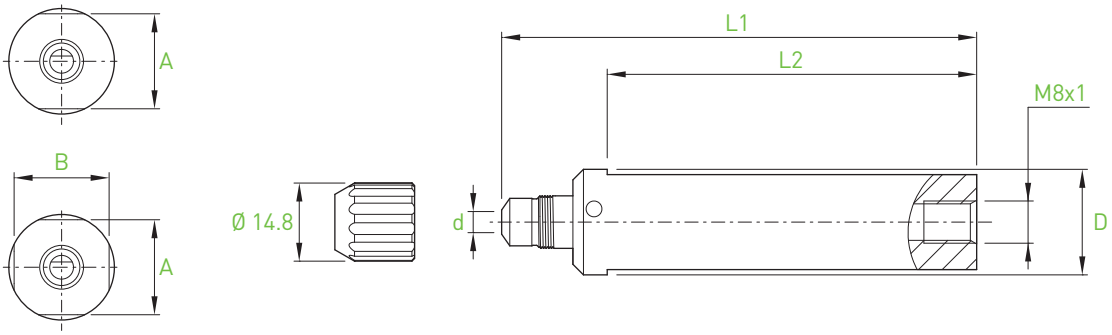
Paramètres de coupe
Schnittwerte
Machining data

Matière Werkstoff Material		VC (m/min)	Ø barre d'alésage Bohrstange Ø boring bar Ø Ø1.0 - Ø2.0 (mm/U)	Ø2.5 - Ø4.0 (mm/U)	Ø4.5 - Ø5.5 (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	60-100	0.02-0.03	0.02-0.08	0.03-0.10
Acier faiblement allié Leicht legierter Stahl Low alloyed steel	P	50-80	0.01-0.03	0.02-0.05	0.03-0.06
Acier fortement allié Legierter Stahl High alloyed steel	P	40-60	0.01-0.02	0.02-0.04	0.02-0.06
Acier inoxydable Rostfreistahl Stainless steel	M	40-90	0.01-0.03	0.02-0.05	0.03-0.08
Aluminium	N	60-150	0.01-0.03	0.02-0.06	0.03-0.10
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	60-150	0.01-0.03	0.02-0.05	0.03-0.08
Titane Titan Titanium	S	30-70	0.01-0.03	0.02-0.05	0.03-0.10

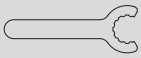
Porte-outils avec écrou de serrage
Halter mit Spannmutter
Tool holders with clamping nut

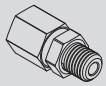
BH4-D

> page 10.05



d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
4	BB4... BF4...	10	75	55	8.8x8.8	■		**BH4-D10-75**
		12	75	55	11.2x11.2	■		**BH4-D12-75**
		12.7	75	55	11.2x11.2	■		**BH4-D12.7-75**
		15.87	75	55	14x14	■		**BH4-D15.87-75**
		16	75	55	14x14	■		**BH4-D16-75**
		16	75	55	14x14		■	**BH4-D16-75-F4**
		19.05	90	70	17x17	■		**BH4-D19.05-90**
		20	90	70	18x18	■		**BH4-D20-90**
		20	90	70	18x18		■	**BH4-D20-90-F4**
		20	160	140	18x18		■	**BH4-D20-160-F4**
		22	90	70	20x20	■		**BH4-D22-90**
		22	90	70	20x20		■	**BH4-D22-90-F4**
		22	130	110	20x20		■	**BH4-D22-130-F4**
		25	100	80	23x23	■		**BH4-D25-100**
		25	100	80	23x23		■	**BH4-D25-100-F4**
		25	170	150	23x23		■	**BH4-D25-170-F4**
		25.4	100	80	23.4x23.4	■		**BH4-D25.4-100**
		28	100	80	26x26	■		**BH4-D28-100**

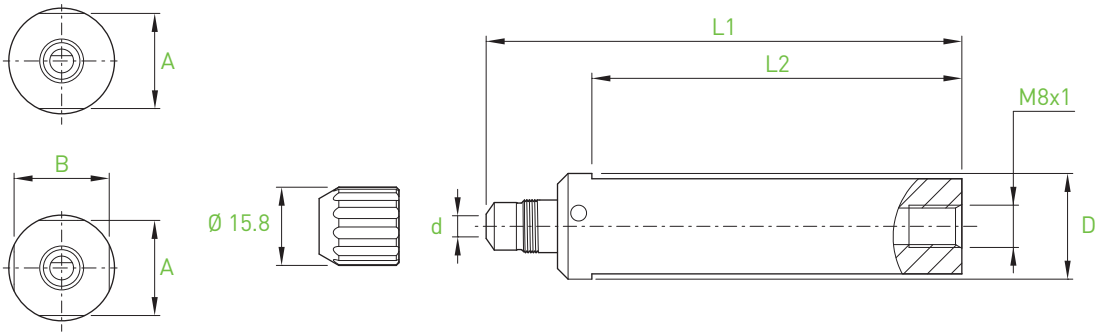
Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BH4...	**BH4-M10**	**C-BH4-M10**

Option	 Art. N°
BH4...	**J-M8X1-D6**
	more option see JET-Line

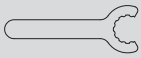
Porte-outils avec écrou de serrage
Halter mit Spannmutter
Tool holders with clamping nut

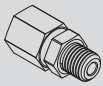
BH6-D

> page 10.05



d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
6	BB6... BF6...	12	75	55	11.2x11.2	■		**BH6-D12-75**
		12.7	75	55	11.2x11.2	■		**BH6-D12.7-75**
		15.87	75	55	14x14	■		**BH6-D15.87-75**
		16	75	55	14x14	■		**BH6-D16-75**
		19.05	90	70	17x17	■		**BH6-D19.05-90**
		20	90	70	18x18	■		**BH6-D20-90**
		20	90	70	18x18		■	**BH6-D20-90-F4**
		20	160	140	18x18		■	**BH6-D20-160-F4**
		22	90	70	20x20	■		**BH6-D22-90**
		22	90	70	20x20		■	**BH6-D22-90-F4**
		22	130	110	20x20		■	**BH6-D22-130-F4**
		25	100	80	23x23	■		**BH6-D25-100**
		25	100	80	23x23		■	**BH6-D25-100-F4**
		25	170	150	23x23		■	**BH6-D25-170-F4**
		25.4	100	80	23.4x23.4	■		**BH6-D25.4-100**
		28	100	80	26x26	■		**BH6-D28-100**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BH6...	**BH6-M12**	**C-BH6-M12**

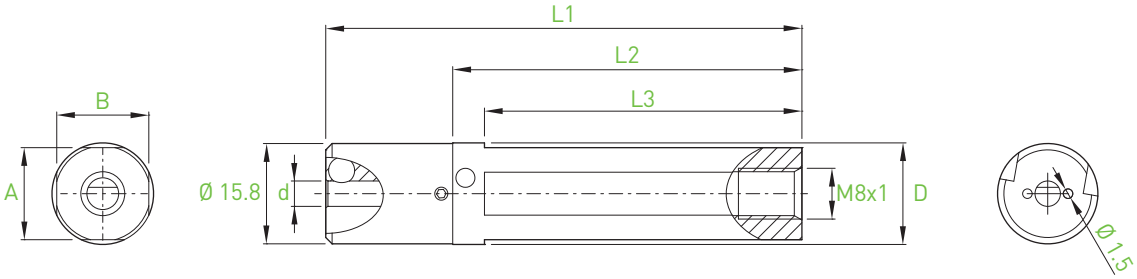
Option	 Art. N°
BH6...	**J-M8X1-D6**
	more option see JET-Line

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

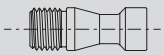
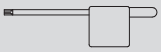
Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Tool holders with multiple coolant system

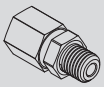
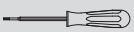
BHS4-D

> page 10.05/10.07



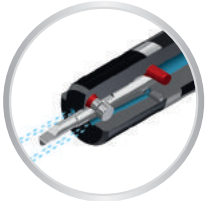
d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	10	75	55	50	9.2x9.2	**BHS4-D10-75-F4**
		12	75	55	50	11x11	**BHS4-D12-75-F4**
		12.7	75	55	50	11.7x11.7	**BHS4-D12.7-75-F4**
		15.87	75	55	50	14.5x14.5	**BHS4-D15.87-75-F4**
		16	75	55	50	14.5x14.5	**BHS4-D16-75-F4**
		16	110	90	85	14.5x14.5	**BHS4-D16-110-F4**
		19.05	90	70	65	17x17	**BHS4-D19.05-90-F4**
		20	90	70	65	18x18	**BHS4-D20-90-F4**
		20	160	140	135	18x18	**BHS4-D20-160-F4**
		22	90	70	65	20x20	**BHS4-D22-90-F4**
		22	130	110	105	20x20	**BHS4-D22-130-F4**
		25	100	80	75	23x23	**BHS4-D25-100-F4**
		25	170	150	145	23x23	**BHS4-D25-170-F4**
		25.4	100	80	75	23x23	**BHS4-D25.4-100-F4**
		28	100	80	75	26x26	**BHS4-D28-100-F4**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHS4...	**V-BHS-M4X0.5-T8**	**C-T8**

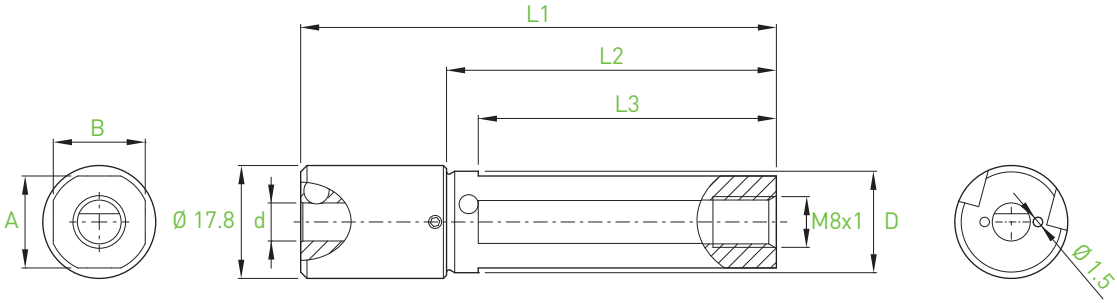
Option	 Art. N°	 Art. N°
BHS4...	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Tool holders with multiple coolant system

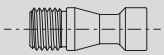
BHS6-D

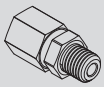
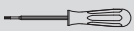


> page 10.05/10.07



d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	75	52	47	11x11	**BHS6-D12-75-F4**
		12.7	75	52	47	11.7x11.7	**BHS6-D12.7-75-F4**
		15.87	75	52	47	14.5x14.5	**BHS6-D15.87-75-F4**
		16	75	52	47	14.5x14.5	**BHS6-D16-75-F4**
		16	110	87	82	14.5x14.5	**BHS6-D16-110-F4**
		19.05	90	67	62	17x17	**BHS6-D19.05-90-F4**
		20	90	67	62	18x18	**BHS6-D20-90-F4**
		20	160	137	132	18x18	**BHS6-D20-160-F4**
		22	90	67	62	20x20	**BHS6-D22-90-F4**
		22	130	107	102	20x20	**BHS6-D22-130-F4**
		25	100	77	72	23x23	**BHS6-D25-100-F4**
		25	170	147	142	23x23	**BHS6-D25-170-F4**
		25.4	100	77	72	23x23	**BHS6-D25.4-100-F4**
		28	100	77	72	26x26	**BHS6-D28-100-F4**

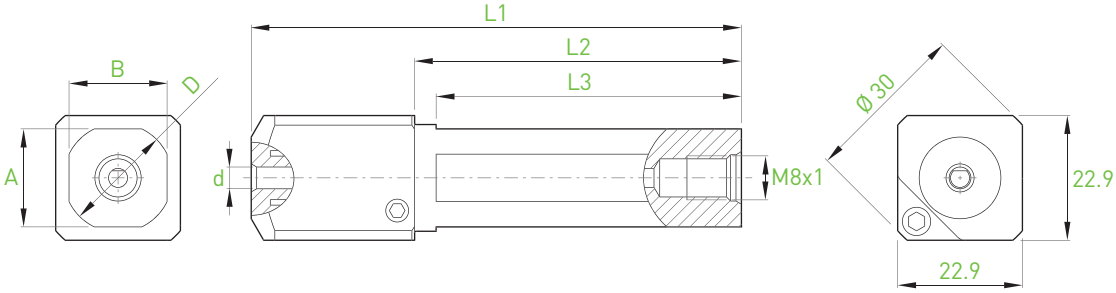
Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHS6...	**V-BHS-M4X0.5-T8**	**C-T8**

Option	 Art. N°	 Art. N°
BHS6...	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

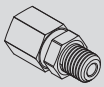
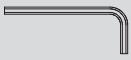
Porte-outils à serrage hydraulique
Halter mit Hydro-Dehnspann-System
Tool holders with hydraulic clamping system

BHY4-D

> page 10.06



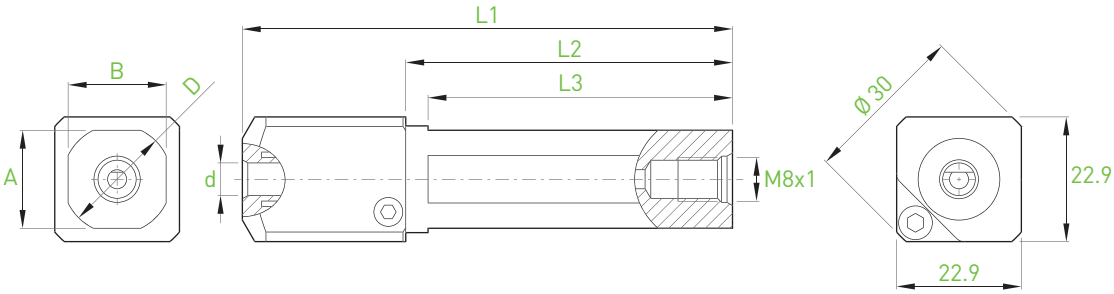
d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	12	90	60	55	11.2x11.2	**BHY4-D12-90-F4**
		16	90	60	55	14.5x14.5	**BHY4-D16-90-F4**
		19.05	90	60	55	17x17	**BHY4-D19.05-90-F4**
		20	90	60	55	18x18	**BHY4-D20-90-F4**
		22	90	60	55	20x20	**BHY4-D22-90-F4**
		25	100	70	65	23x23	**BHY4-D25-100-F4**

Pièces de rechange Ersatzteile Spare parts	 **Art. N°**	 **Art. N°**
BHY4...	**J-M8X1-D6**	**C-6P-3.0**
	more option see JET-Line	

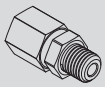
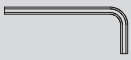
Porte-outils à serrage hydraulique
Halter mit Hydro-Dehnspann-System
Tool holders with hydraulic clamping system

BHY6-D

> page 10.06



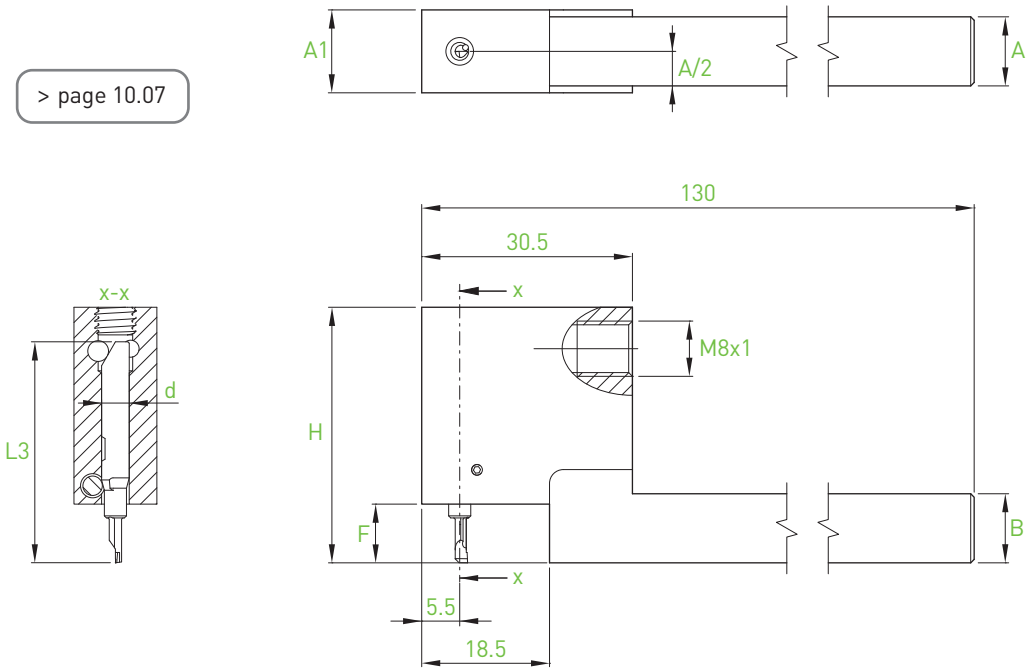
d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	90	60	55	11.2x11.2	**BHY6-D12-90-F4**
		16	90	60	55	14.5x14.5	**BHY6-D16-90-F4**
		19.05	90	60	55	17x17	**BHY6-D19.05-90-F4**
		20	90	60	55	18x18	**BHY6-D20-90-F4**
		22	90	60	55	20x20	**BHY6-D22-90-F4**
		25	100	70	65	23x23	**BHY6-D25-100-F4**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHY6...	**J-M8X1-D6**	**C-6P-3.0**
	more option see JET-Line	

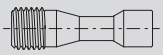
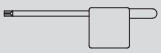
Porte-outils coudés
Kröpfhalter
Cranked tool holders

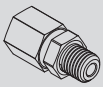
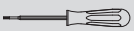
BHK4N

> page 10.07



d	Bars	L3	A x B	F	H	A1	Art. N°
4	BB4R... BF4R...	32	8x8	8.5	37	12	**BHK4N-0808X-32R**
			10x10	8.5	37	12	**BHK4N-1010X-32R**
			12x12	8.5	37	12	**BHK4N-1212X-32R**
			16x16	8.5	37	16	**BHK4N-1616X-32R**
		37	8x8	13.5	42	12	**BHK4N-0808X-37R**
			10x10	13.5	42	12	**BHK4N-1010X-37R**
			12x12	13.5	42	12	**BHK4N-1212X-37R**
			16x16	13.5	42	16	**BHK4N-1616X-37R**
		42	10x10	18.5	47	12	**BHK4N-1010X-42R**
			12x12	18.5	47	12	**BHK4N-1212X-42R**
			16x16	18.5	47	16	**BHK4N-1616X-42R**

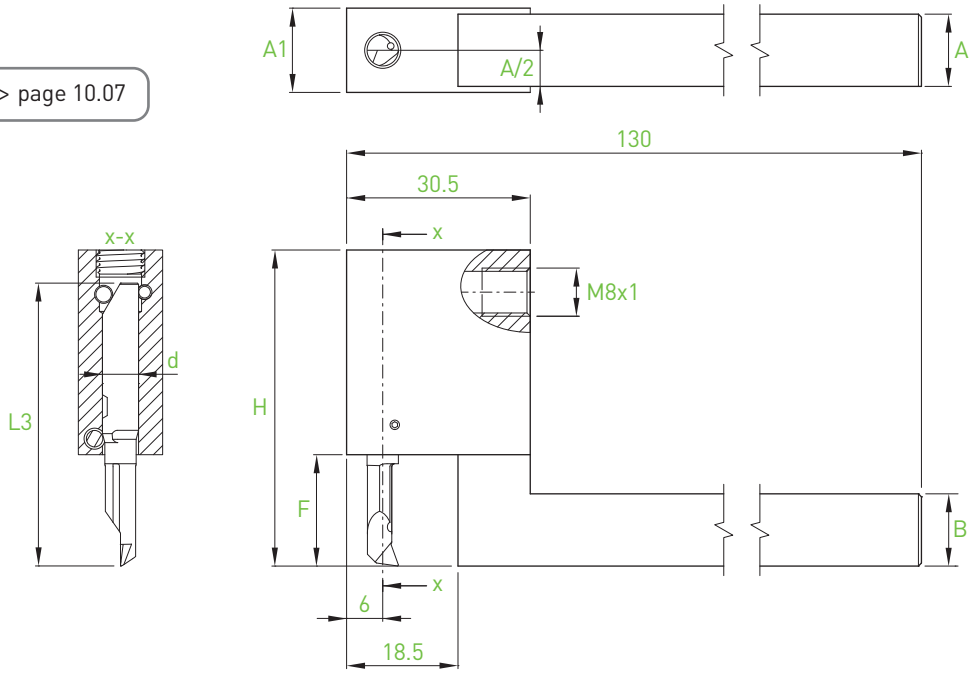
Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHK4N...	**V-BHK-M4X0.5-T8**	**C-T8**

Option	 Art. N°	 Art. N°
BHK4N...	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

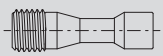
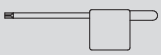
Porte-outils coudés
Kröpfhalter
Cranked tool holders

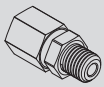
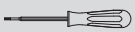
BHK6N

> page 10.07



d	Bars	L3	A x B	F	H	A1	Art. N°
6	BB6R... BF6R...	47	10x10	18.5	52.5	12	**BHK6N-1010X-47R**
			12x12	18.5	52.5	12	**BHK6N-1212X-47R**
			16x16	18.5	52.5	16	**BHK6N-1616X-47R**
		57	10x10	28.5	62.5	12	**BHK6N-1010X-57R**
			12x12	28.5	62.5	12	**BHK6N-1212X-57R**
			16x16	28.5	62.5	16	**BHK6N-1616X-57R**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHK6N...	**V-BHK-M4X0.5-T8**	**C-T8**

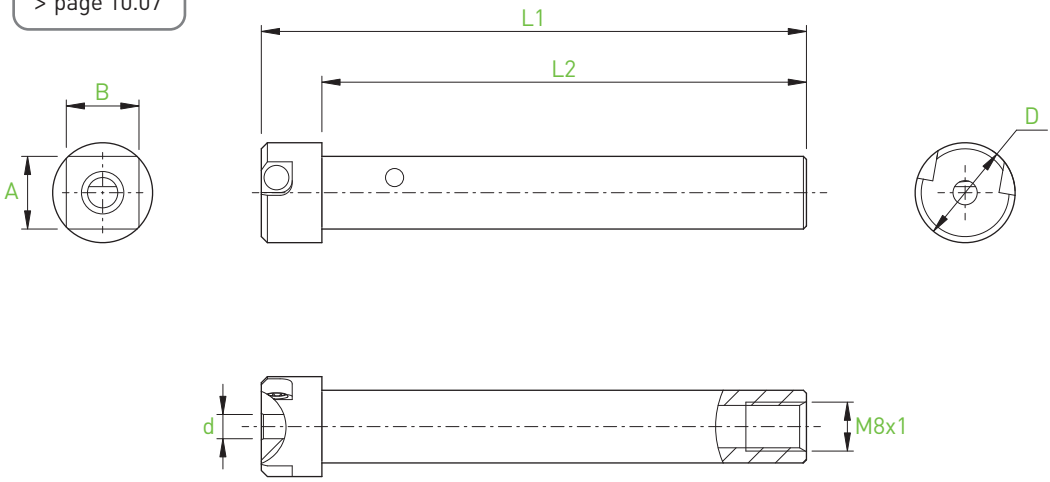
Option	 Art. N°	 Art. N°
BHK6N...	**J-M8X1-D6**	**SET-NM1.2-TX8**
	more option see JET-Line	

Porte-outils section carrée
Viereckige Halter
Square holders

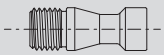
BHS4

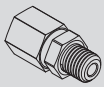
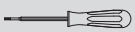
new

> page 10.07



d	Bars	A x B	L1	L2	D	Art. N°
4	BB4... BF4...	12x12	90	80	16.5	**BHS4-1212-90**
		16x16	100	90	15.5	**BHS4-1616-90**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHS4...	**V-BHS-M4X0.5-T8**	**C-T8**

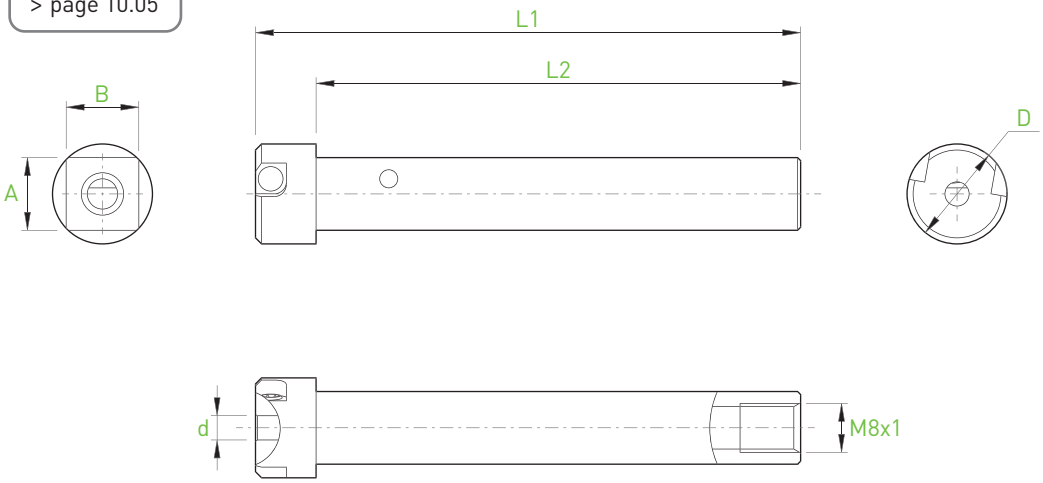
Option	 Art. N°	 Art. N°
BHS4...	**J-M8X1-D6** more option see JET-Line	**SET-NM1.2-TX8**

Porte-outils section carrée
Viereckige Halter
Square holders

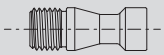
BHS6

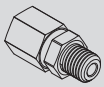
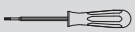
new

> page 10.05

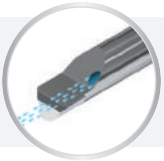


d	Bars	A x B	L1	L2	D	Art. N°
6	BB6... BF6...	12x12	90	80	17.5	**BHS6-1212-90**
		16x16	100	-	-	**BHS6-1616-90**

Pièces de rechange Ersatzteile Spare parts	 Art. N°	 Art. N°
BHS6...	**V-BHS-M4X0.5-T8**	**C-T8**

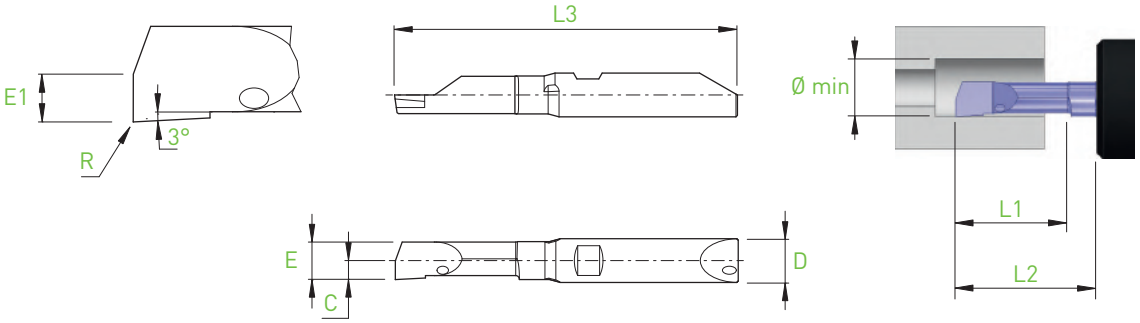
Option	 Art. N°	 Art. N°
BHS6...	**J-M8X1-D6**	**SET-NM1.2-TX8**
	more option see JET-Line	

Alésage
Ausbohren
Boring



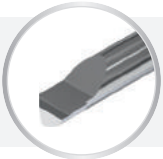
BB4...

BA



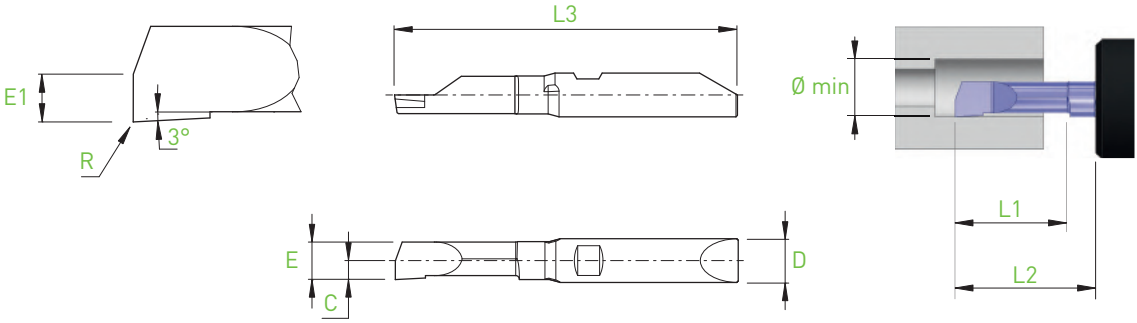
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)	
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	**BB4R/L-0309-BA**	■	■	■	□	□	
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	**BB4R/L-0412-BA**	■	■	■	□	□	
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	**BB4R/L-0515-BA**	■	■	■	□	□	
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	**BB4R/L-0618-BA**	■	■	■	□	□	new
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	**BB4R/L-0721-BA**	■	■	■	□	□	new
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	**BB4R/L-0824-BA**	■	■	■	□	□	new
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	**BB4R/L-0927-BA**	■	■	■	□	□	new
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	**BB4R/L-1030-BA-R02**	■	■	■	□	□	
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	**BB4R/L-1236-BA-R02**	■	■	■	□	□	new
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	**BB4R/L-1545-BA-R02**	■	■	■	□	□	
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	**BB4R/L-2060-BA-R02**	■	■	■	□	□	
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	**BB4R/L-2575-BA-R02**	■	■	■	□	□	
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	**BB4R/L-3090-BA-R05**	■	■	■	□	□	
		3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	**BB4R/L-35105-BA-R05**	■	■	■	□	□	

Alésage
Ausbohren
Boring



BF4...

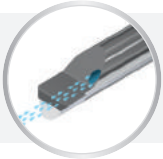
BA



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)	
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	**BF4R/L-0309-BA**	■	■	■	□	□	
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	**BF4R/L-0412-BA**	■	■	■	□	□	
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	**BF4R/L-0515-BA**	■	■	■	□	□	
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	**BF4R/L-0618-BA**	■	■	■	□	□	new
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	**BF4R/L-0721-BA**	■	■	■	□	□	new
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	**BF4R/L-0824-BA**	■	■	■	□	□	new
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	**BF4R/L-0927-BA**	■	■	■	□	□	new
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	**BF4R/L-1030-BA-R02**	■	■	■	□	□	
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	**BF4R/L-1236-BA-R02**	■	■	■	□	□	new
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	**BF4R/L-1545-BA-R02**	■	■	■	□	□	
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	**BF4R/L-2060-BA-R02**	■	■	■	□	□	
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	**BF4R/L-2575-BA-R02**	■	■	■	□	□	
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	**BF4R/L-3090-BA-R05**	■	■	■	□	□	
		3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	**BF4R/L-35105-BA-R05**	■	■	■	□	□	

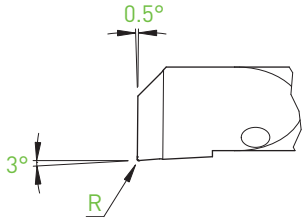
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

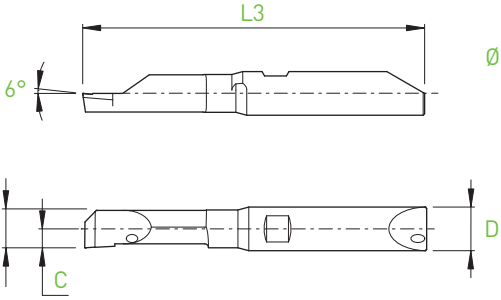
Alésage
Ausbohren
Boring

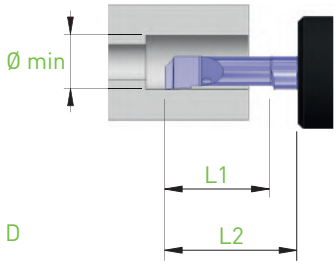


BB4... / BB6...

BAX







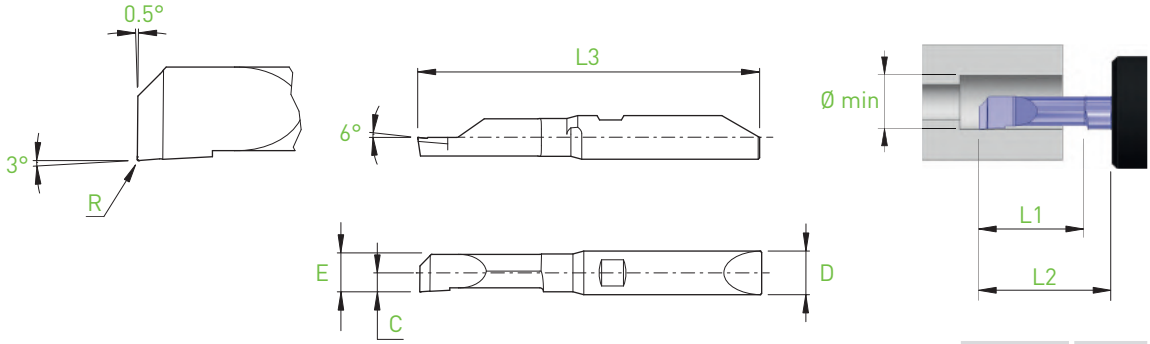
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	**BB4R/L-0515-BAX**	■	■	■	□	□
		0.6	1.8	10	8.5	0.54	0.30	0	32	**BB4R/L-0618-BAX**	■	■	■	□	□
		0.7	2.1	10	8.5	0.63	0.35	0	32	**BB4R/L-0721-BAX**	■	■	■	□	□
		0.8	2.4	10	8.5	0.72	0.40	0	32	**BB4R/L-0824-BAX**	■	■	■	□	□
		0.9	2.7	10	8.5	0.81	0.45	0	32	**BB4R/L-0927-BAX**	■	■	■	□	□
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	**BB4R/L-1030-BAX-R02**	■	■	■	□	□
			5.0	10	8.5	0.90	0.60	0.02	32	**BB4R/L-1050-BAX-R02**	■	■	■	□	□
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	**BB4R/L-1545-BAX-R02**	■	■	■	□	□
			7.5	10	8.5	1.35	0.65	0.02	32	**BB4R/L-1575-BAX-R02**	■	■	■	□	□
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	**BB4R/L-2060-BAX-R02**	■	■	■	□	□
			10.0	15	13.5	1.80	1.15	0.02	37	**BB4R/L-20100-BAX-R02**	■	■	■	□	□
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	**BB4R/L-2575-BAX-R05**	■	■	■	□	□
			12.5	15	13.5	2.25	1.30	0.05	37	**BB4R/L-25125-BAX-R05**	■	■	■	□	□
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	**BB4R/L-3090-BAX-R05**	■	■	■	□	□
			15.0	20	18.5	2.70	1.35	0.05	42	**BB4R/L-30150-BAX-R05**	■	■	■	□	□
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	**BB4R/L-35105-BAX-R05**	■	■	■	□	□
			17.5	20	18.5	3.15	1.60	0.05	42	**BB4R/L-35175-BAX-R05**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	**BB6R/L-40120-BAX-R05**	■	■	■	□	□
			20.0	30	28.5	3.80	2.20	0.05	57	**BB6R/L-40200-BAX-R05**	■	■	■	□	□
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	**BB6R/L-45135-BAX-R05**	■	■	■	□	□
			22.5	30	28.5	4.28	2.30	0.05	57	**BB6R/L-45225-BAX-R05**	■	■	■	□	□
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	**BB6R/L-50150-BAX-R05**	■	■	■	□	□
			25.0	30	28.5	4.75	2.40	0.05	57	**BB6R/L-50250-BAX-R05**	■	■	■	□	□
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	**BB6R/L-55165-BAX-R05**	■	■	■	□	□
			27.5	30	28.5	5.15	2.60	0.05	57	**BB6R/L-55275-BAX-R05**	■	■	■	□	□

Alésage
Ausbohren
Boring

BF4... / BF6...

BAX



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	**BF4R/L-0515-BAX**	■	■	■	□	□
		0.6	1.8	10	8.5	0.54	0.30	0	32	**BF4R/L-0618-BAX**	■	■	■	□	□
		0.7	2.1	10	8.5	0.63	0.35	0	32	**BF4R/L-0721-BAX**	■	■	■	□	□
		0.8	2.4	10	8.5	0.72	0.40	0	32	**BF4R/L-0824-BAX**	■	■	■	□	□
		0.9	2.7	10	8.5	0.81	0.45	0	32	**BF4R/L-0927-BAX**	■	■	■	□	□
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	**BF4R/L-1030-BAX-R02**	■	■	■	□	□
			5.0	10	8.5	0.90	0.60	0.02	32	**BF4R/L-1050-BAX-R02**	■	■	■	□	□
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	**BF4R/L-1545-BAX-R02**	■	■	■	□	□
			7.5	10	8.5	1.35	0.65	0.02	32	**BF4R/L-1575-BAX-R02**	■	■	■	□	□
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	**BF4R/L-2060-BAX-R02**	■	■	■	□	□
			10.0	15	13.5	1.80	1.15	0.02	37	**BF4R/L-20100-BAX-R02**	■	■	■	□	□
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	**BF4R/L-2575-BAX-R05**	■	■	■	□	□
			12.5	15	13.5	2.25	1.30	0.05	37	**BF4R/L-25125-BAX-R05**	■	■	■	□	□
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	**BF4R/L-3090-BAX-R05**	■	■	■	□	□
			15.0	20	18.5	2.70	1.35	0.05	42	**BF4R/L-30150-BAX-R05**	■	■	■	□	□
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	**BF4R/L-35105-BAX-R05**	■	■	■	□	□
			17.5	20	18.5	3.15	1.60	0.05	42	**BF4R/L-35175-BAX-R05**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	**BF6R/L-40120-BAX-R05**	■	■	■	□	□
			20.0	30	28.5	3.80	2.20	0.05	57	**BF6R/L-40200-BAX-R05**	■	■	■	□	□
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	**BF6R/L-45135-BAX-R05**	■	■	■	□	□
			22.5	30	28.5	4.28	2.30	0.05	57	**BF6R/L-45225-BAX-R05**	■	■	■	□	□
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	**BF6R/L-50150-BAX-R05**	■	■	■	□	□
			25.0	30	28.5	4.75	2.40	0.05	57	**BF6R/L-50250-BAX-R05**	■	■	■	□	□
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	**BF6R/L-55165-BAX-R05**	■	■	■	□	□
			27.5	30	28.5	5.15	2.60	0.05	57	**BF6R/L-55275-BAX-R05**	■	■	■	□	□

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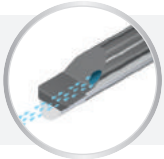
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Alésage-copiage
Ausbohren-kopieren
Boring chambering



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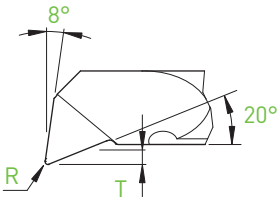

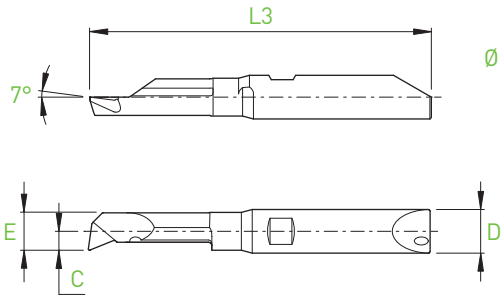

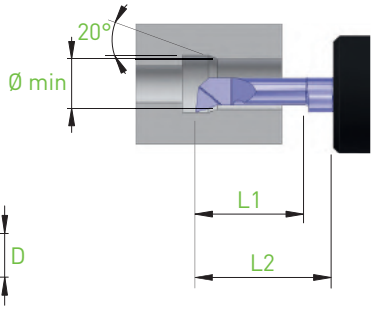

D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M N S)	R ZN (P M N S)	L ZTAF (P M N S)	L ZN (P M N S)
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	**BB4R**/L-1030-BCX-R05	■	■	■	□	□
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	**BB4R**/L-1050-BCX-R05	■	■	■	□	□
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	**BB4R**/L-1545-BCX-R05	■	■	■	□	□
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	**BB4R**/L-1575-BCX-R05	■	■	■	□	□
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	**BB4R**/L-2060-BCX-R05	■	■	■	□	□
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	**BB4R**/L-20100-BCX-R05	■	■	■	□	□
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	**BB4R**/L-2575-BCX-R10	■	■	■	□	□
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	**BB4R**/L-25125-BCX-R10	■	■	■	□	□
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	**BB4R**/L-3090-BCX-R10	■	■	■	□	□
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	**BB4R**/L-30150-BCX-R10	■	■	■	□	□
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	**BB4R**/L-35105-BCX-R10	■	■	■	□	□
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	**BB4R**/L-35175-BCX-R10	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	**BB6R**/L-40120-BCX-R15	■	■	■	□	□
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	**BB6R**/L-40200-BCX-R15	■	■	■	□	□
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	**BB6R**/L-45135-BCX-R15	■	■	■	□	□
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	**BB6R**/L-45225-BCX-R15	■	■	■	□	□
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	**BB6R**/L-50150-BCX-R15	■	■	■	□	□
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	**BB6R**/L-50250-BCX-R15	■	■	■	□	□
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	**BB6R**/L-55165-BCX-R15	■	■	■	□	□
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	**BB6R**/L-55275-BCX-R15	■	■	■	□	□

Alésage-copiage
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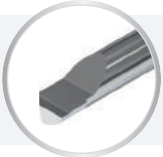

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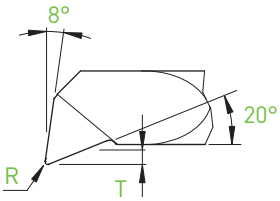

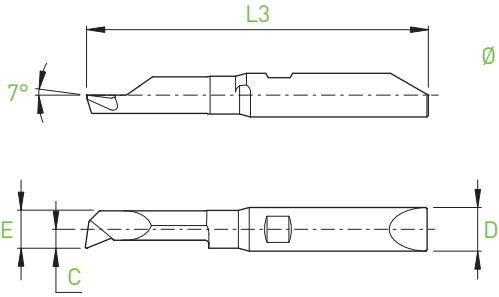

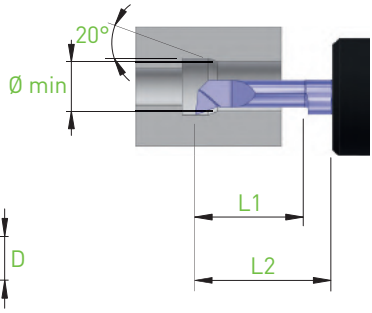

D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	**BF4R/L-1030-BCX-R05**	■	■	■	□	□
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	**BF4R/L-1050-BCX-R05**	■	■	■	□	□
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	**BF4R/L-1545-BCX-R05**	■	■	■	□	□
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	**BF4R/L-1575-BCX-R05**	■	■	■	□	□
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	**BF4R/L-2060-BCX-R05**	■	■	■	□	□
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	**BF4R/L-20100-BCX-R05**	■	■	■	□	□
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	**BF4R/L-2575-BCX-R10**	■	■	■	□	□
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	**BF4R/L-25125-BCX-R10**	■	■	■	□	□
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	**BF4R/L-3090-BCX-R10**	■	■	■	□	□
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	**BF4R/L-30150-BCX-R10**	■	■	■	□	□
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	**BF4R/L-35105-BCX-R10**	■	■	■	□	□
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	**BF4R/L-35175-BCX-R10**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	**BF6R/L-40120-BCX-R15**	■	■	■	□	□
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	**BF6R/L-40200-BCX-R15**	■	■	■	□	□
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	**BF6R/L-45135-BCX-R15**	■	■	■	□	□
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	**BF6R/L-45225-BCX-R15**	■	■	■	□	□
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	**BF6R/L-50150-BCX-R15**	■	■	■	□	□
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	**BF6R/L-50250-BCX-R15**	■	■	■	□	□
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	**BF6R/L-55165-BCX-R15**	■	■	■	□	□
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	**BF6R/L-55275-BCX-R15**	■	■	■	□	□

■ = disponible / verfügbar / available
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Copiage
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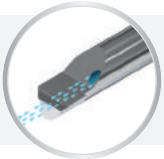

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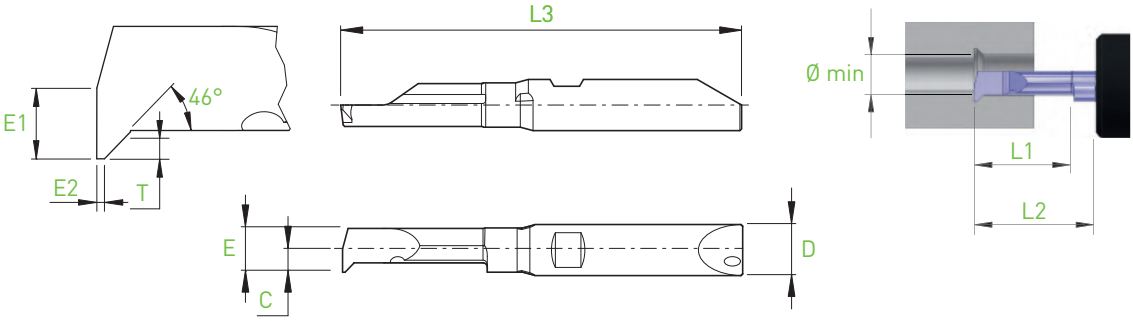

D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	E1	C	E2	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	**BB4R/L-0306-C45-E03**	■	■	■	□	□
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	**BB4R/L-0408-C45-E03**	■	■	■	□	□
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	**BB4R/L-0510-C45-E03**	■	■	■	□	□
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	**BB4R/L-0612-C45-E03**	■	■	■	□	□
		0.7	1.2	10	8.5	0.12	0.63	0.32	0.35	0.03	32	**BB4R/L-0714-C45-E03**	■	■	■	□	□
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	**BB4R/L-0816-C45-E05**	■	■	■	□	□
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	**BB4R/L-0918-C45-E05**	■	■	■	□	□
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	**BB4R/L-1030-C45-E10**	■	■	■	□	□
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	**BB4R/L-1236-C45-E10**	■	■	■	□	□ new
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	**BB4R/L-1545-C45-E10**	■	■	■	□	□
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	**BB4R/L-2060-C45-E20**	■	■	■	□	□
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	**BB4R/L-2575-C45-E20**	■	■	■	□	□
		3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	**BB4R/L-3090-C45-E30**	■	■	■	□	□
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	**BB4R/L-35105-C45-E30**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	**BB6R/L-40120-C45-E40**	■	■	■	□	□
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	**BB6R/L-50150-C45-E50**	■	■	■	□	□

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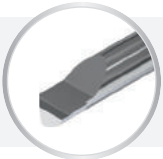

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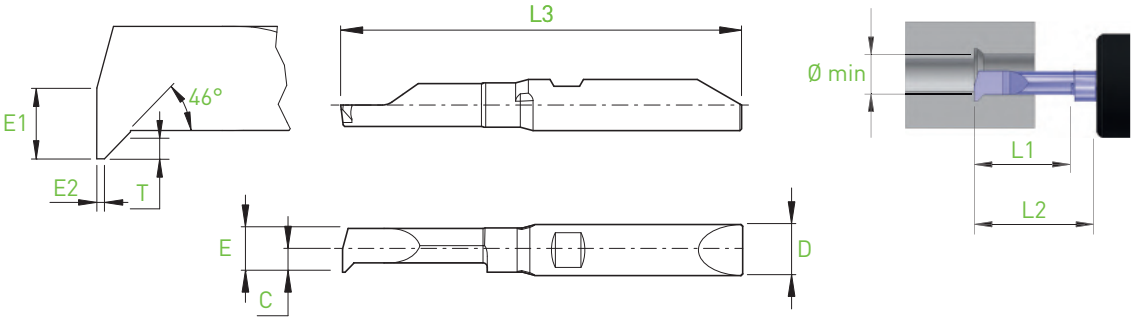

D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	E1	C	E2	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	**BF4R/L-0306-C45-E03**	■	■	■	□	□
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	**BF4R/L-0408-C45-E03**	■	■	■	□	□
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	**BF4R/L-0510-C45-E03**	■	■	■	□	□
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	**BF4R/L-0612-C45-E03**	■	■	■	□	□
		0.7	1.2	10	8.5	0.12	0.63	0.32	0.35	0.03	32	**BF4R/L-0714-C45-E03**	■	■	■	□	□
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	**BF4R/L-0816-C45-E05**	■	■	■	□	□
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	**BF4R/L-0918-C45-E05**	■	■	■	□	□
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	**BF4R/L-1030-C45-E10**	■	■	■	□	□
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	**BF4R/L-1236-C45-E10**	■	■	■	□	□ new
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	**BF4R/L-1545-C45-E10**	■	■	■	□	□
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	**BF4R/L-2060-C45-E20**	■	■	■	□	□
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	**BF4R/L-2575-C45-E20**	■	■	■	□	□
		3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	**BF4R/L-3090-C45-E30**	■	■	■	□	□
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	**BF4R/L-35105-C45-E30**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	E1	C	E2	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	**BF6R/L-40120-C45-E40**	■	■	■	□	□
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	**BF6R/L-50150-C45-E50**	■	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

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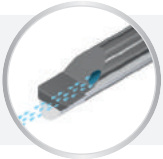

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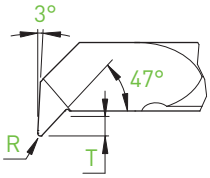
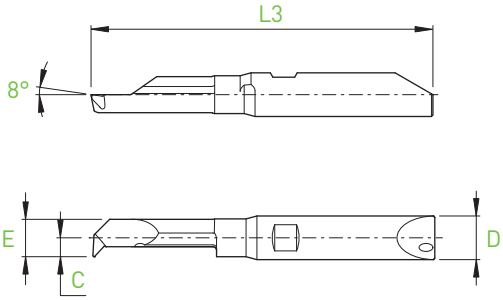
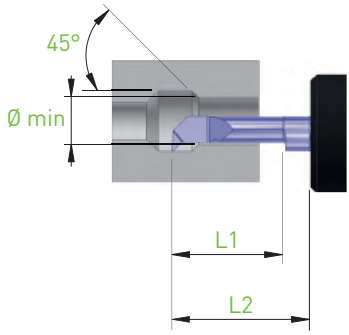


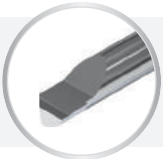




D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	**BB4R/L-2575-C45X-R10**	■	■	■	□	□
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	**BB4R/L-25125-C45X-R10**	■	■	■	□	□
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	**BB4R/L-3090-C45X-R10**	■	■	■	□	□
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	**BB4R/L-30150-C45X-R10**	■	■	■	□	□
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	**BB4R/L-35105-C45X-R10**	■	■	■	□	□
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	**BB4R/L-35175-C45X-R10**	■	■	■	□	□

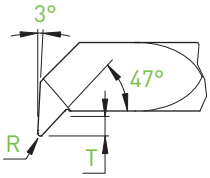
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	**BB6R/L-40120-C45X-R15**	■	■	■	□	□
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	**BB6R/L-40200-C45X-R15**	■	■	■	□	□
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	**BB6R/L-45135-C45X-R15**	■	■	■	□	□
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	**BB6R/L-45225-C45X-R15**	■	■	■	□	□
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	**BB6R/L-50150-C45X-R15**	■	■	■	□	□
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	**BB6R/L-50250-C45X-R15**	■	■	■	□	□
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	**BB6R/L-55165-C45X-R15**	■	■	■	□	□
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	**BB6R/L-55275-C45X-R15**	■	■	■	□	□

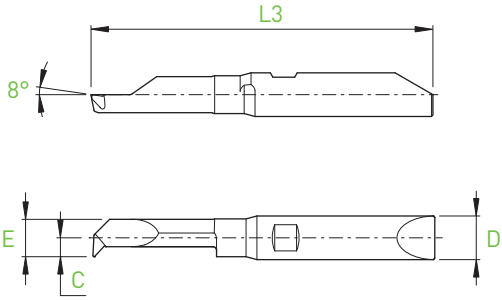
Copiage
Kopieren
Chambering

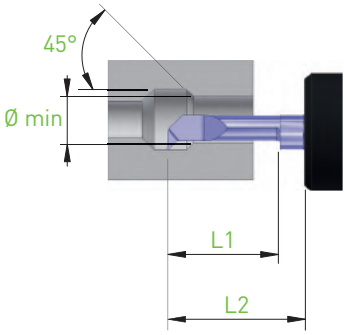


BF4... / BF6...

C45X





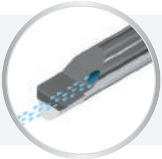


D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	**BF4R/L-2575-C45X-R10**	■	■	■	□	□
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	**BF4R/L-25125-C45X-R10**	■	■	■	□	□
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	**BF4R/L-3090-C45X-R10**	■	■	■	□	□
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	**BF4R/L-30150-C45X-R10**	■	■	■	□	□
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	**BF4R/L-35105-C45X-R10**	■	■	■	□	□
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	**BF4R/L-35175-C45X-R10**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	**BF6R/L-40120-C45X-R15**	■	■	■	□	□
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	**BF6R/L-40200-C45X-R15**	■	■	■	□	□
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	**BF6R/L-45135-C45X-R15**	■	■	■	□	□
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	**BF6R/L-45225-C45X-R15**	■	■	■	□	□
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	**BF6R/L-50150-C45X-R15**	■	■	■	□	□
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	**BF6R/L-50250-C45X-R15**	■	■	■	□	□
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	**BF6R/L-55165-C45X-R15**	■	■	■	□	□
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	**BF6R/L-55275-C45X-R15**	■	■	■	□	□

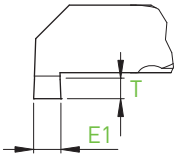
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

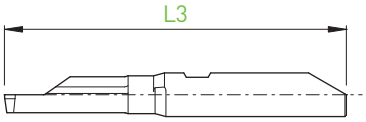
Gorge
Einstechen
Grooving

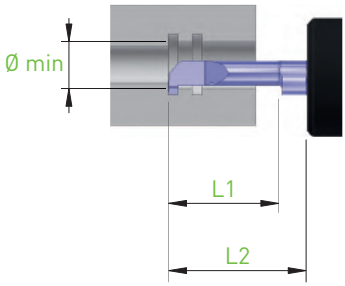


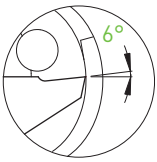
BB4... / BB6...

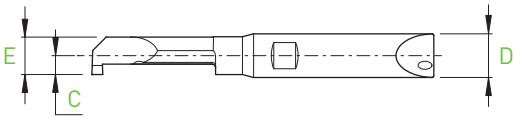
GX







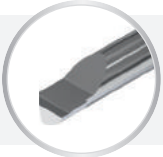




D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	0.50	0.60	2.70	1.45	37	BB4R/L-3090-G050X	■	■	■	□	□
			15.0	20	18.5	0.50	0.60	2.70	1.45	42	BB4R/L-30150-G050X	■	■	■	□	□
		3.5	10.5	15	13.5	0.75	0.70	3.15	1.60	37	BB4R/L-35105-G075X	■	■	■	□	□
			17.5	20	18.5	0.75	0.70	3.15	1.60	42	BB4R/L-35175-G075X	■	■	■	□	□

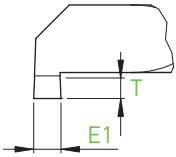
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	2.20	47	BB6R/L-40120-G100X	■	■	■	□	□
			20.0	30	28.5	1.00	0.80	3.80	2.20	57	BB6R/L-40200-G100X	■	■	■	□	□
		4.5	13.5	20	18.5	1.00	0.90	4.28	2.40	47	BB6R/L-45135-G100X	■	■	■	□	□
						1.50					BB6R/L-45135-G150X	■	■	■	□	□
			22.5	30	28.5	1.00	0.90	4.28	2.40	57	BB6R/L-45225-G100X	■	■	■	□	□
						1.50					BB6R/L-45225-G150X	■	■	■	□	□
		5.0	15.0	20	18.5	1.00	1.00	4.75	2.50	47	BB6R/L-50150-G100X	■	■	■	□	□
						1.50					BB6R/L-50150-G150X	■	■	■	□	□
			25.0	30	28.5	1.00	1.00	4.75	2.50	57	BB6R/L-50250-G100X	■	■	■	□	□
						1.50					BB6R/L-50250-G150X	■	■	■	□	□
		5.5	16.5	20	18.5	1.00	1.10	5.15	2.60	47	BB6R/L-55165-G100X	■	■	■	□	□
						1.50					BB6R/L-55165-G150X	■	■	■	□	□
						2.00					BB6R/L-55165-G200X	■	■	■	□	□
			27.5	30	28.5	1.00	1.10	5.15	2.60	57	BB6R/L-55275-G100X	■	■	■	□	□
						1.50					BB6R/L-55275-G150X	■	■	■	□	□
						2.00					BB6R/L-55275-G200X	■	■	■	□	□

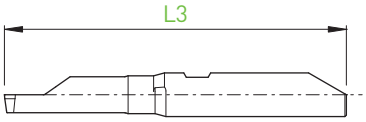
Gorge
Einstechen
Grooving

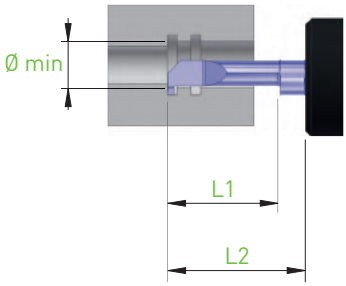


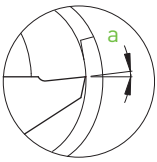
BF4... / BF6...

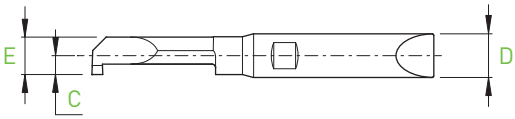
GX









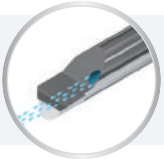


D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	a	C	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)	
4	BH4... BHS4... BHY4... BHK4...	0.5	1.0	10	8.5	0.15	0.10	0.45	3°	0.25	32	BF4R/L-0510-G015X	■	■	■	□	□	new
		0.7	1.4	10	8.5	0.20	0.14	0.63		0.35	32	BF4R/L-0714-G020X	■	■	■	□	□	new
		1.0	2.0	10	8.5	0.30	0.20	0.90		0.60	32	BF4R/L-1020-G030X	■	■	■	□	□	new
		1.5	3.0	10	8.5	0.40	0.30	1.35	6°	0.80	32	BF4R/L-1530-G040X	■	■	■	□	□	new
		2.0	6.0	10	8.5	0.40	0.40	1.80		1.15	32	BF4R/L-2060-G040X	■	■	■	□	□	new
		2.5	7.5	10	8.5	0.50	0.50	2.25		1.15	32	BF4R/L-2575-G050X	■	■	■	□	□	new
		3.0	9.0	15	13.5	0.50	0.60	2.70		1.45	37	BF4R/L-3090-G050X	■	■	■	□	□	
			15.0	20	18.5	0.50	0.60	2.70		1.45	42	BF4R/L-30150-G050X	■	■	■	□	□	
		3.5	10.5	15	13.5	0.75	0.70	3.15		1.60	37	BF4R/L-35105-G075X	■	■	■	□	□	
			17.5	20	18.5	0.75	0.70	3.15		1.60	42	BF4R/L-35175-G075X	■	■	■	□	□	

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	a	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	6°	2.20	47	BF6R/L-40120-G100X	■	■	■	□	□
			20.0	30	28.5	1.00	0.80	3.80		2.20	57	BF6R/L-40200-G100X	■	■	■	□	□
		4.5	13.5	20	18.5	1.00	0.90	4.28		2.40	47	BF6R/L-45135-G100X	■	■	■	□	□
						1.50						BF6R/L-45135-G150X	■	■	■	□	□
			22.5	30	28.5	1.00	0.90	4.28		2.40	57	BF6R/L-45225-G100X	■	■	■	□	□
						1.50						BF6R/L-45225-G150X	■	■	■	□	□
		5.0	15.0	20	18.5	1.00	1.00	4.75		2.50	47	BF6R/L-50150-G100X	■	■	■	□	□
						1.50						BF6R/L-50150-G150X	■	■	■	□	□
			25.0	30	28.5	1.00	1.00	4.75		2.50	57	BF6R/L-50250-G100X	■	■	■	□	□
						1.50						BF6R/L-50250-G150X	■	■	■	□	□
		5.5	16.5	20	18.5	1.00	1.10	5.15		2.60	47	BF6R/L-55165-G100X	■	■	■	□	□
						1.50						BF6R/L-55165-G150X	■	■	■	□	□
						2.00						BF6R/L-55165-G200X	■	■	■	□	□
			27.5	30	28.5	1.00	1.10	5.15		2.60	57	BF6R/L-55275-G100X	■	■	■	□	□
						1.50						BF6R/L-55275-G150X	■	■	■	□	□
						2.00						BF6R/L-55275-G200X	■	■	■	□	□

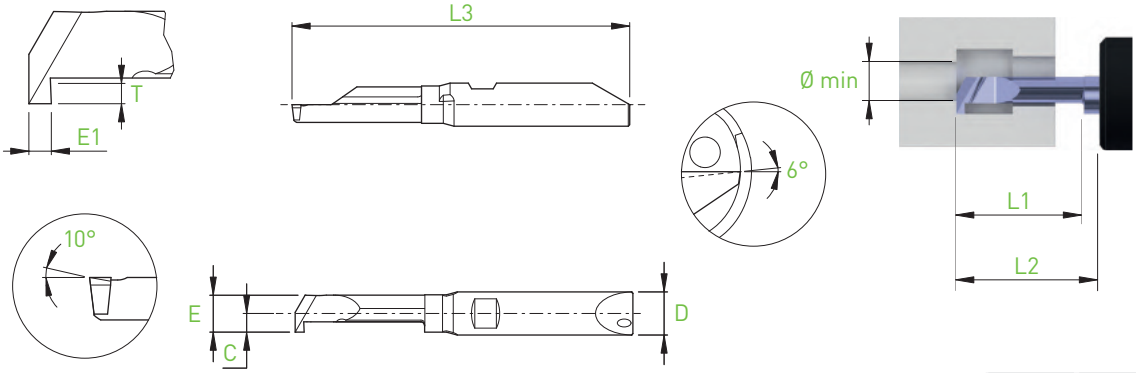
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Fonçage-tournage
Einstechen und drehen
Grooving and turning



BB4... / BB6...

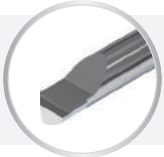
GTX



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	**BB4R/L-3090-GT100X**	■	■	■	□	□
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	**BB4R/L-30150-GT100X**	■	■	■	□	□
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	**BB4R/L-35105-GT100X**	■	■	■	□	□
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	**BB4R/L-35175-GT100X**	■	■	■	□	□

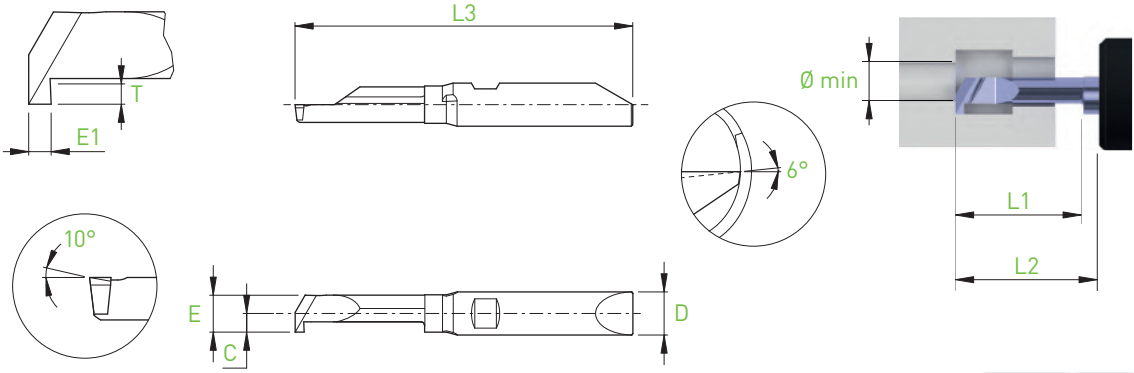
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	**BB6R/L-40140-GT125X**	■	■	■	□	□
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	**BB6R/L-40220-GT125X**	■	■	■	□	□
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	**BB6R/L-45160-GT125X**	■	■	■	□	□
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	**BB6R/L-45250-GT125X**	■	■	■	□	□
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	**BB6R/L-50175-GT125X**	■	■	■	□	□
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	**BB6R/L-50275-GT125X**	■	■	■	□	□
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	**BB6R/L-55175-GT125X**	■	■	■	□	□
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	**BB6R/L-55275-GT125X**	■	■	■	□	□

Fonçage-tournage
Einstechen und drehen
Grooving and turning



BF4... / BF6...

GTX



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	R ZTAF (P M N S)	R ZTAXF (P M S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	**BF4R/L-3090-GT100X**	■	■	■	□	□
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	**BF4R/L-30150-GT100X**	■	■	■	□	□
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	**BF4R/L-35105-GT100X**	■	■	■	□	□
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	**BF4R/L-35175-GT100X**	■	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	**BF6R/L-40140-GT125X**	■	■	■	□	□
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	**BF6R/L-40220-GT125X**	■	■	■	□	□
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	**BF6R/L-45160-GT125X**	■	■	■	□	□
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	**BF6R/L-45250-GT125X**	■	■	■	□	□
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	**BF6R/L-50175-GT125X**	■	■	■	□	□
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	**BF6R/L-50275-GT125X**	■	■	■	□	□
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	**BF6R/L-55175-GT125X**	■	■	■	□	□
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	**BF6R/L-55275-GT125X**	■	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

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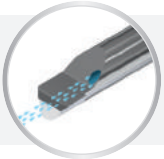
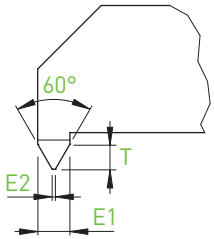
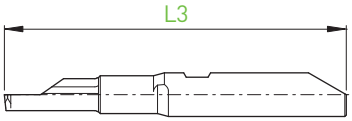
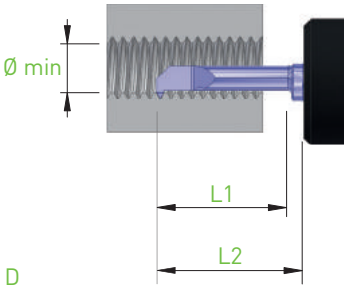


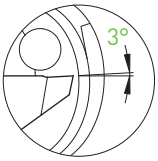
BB4... / BB6...

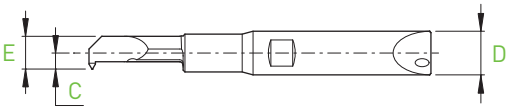
TP60











D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R ZTAF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	**BB4R/L-1232-TP60**	■	■	□	□
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	**BB4R/L-1640-TP60**	■	■	□	□
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	**BB4R/L-2560-TP60**	■	■	□	□
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	**BB4R/L-2590-TP60**	■	■	□	□
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BB4R/L-3380-TP60**	■	■	□	□
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BB4R/L-33120-TP60**	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BB6R/L-42100-TP60**	■	■	□	□
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BB6R/L-42150-TP60**	■	■	□	□
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BB6R/L-50120-TP60**	■	■	□	□
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BB6R/L-50180-TP60**	■	■	□	□

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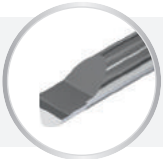
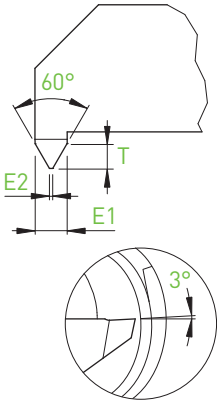
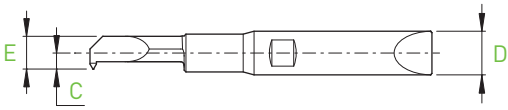
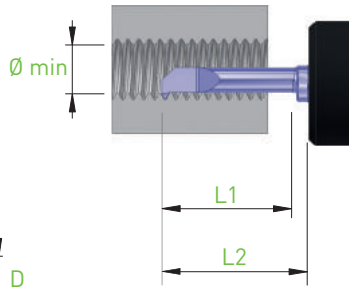


BF4... / BF6...

TP60







D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R ZTAF (P M N S)	R ZN (P N S)	L ZTAF (P M N S)	L ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	**BF4R/L-1232-TP60**	■	■	□	□
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	**BF4R/L-1640-TP60**	■	■	□	□
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	**BF4R/L-2560-TP60**	■	■	□	□
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	**BF4R/L-2590-TP60**	■	■	□	□
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BF4R/L-3380-TP60**	■	■	□	□
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	**BF4R/L-33120-TP60**	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BF6R/L-42100-TP60**	■	■	□	□
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	**BF6R/L-42150-TP60**	■	■	□	□
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BF6R/L-50120-TP60**	■	■	□	□
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	**BF6R/L-50180-TP60**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

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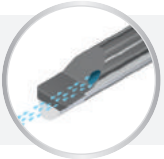
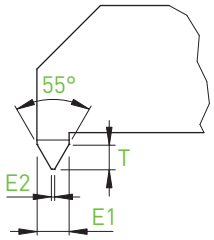
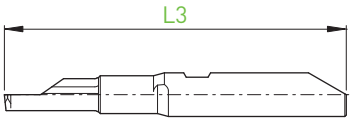
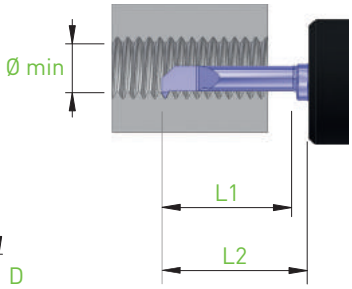


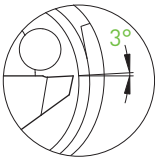
BB4... / BB6...

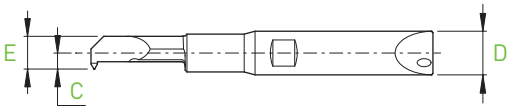
TP55











D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	Art. N°	R ZTAF	R ZN	L ZTAF	L ZN
														P M N S	P N S	P M N S	P N S
4	BH4... BHS4... BHY4... BHK4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	**BB4R/L-1845-TP55**	■	■	□	□
		2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	**BB4R/L-2560-TP55**	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	**BB6R/L-37110-TP55**	■	■	□	□
		5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	**BB6R/L-51150-TP55**	■	■	□	□
		5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	**BB6R/L-55160-TP55**	■	■	□	□

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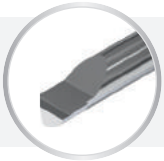
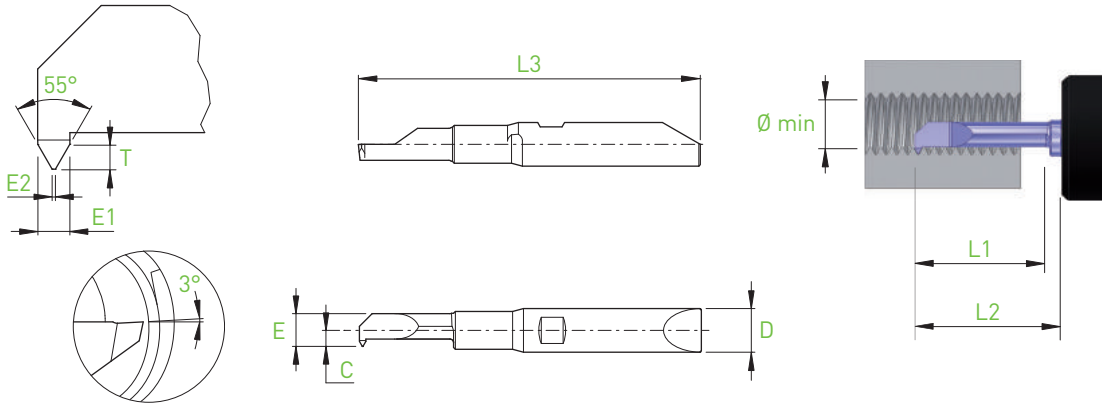


BF4... / BF6...

TP55



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	Art. N°	R ZTAF	R ZN	L ZTAF	L ZN
														P M N S	P N S	P M N S	P N S
4	BH4... BHS4... BHY4... BHK4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	**BF4R/L-1845-TP55**	■	■	□	□
		2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	**BF4R/L-2560-TP55**	■	■	□	□

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (TPI)	E1	E2 (0/-0.02)	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	**BF6R/L-37110-TP55**	■	■	□	□
		5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	**BF6R/L-51150-TP55**	■	■	□	□
		5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	**BF6R/L-55160-TP55**	■	■	□	□

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

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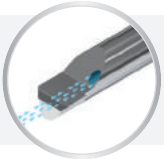
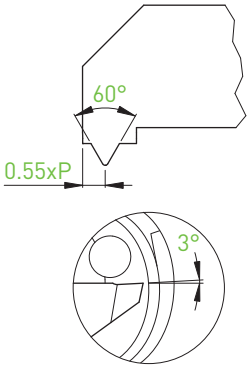
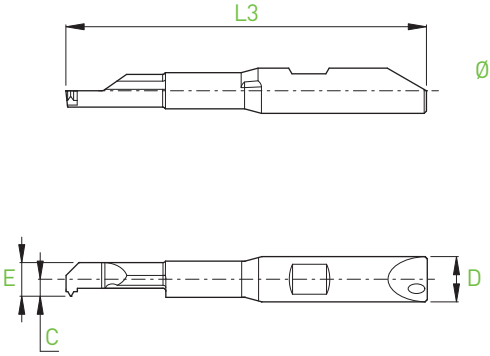


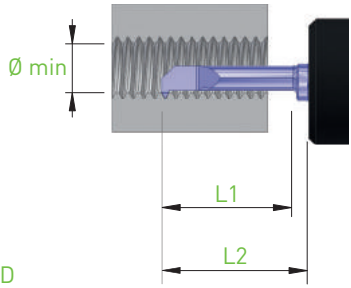
BB4... / BB6...

TM

Profil complet métrique
Metrisches Vollprofil
Metric full profile





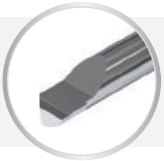


R

D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	ZTAF (P M N S)	ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	**BB4R-2560-TM-0.50**	■	■
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	**BB4R-3380-TM-0.70**	■	■

D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	**BB6R-42100-TM-0.80**	■	■
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	**BB6R-50120-TM-1.00**	■	■

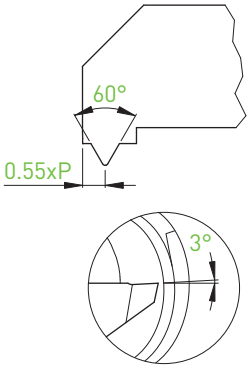
Filetage
Gewindedrehen
Threading

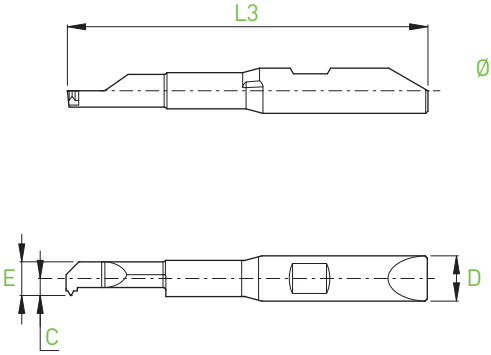


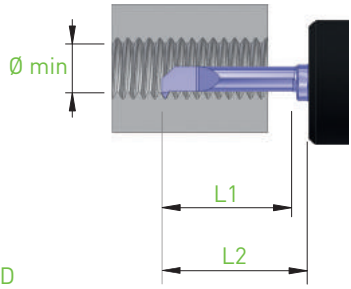
BF4... / BF6...

TM

Profil complet métrique
Metrisches Vollprofil
Metric full profile







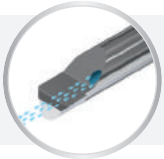
R

D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	ZTAF (P M N S)	ZN (P N S)
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	**BF4R-2560-TM-0.50**	■	■
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	**BF4R-3380-TM-0.70**	■	■

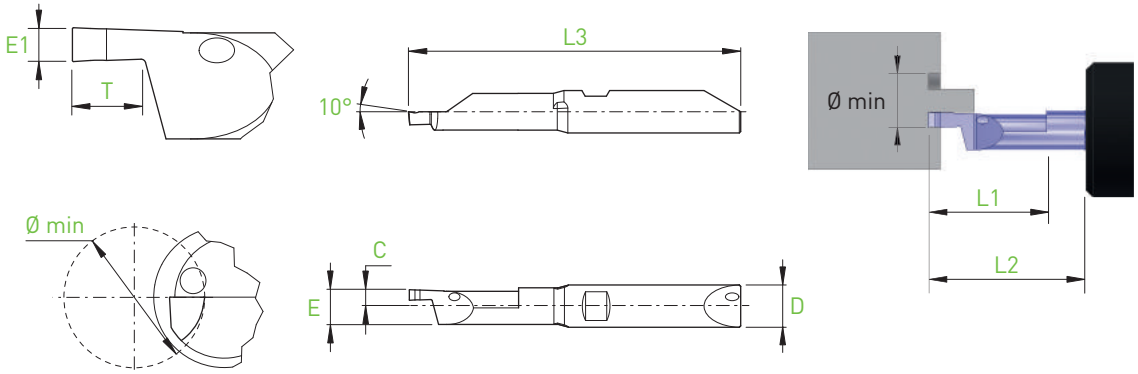
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	**BF6R-42100-TM-0.80**	■	■
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	**BF6R-50120-TM-1.00**	■	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Gorge frontale extérieure
Aussen axiales stechen
External axial grooving

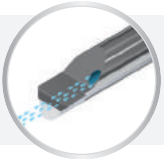


BB6... **FEG**



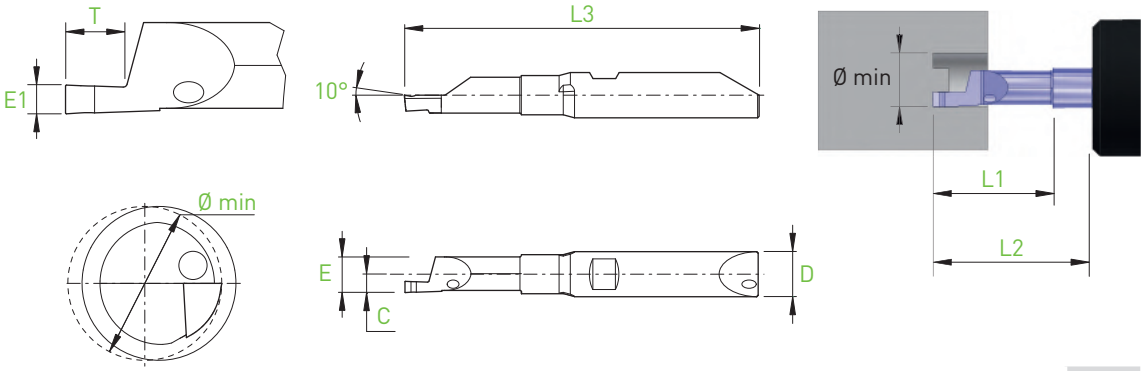
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	E1	L3	Art. N°	R ZTAF (P M N S)	R ZN (P N S)
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.90	2.30	1.50	47	**BB6R-50150-FEG150X**	■	■

Gorge frontale intérieure
Innen axiales stechen
Internal axial grooving



BB6...

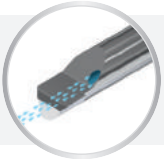
FIG



D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	E1	L3	Art. N°	R ZTAF (P M N S)	R ZN (P N S)
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.75	2.45	1.50	47	**BB6R-50150-FIG150X**	■	■

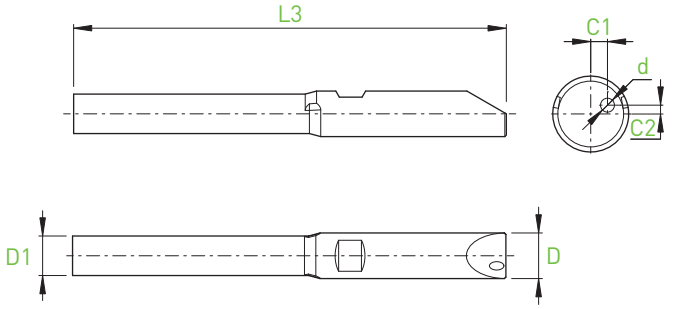
■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

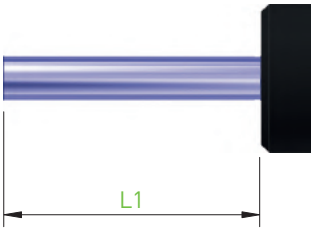
Ébauches avec arrosage
Rohlinge mit Kühlung
Blanks with coolant



BB4... / BB6...

BB_E

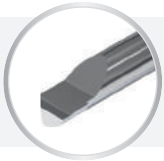




D h5	Holder	L1 BH4... BHY4...	L1 BHS4... BHK4...	D1	C1	C2	d	L3	Art. N°	ZN
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	0.84	0.55	0.85	42	**BB4R-E42**	■

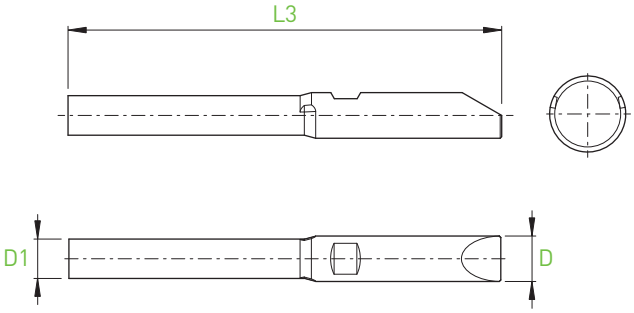
D h5	Holder	L1 BH6... BHY6...	L1 BHS6... BHK6...	D1	C1	C2	d	L3	Art. N°	ZN
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	1.33	0.70	1.10	57	**BB6R-E57**	■

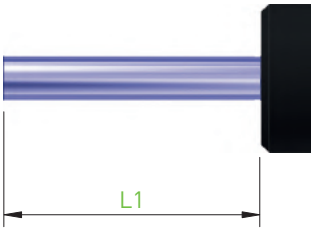
Ébauches
Rohlinge
Blanks



BF4... / BF6...

BF_E





D h5	Holder	**L1** BH4... BHY4...	**L1** BHS4... BHK4...	D1	L3	**Art. N°**	ZN
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	42	**BF4-E42**	■

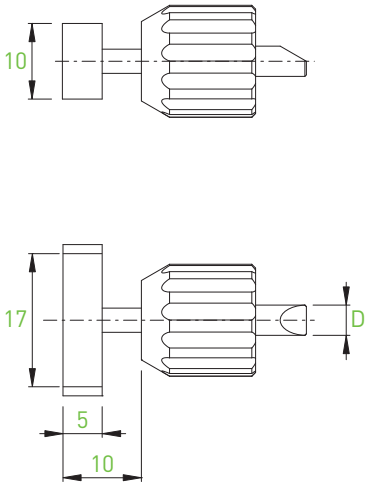
D h5	Holder	**L1** BH6... BHY6...	**L1** BHS6... BHK6...	D1	L3	**Art. N°**	ZN
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	57	**BF6-E57**	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

Jauges d'alignement
Richtplatten
Adjusting tools

MASTER

BH4 / BH6

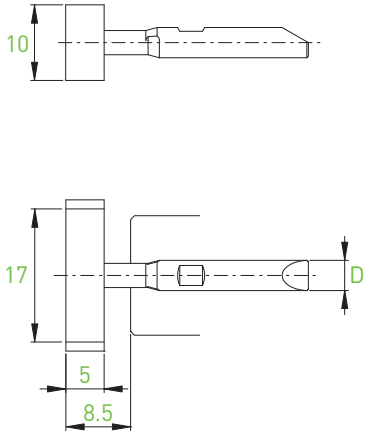


D h5	Art. N°	
4	BH4-MASTER	■
6	BH6-MASTER	■

Jauges d'alignement
Richtplatten
Adjusting tools

MASTER

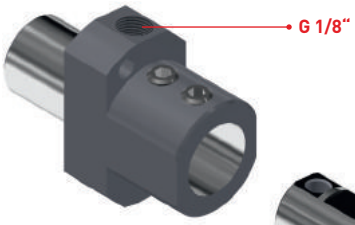
BHSY...

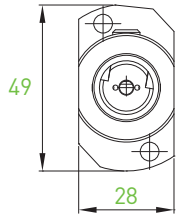


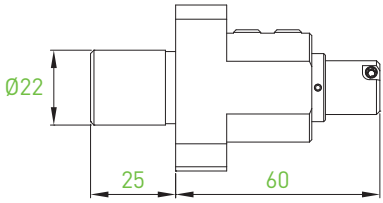
D h5	Art. N°	
4	BHSY4-MASTER	■
6	BHSY6-MASTER	■

Porte-outils avec arrosage pour contre-opération - Machines STAR
Halter mit Kühlungssystem für Gegenbearbeitung – STAR-Maschinen
Backworking holders with through coolant – STAR-Machines

BH4 / BH6
BHS4 / BHS6



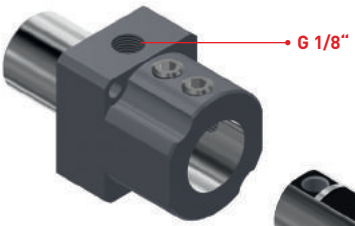


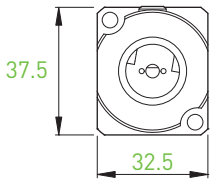


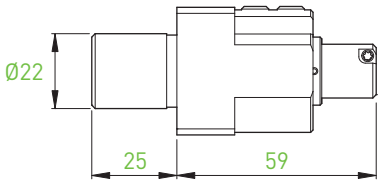
Art. N°
BWD1-2022-STAR-SRR

Art. N°
BHS4-D20-55-BWD1
BHS6-D20-55-BWD1

Types of STAR machines
SR10J (T22+T24)
SB16/20 Types C + D + E (T21-T24)
SB20R Types E + G + N (T21-T24)
SR20J / JN (T21-T24)
SR20R / II / III (T21-T24)
SR20R IV (T21-T24)
SR32J/JN (T21-T24)
SW12RII (T21-T24)
SV20R (T21-T24)
ECAS12/20 (T21-T24)
SW20 (T21-T23)







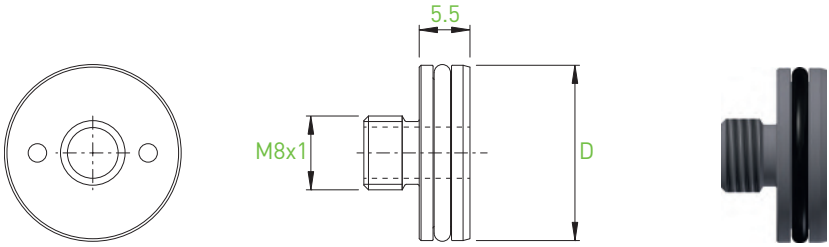
Art. N°
BWD1-2022-STAR-SW

Art. N°
BHS4-D20-55-BWD1
BHS6-D20-55-BWD1

Types of STAR machines
SW12RII (T21-T28)
SW20 (T21-T23 + T25-T27)
SV20R (T21-T28)
SR-20R IV (T21-T28)
SB12/20R (T22-T24)
SR38 (T21-T28)

Bagues d'étanchéité
Dichtungsringe
Sealing rings

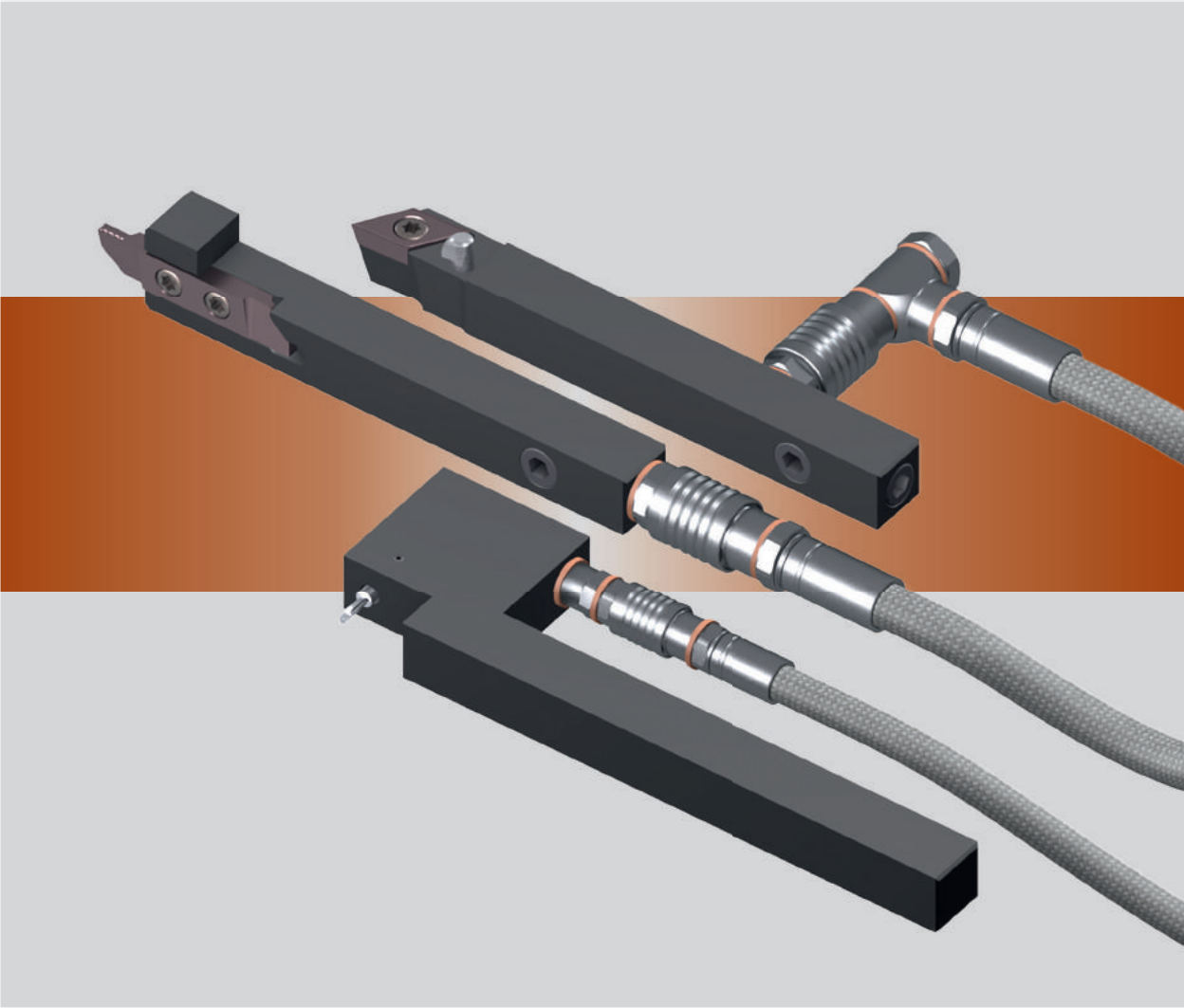
JB



D	Art. N°	
19.05	JB-M8X1-D19.05	■
20	JB-M8X1-D20	■
22	JB-M8X1-D22	■
25	JB-M8X1-D25	■
25.4	JB-M8X1-D25.4	■

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending the stock availability

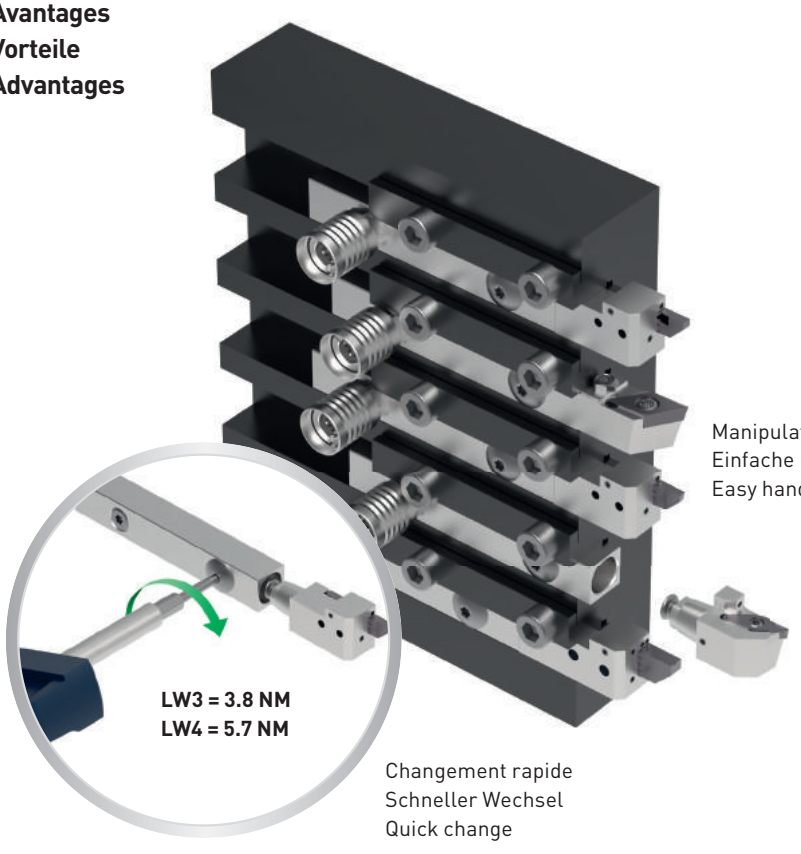
JET-LINE



DISCOVER JET-LINE IN CHAPTER 16!

APPLITEC

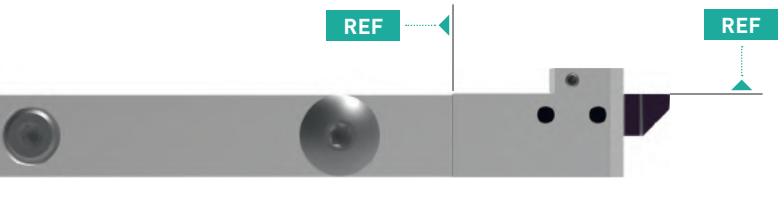
Avantages
Vorteile
Advantages



Manipulation facilitée
Einfache Handhabung
Easy handling

Changement rapide
Schneller Wechsel
Quick change

Lubrification intégrée
Integrierte Kühlung
Integrated coolant

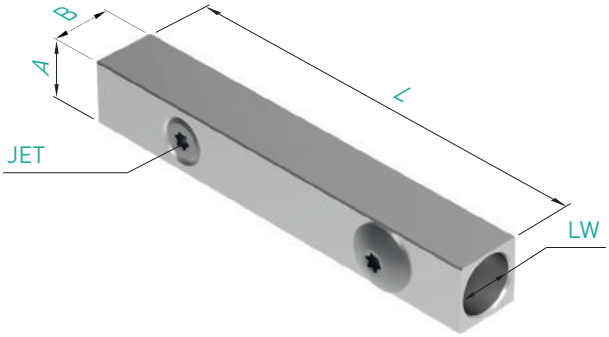


Excellente répétitivité
Ausgezeichnete Wiederholgenauigkeit
Excellent repeatability

Index

Désignations - Carrés
Bezeichnungen - Quadrat
Designation - Square

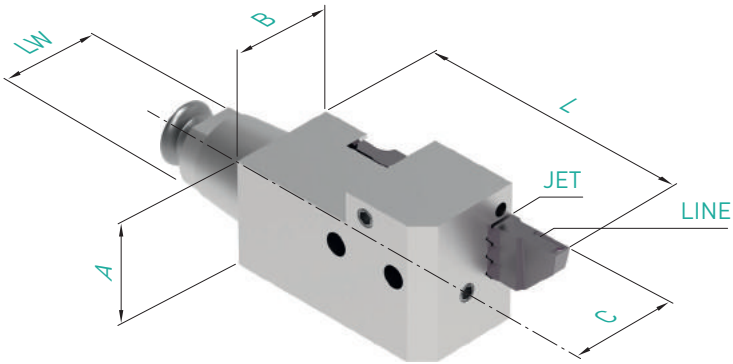
INFO



LW	A x B	L	JET
Interface	Section	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Désignations - Têtes interchangeables
Bezeichnungen - Wechselköpfe
Designation - Interchangeable heads

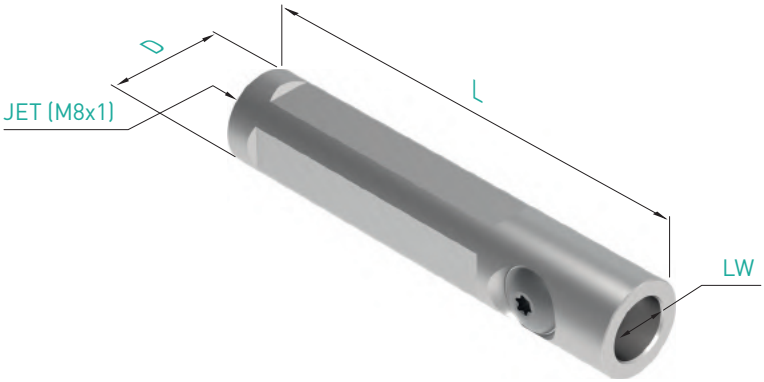
INFO



LW	LINE	A x B	C	L	JET
Interface	Serie	Section	Localisation axe Achselokalisation Axis location	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Désignations - Cylindres
Bezeichnungen - Zylinder
Designations - Cylinder

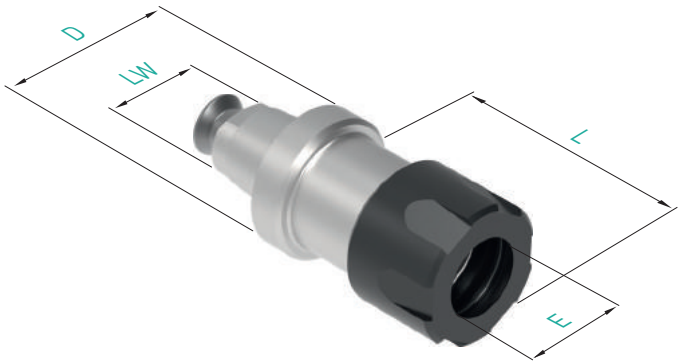
INFO



LW	D	L	JET
Interface	Ø	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Désignations - Têtes porte-pinces
Bezeichnungen - Spannzangenköpfe
Designation - Gripper holder heads

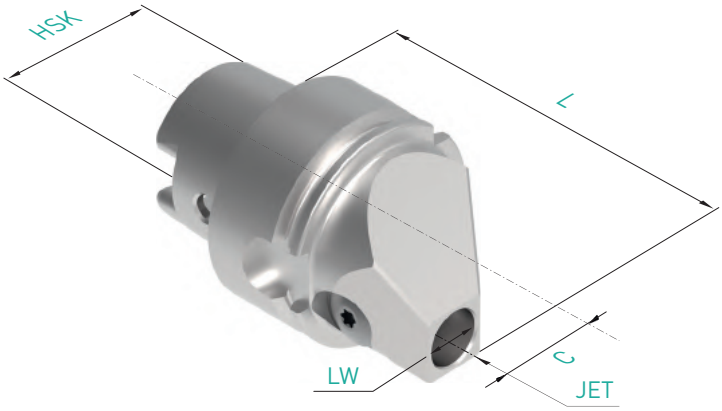
INFO



LW	E	D	L
Interface	Pince type Spannzange Typ Gripper type	Ø	Longueur Länge Length

Désignations - HSK
Bezeichnungen - HSK
Designation - HSK

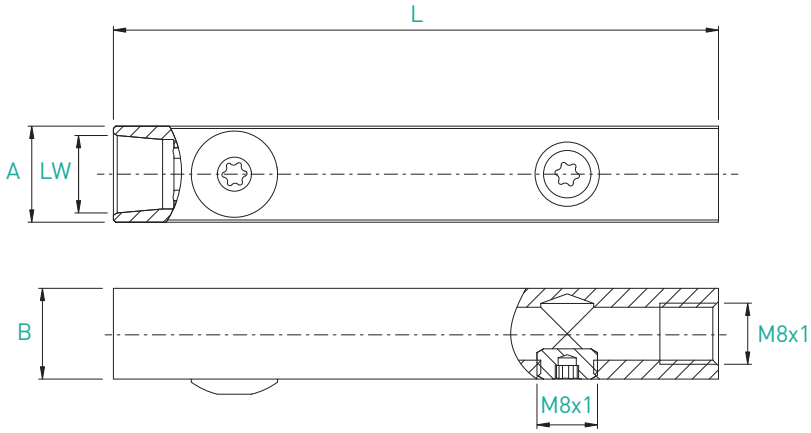
INFO

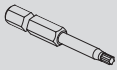


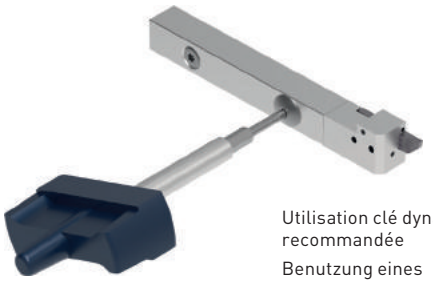
HSK	LW	C	L	JET	X
Machine interface	Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface	Localisation axe Achsellokalisation Axis location LW	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant	Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer

Supports carrés
Viereckige Halter
Square holders

LW-JET



				Pièces rechanges Ersatzteile Spare parts		Options	
							
LW	A x B	L	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
LW3	12x12	80	**LW3-1212-80-JET**	**JB-M8X1**	**LW3-ER1.012.014**	**CD-NM3.8**	**TX15-E6.3**
LW3	12.7x12	80	**LW3-12.7-80-JET**				
LW4	15.87x16	80	**LW4-15.87-80-JET**	**JB-M8X1**	**LW4-ER1.014.019**	**CD-NM5.7**	**TX20-E6.3**
LW4	16x16	80	**LW4-1616-80-JET**				



Utilisation clé dynamométrique recommandée

Benutzung eines Drehmomentschlüssel empfohlen

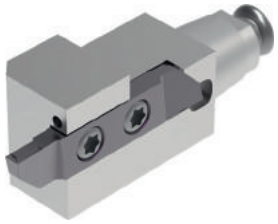
Recommended use of dynamometric key

Options	
	Art. N°
	M8X1
	voir JET-LINE siehe JET-LINE see JET-LINE

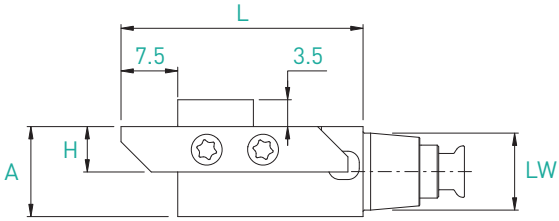
Têtes interchangeables
Wechselköpfe
Interchangeable heads

TOP-Line

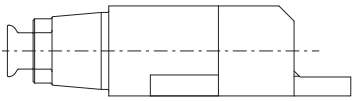
LW-730/740-JET

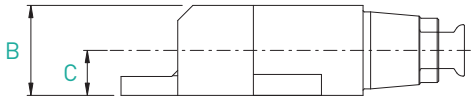


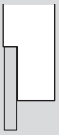
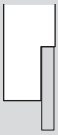
R

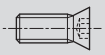
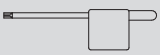


L





Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
73_-74_	LW3	12x12	6	6	32	**LW3-730-12-0632-JET**	**LW3-740-12-0632-JET**
	LW4	16x16	8	8	32	**LW4-730-16-0832-JET**	**LW4-740-16-0832-JET**

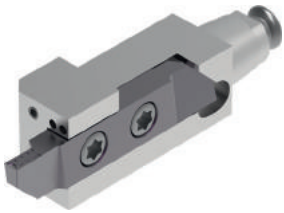
Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW3	**V-M3X7-T8**	**C-T8**	**LW3-U00.ER1.000**
	LW4			**LW4-U00.ER1.000**

SWITCH-LINE

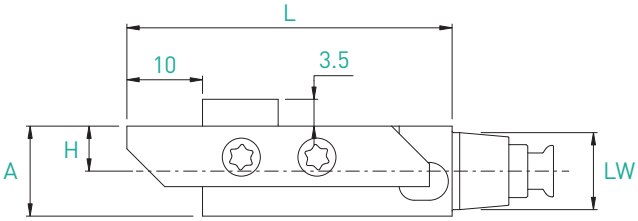
Têtes interchangeables
Wechselköpfe
Interchangeable heads

TOP-Line

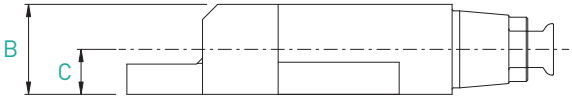
LW-750/760-JET

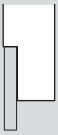


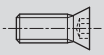
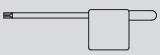
R



L



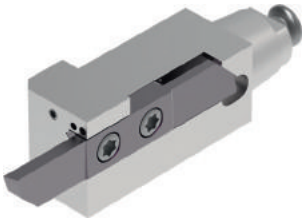
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
75_-76_	LW3	12x12	6	6	43	**LW3-750-12-0643-JET**	**LW3-760-12-0643-JET**
	LW4	16x16	8	8	43	**LW4-750-16-0843-JET**	**LW4-760-16-0843-JET**

Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW3	**V-M4X9-T15**	**C-T15**	**LW3-U00.ER1.000**
	LW4			**LW4-U00.ER1.000**

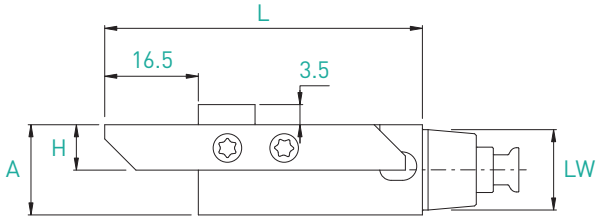
Têtes interchangeables
Wechselköpfe
Interchangeable heads

TOP-Line

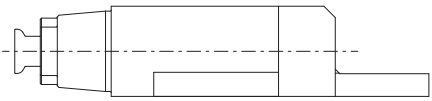
LW-770/780-JET

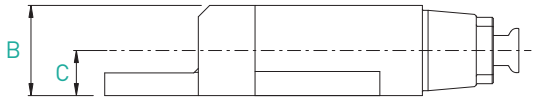


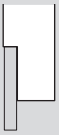
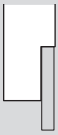
R

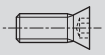
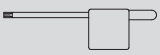


L





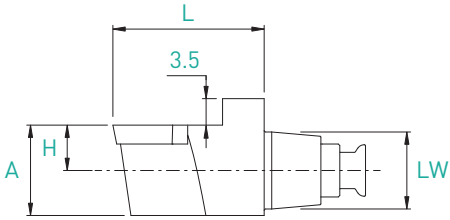
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
77_-78_	LW4	16x16	8	8	56	**LW4-770-16-0856-JET**	**LW4-780-16-0856-JET**

Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW4	**V-M4X9-T15**	**C-T15**	**LW4-U00.ER1.000**

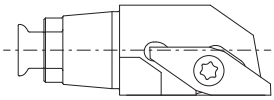
Têtes interchangeables
Wechselköpfe
Interchangeable heads

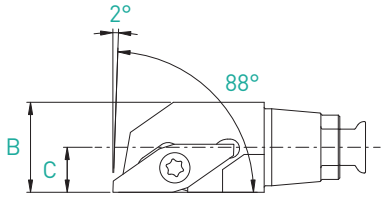
TURN-Line 88° LW-310/320-JET

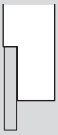
R

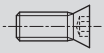
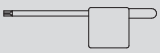


L





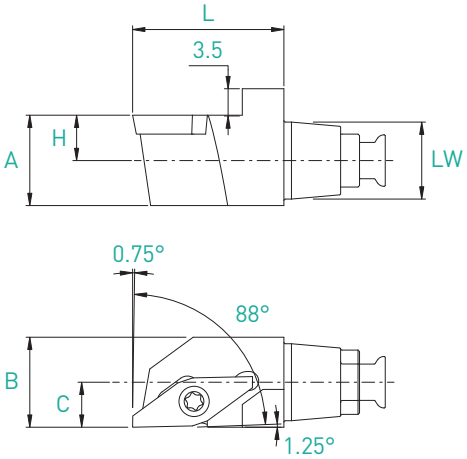
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
31_-32_	LW3	12x12	6	6	20	**LW3-310-12-0620-JET**	**LW3-320-12-0620-JET**
	LW4	16x16	8	8	25	**LW4-310-16-0825-JET**	**LW4-320-16-0825-JET**

Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LW3-U00.ER1.000**
	LW4			**LW4-U00.ER1.000**

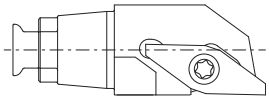
Têtes interchangeables
Wechselköpfe
Interchangeable heads

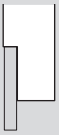
TURN-Line 88° LW-310-BC/320-BC-JET

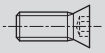
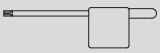
R



L



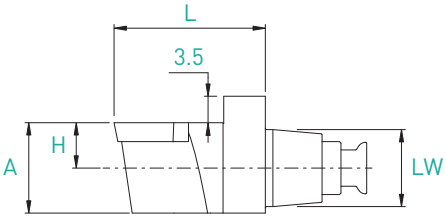
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
31_-32_	LW3	12x12	6	6	20	**LW3-310-12-0620-BC-JET**	**LW3-320-12-0620-BC-JET**
	LW4	16x16	8	8	25	**LW4-310-16-0825-BC-JET**	**LW4-320-16-0825-BC-JET**

Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LW3-U00.ER1.000**
	LW4			**LW4-U00.ER1.000**

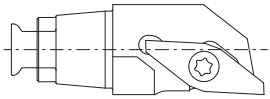
Têtes interchangeables
Wechselköpfe
Interchangeable heads

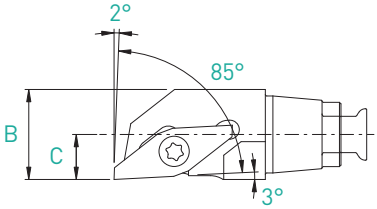
TURN-Line **85°** **LW-330/340-JET**

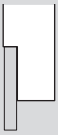
R

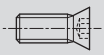
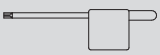


L





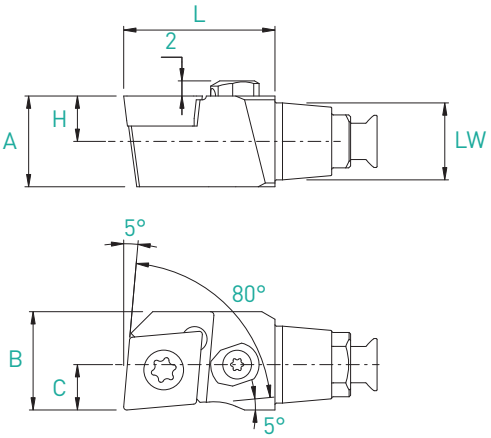
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
33_-34_	LW3	12x12	6	6	20	**LW3-330-12-0620-JET**	**LW3-340-12-0620-JET**
	LW4	16x16	8	8	25	**LW4-330-16-0825-JET**	**LW4-340-16-0825-JET**

Pièces de rechange Ersatzteile Spare parts	LW	 Art. N°	 Art. N°	 Art. N°
	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LW3-U00.ER1.000**
	LW4			**LW4-U00.ER1.000**

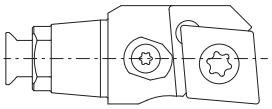
Têtes interchangeables
Wechselköpfe
Interchangeable heads

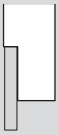
ISO-Line 80° LW-SCL-JET

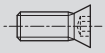
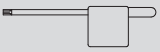
R



L



Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
CC..-0602..	LW3	12x12	6	6	20	LW3-SCLCL-12-0620-06-JET	LW3-SCLCR-12-0620-06-JET
	LW4	16x16	8	8	25	LW4-SCLCL-16-0825-06-JET	LW4-SCLCR-16-0825-06-JET
CC..-09T3..	LW3	12x12	6	6	20	LW3-SCLCL-12-0620-09-JET	LW3-SCLCR-12-0620-09-JET
	LW4	16x16	8	8	25	LW4-SCLCL-16-0825-09-JET	LW4-SCLCR-16-0825-09-JET

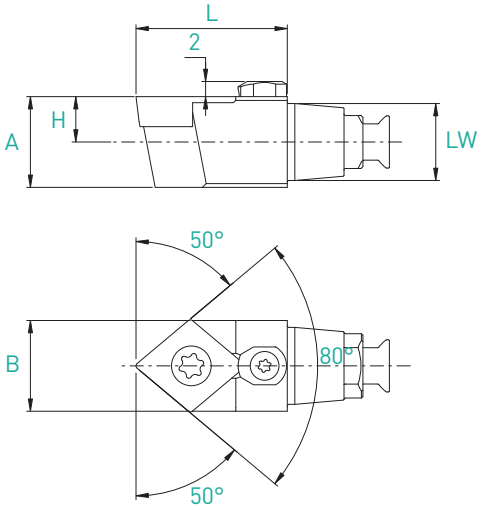
Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	CC..-0602..	LW3	V-M2.5X7.8-T8	C-T8	LWX-ER1.007.002	LW3-U00.ER1.000
		LW4				LW4-U00.ER1.000
	CC..-09T3..	LW3	V-M4X9-T15-ISO	C-T15		LW3-U00.ER1.000
		LW4				LW4-U00.ER1.000

Têtes interchangeables
Wechselköpfe
Interchangeable heads

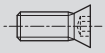
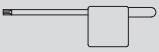
ISO-Line 80°

LW-SCM-JET

R



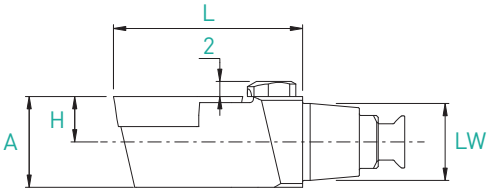
Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
CC..-0602..	LW3	12x12	6	20	**LW3-SCMCN-12-0020-06-JET**
	LW4	16x16	8	25	**LW4-SCMCN-16-0025-06-JET**
CC..-09T3..	LW3	12x12	6	20	**LW3-SCMCN-12-0020-09-JET**
	LW4	16x16	8	25	**LW4-SCMCN-16-0025-09-JET**

Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	CC..-0602..	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LWX-ER1.007.002**	**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	CC..-09T3..	LW3	**V-M4X9-T15-ISO**	**C-T15**		**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**

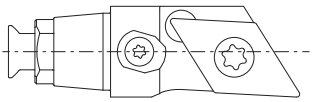
Têtes interchangeables
Wechselköpfe
Interchangeable heads

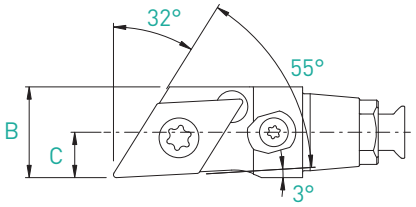
ISO-Line 55° LW-SDJ-JET

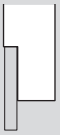
R

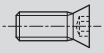


L





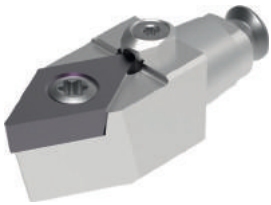
Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
DC..-0702..	LW3	12x12	6	6	20	LW3-SDJCL-12-0620-07-JET	LW3-SDJCR-12-0620-07-JET
	LW4	16x16	8	8	25	LW4-SDJCL-16-0825-07-JET	LW4-SDJCR-16-0825-07-JET
DC..-11T3..	LW3	12x12	6	6	25	LW3-SDJCL-12-0625-11-JET	LW3-SDJCR-12-0625-11-JET
	LW4	16x16	8	8	25	LW4-SDJCL-16-0825-11-JET	LW4-SDJCR-16-0825-11-JET

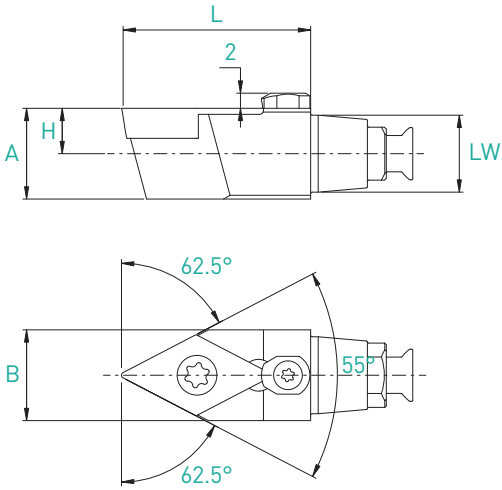
Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	DC..-0702..	LW3	V-M2.5X7.8-T8	C-T8	LWX-ER1.007.002	LW3-U00.ER1.000
		LW4				LW4-U00.ER1.000
	DC..-11T3..	LW3	V-M4X9-T15-ISO	C-T15		LW3-U00.ER1.000
		LW4				LW4-U00.ER1.000

Têtes interchangeables
Wechselköpfe
Interchangeable heads

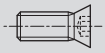
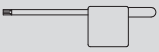
ISO-Line **55°**

LW-SDN-JET





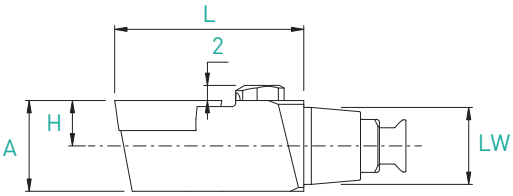
Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
DC..-0702	LW3	12x12	6	20	**LW3-SDNCN-12-0020-07-JET**
	LW4	16x16	8	25	**LW4-SDNCN-16-0025-07-JET**
DC..-11T3	LW3	12x12	6	25	**LW3-SDNCN-12-0025-11-JET**
	LW4	16x16	8	25	**LW4-SDNCN-16-0025-11-JET**

Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	DC..-0702	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LWX-ER1.007.002**	**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	DC..-11T3	LW3	**V-M4X9-T15-ISO**	**C-T15**		**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line **55°** **LW-SDH-JET**

R



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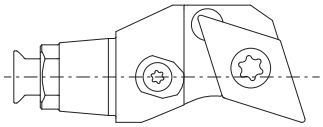
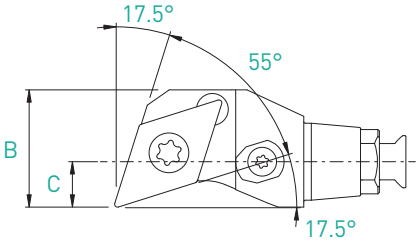
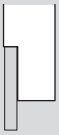
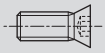
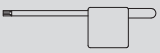




Plaquettes WSP Inserts	LW	A x B	H	C	L	L  Art. N°	R  Art. N°
DC..-0702..	LW3	12x15.5	6	6	20	**LW3-SDHCL-12-0620-07-JET**	**LW3-SDHCR-12-0620-07-JET**
	LW4	16x16	8	8	25	**LW4-SDHCL-16-0825-07-JET**	**LW4-SDHCR-16-0825-07-JET**
DC..-11T3..	LW3	12x15.5	6	6	25	**LW3-SDHCL-12-0625-11-JET**	**LW3-SDHCR-12-0625-11-JET**
	LW4	16x16	8	8	25	**LW4-SDHCL-16-0825-11-JET**	**LW4-SDHCR-16-0825-11-JET**

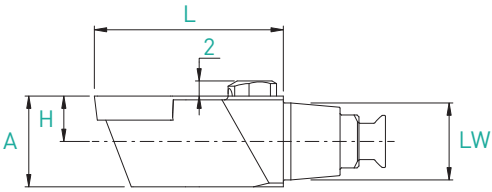
Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	DC..-0702..	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LWX-ER1.007.002**	**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	DC..-11T3..	LW3	**V-M4X9-T15-ISO**	**C-T15**		**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line 35°

LW-SVJ-JET

R



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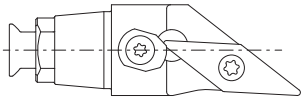
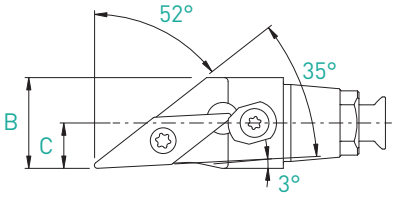
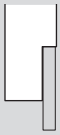
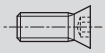
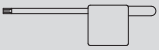


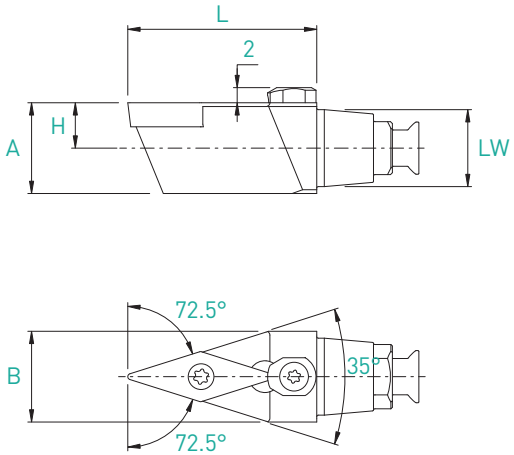


						L 	R 
Plaquettes WSP Inserts	LW	A x B	H	C	L	**Art. N°**	**Art. N°**
VC..-1103..	LW3	12x12	6	6	25	**LW3-SVJCL-12-0625-11-JET**	**LW3-SVJCR-12-0625-11-JET**
	LW4	16x16	8	8	25	**LW4-SVJCL-16-0825-11-JET**	**LW4-SVJCR-16-0825-11-JET**
VC..-1303..	LW3	12x12	6	6	30	**LW3-SVJCL-12-0630-13-JET**	**LW3-SVJCR-12-0630-13-JET**
	LW4	16x16	8	8	30	**LW4-SVJCL-16-0830-13-JET**	**LW4-SVJCR-16-0830-13-JET**
VC..-1604..	LW4	16x16	8	8	35	**LW4-SVJCL-16-0835-16-JET**	**LW4-SVJCR-16-0835-16-JET**

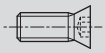
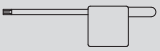
						
Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	**Art. N°**	**Art. N°**	**Art. N°**	**Art. N°**
	VC..-1103..	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LWX-ER1.007.002**	**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	VC..-1303..	LW3	**V-M4X9-T15-ISO**	**C-T15**		**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	VC..-1604..	LW4	**V-M4X9-T15-ISO**	**C-T15**		**LW4-U00.ER1.000**

Têtes interchangeables
Wechselköpfe
Interchangeable heads

ISO-Line 35° LW-SVV-JET

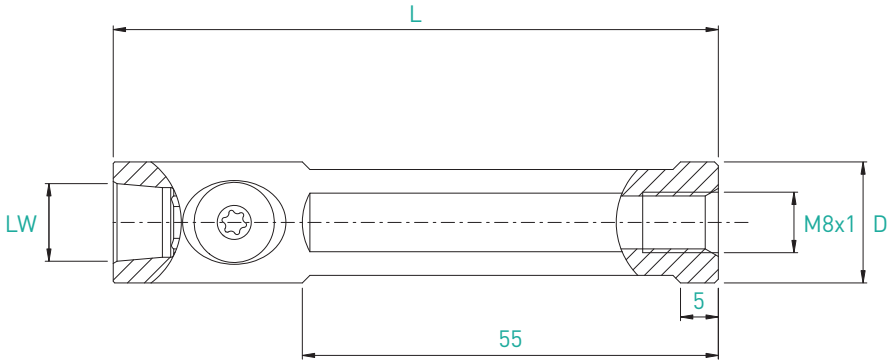


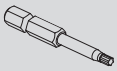
Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
VC..-1103..	LW3	12x12	6	25	**LW3-SVVCN-12-0025-11-JET**
	LW4	16x16	8	25	**LW4-SVVCN-16-0025-11-JET**
VC..-1303..	LW3	12x12	6	30	**LW3-SVVCN-12-0030-13-JET**
	LW4	16x16	8	30	**LW4-SVVCN-16-0030-13-JET**
VC..-1604..	LW4	16x16	8	35	**LW4-SVVCN-16-0035-16-JET**

Pièces de rechange Ersatzteile Spare parts	Plaquettes WSP Inserts	LW	 Art. N°	 Art. N°	 Art. N°	 Art. N°
	VC..-1103..	LW3	**V-M2.5X7.8-T8**	**C-T8**	**LWX-ER1.007.002**	**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	VC..-1303..	LW3	**V-M3X7.3-T8-ISO**			**LW3-U00.ER1.000**
		LW4				**LW4-U00.ER1.000**
	VC..-1604..	LW4	**V-M4X9-T15-ISO**	**C-T15**		**LW4-U00.ER1.000**

Supports cylindriques
Zylindrische Halter
Cylinder holders

LW-D



					Pièces rechanges Ersatzteile Spare parts		Options	
								
LW	D	L	L1	Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3	16	80	55	**LW3-D16-80-JET**	**LW3-ER1.012.014**	**JB-M8X1**	**CD-NM3.8**	**TX15-E6.3**
LW4	19.05	80	55	**LW4-D19.05-80-JET**	**LW4-ER1.014.018**		**CD-NM5.7**	**TX20-E6.3**
	20	80	55	**LW4-D20-80-JET**				
	22	80	55	**LW4-D22-80-JET**	**LW4-ER1.014.019**			
	25	80	55	**LW4-D25-80-JET**	**LW4-ER1.015.023**			
	25.4	80	55	**LW4-D25.4-80-JET**				

Utilisation clé dynamométrique recommandée

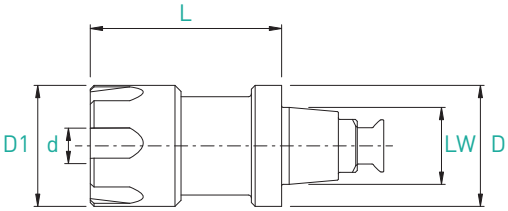
Benutzung eines Drehmomentschlüssel empfohlen

Recommended use of dynamometric key

Options raccords	
	Art. N°
	M8X1
	voir JET-LINE siehe JET-LINE see JET-LINE

Têtes interchangeables porte-pince
Spannzangenwechselköpfe
Interchangeable heads gripper holder

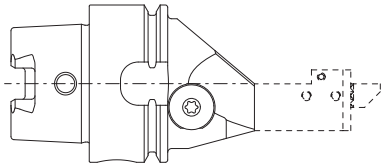
LW-E

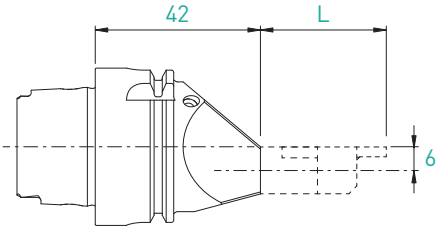


LW	D	D1	L	Pince type	d	Art. N°	Pièces rechanges Ersatzteile Spare parts  Art. N°	 Art. N°
LW3	16	16	26	ER11	0.5-7	**LW3-E11-D16-26**	**E11-ER1.001-012**	**LW3-U00.ER1.00**
LW4	19	16	26	ER11	0.5-7	**LW4-E11-D19-26**		**LW4-U00.ER1.00**
	19	22	35	ER16	0.5-10	**LW4-E16-D19-35**	**E16-ER1.001-018**	

Porte-outils
Halter
Holders

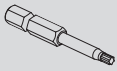
HSK-40-LW3



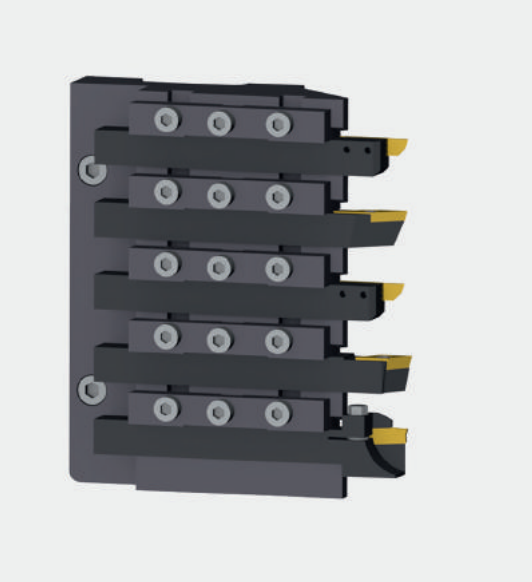


					BUMOTEC S191
LW	Compatibility	Page	L	**Art. N°**	**Art. N°**
LW3	LW3-740..	11.06	32	**HSK-T40-LW3-0642-JET**	**HSK-A40-LW3-0642-JET-BU****
	LW3-760..	11.07	43		
	LW3-320-340..	11.09/11.11	20		
	LW3-SCLCR..	11.12	20		
	LW3-SCMCN..	11.13	20		
	LW3-SDJCR..	11.14	20		
	LW3-SDNCN..	11.15	20		
	LW3-SDHCR..	11.16	20		
	LW3-SVJCR..	11,17	25		

** Pour machines Bumotec

Pièces rechanges Ersatzteile Spare parts	Options	
		
Art. N°	**Art. N°**	**Art. N°**
LW3-ER1.012.014	**CD-NM3.8**	**TX15-E6.3**

APPLITEC

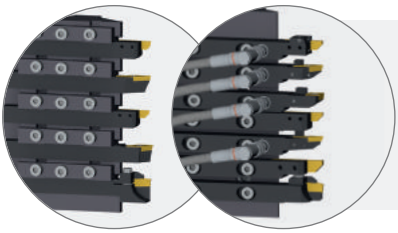
Original system	MODU-Line system
	

Système d'outils modulaires pour tours automatiques

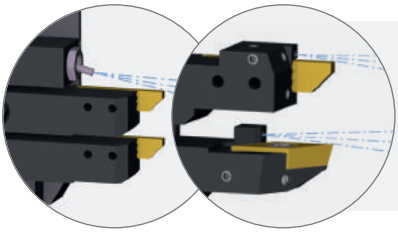
Modulares Werkzeugsystem für Langdrehautomaten

Modular tooling system for sliding headstock automatic lathes

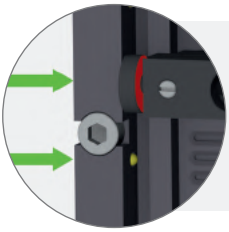
Les avantages
Die Vorteile
The advantages



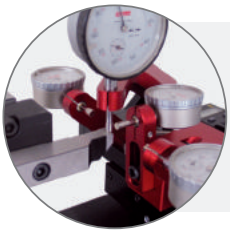
Plus d'outils disponibles
Höhere Werkzeuganzahl
More available tools



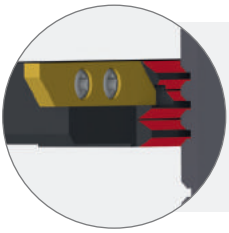
Système d'arrosage efficace
Effizientes Kühlmittelzufuhrsystem
Efficient coolant supply system



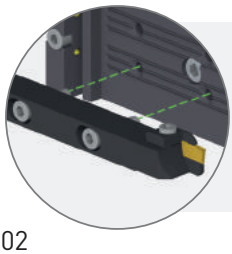
Repositionnement précis, poussée axiale automatique
Präzise Nachpositionierung, automatischer Axialschub
Precise repositionning, automatic axial thrust



Possibilité de préréglage et de réglage de la longueur des outils
Voreinstellbar auf feste oder einstellbare Länge
Presetting on fixed or adjustable length



Système de fixation robuste et rigide
Robustes und starres Spannsystem
Strong and stable clamping system



Changement d'outil simple et rapide
Einfacher und schneller Werkzeugwechsel
Easy and quick tool replacement

Index

Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

Fabricant Hersteller Manufacturer	Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
Citizen	C12/C16	ML12-CITIZEN-C16	ML12	12.06
	L12-1M7	ML12-CITIZEN-L12-1M7		12.07
	L12-2M10	ML12-CITIZEN-L12-2M10		12.08
	M16V/VIII	ML12-CITIZEN-M16V/VIII		12.09
	R04	ML12-CITIZEN-R04-QTF3101-3T		12.12
		ML12-CITIZEN-R04-QTF5008-4T		12.10
		ML12-CITIZEN-R04-QTF5108-4T		
	R07	ML12-CITIZEN-R07-QTF4008-5T		12.13
		ML12-CITIZEN-R07-QTF4108-6T		
		ML12-CITIZEN-R07-QTF4208-3T		12.14
		ML12-CITIZEN-R07-QTF4608-4T		
	K12/K16	ML16-CITIZEN-K16	ML16	12.15
	L16/L20-5M1/5M7	ML16-CITIZEN-L20		12.16
	L20E-1M8/L20X-1M10/ L20-2M8/2M12	ML16-CITIZEN-L20E		12.17
Hanwha	XD20M	ML12-HANWHA-XD20M	ML12	12.18
	SL12/16	ML16-HANWHA-SL12/16	ML16	12.19
Manuhrin	KMX 426/526/626/ Swingg 20-26 MM	ML16-KMX26-DUO	ML16	12.20
		ML16-KMX26-JET		
Metafil	D3/D10/D13	ML12-D10-3T	ML12	12.21
Star	SB-12RG	ML12-STAR-SB-12RG	ML12	12.22
	SR-10J	ML12-STAR-SR-10J		12.23
	SW-12RII	ML12-STAR-SW-12RII-2T		12.24
		ML12-STAR-SW-12RII-8T		
	SA-12/SA-16/SA-16R	ML16-STAR-SA-16	ML16	12.25
	SB-16	ML16-STAR-SB-16		12.26
	SB-16/20RG	ML16-STAR-SB-16/20RG		12.27
	SB-20C/E	ML16-STAR-SB-20		12.28
	SR-16R/SR-20R/SR-20RII	ML16-STAR-SR-20R		12.29
	SR-20J/SR-20RIII	ML16-STAR-SR-20J		12.30
	SR-20JII-A/B	ML16-STAR-SR-20JII-A/B new		12.31
	SR-20RIV	ML16-STAR-SR-20RIV-2T		12.32
		ML16-STAR-SR-20RIV-6T		
	SR-32J	ML16-STAR-SR-32J		12.33
	SV-12/20	ML16-STAR-SV-12/20 new		12.35
	SV-20R	ML16-STAR-SV-20R		12.35
	SW-20R	ML16-STAR-SW-20R-2T		12.36
		ML16-STAR-SW-20R-6T		

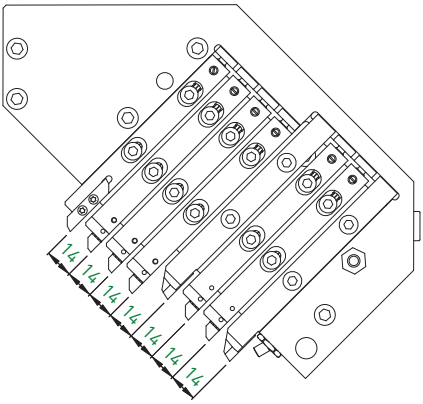
Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

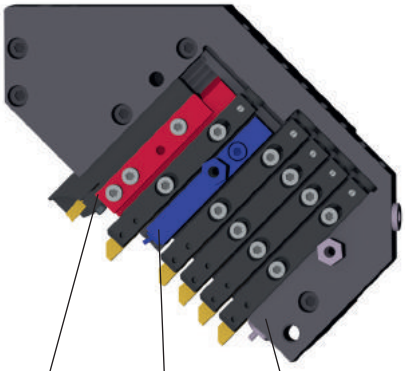
Fabricant Hersteller Manufacturer	Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
Tornos	DECO7/10 - EvoDECO 10	ML12-DECO10-DUO	ML12	12.37
		ML12-DECO10-JET		
	SWISS-NANO /SWISS-NANO 7	ML12-SWISS-NANO-2T		12.40
		ML12-SWISS-NANO-3T		
		ML12-SWISS-NANO-6T		12.38
	SWISS-NANO 7	ML12-SWISS-NANO-4T		12.41
	DT13	ML12-DT13-2020206-9T		12.42
	CT20	ML12-CT20-2020019-7T		12.43
	GT13	ML12-GT13-390224-5T		12.44
		ML12-GT13-390223-7T		
	GT26	ML16-GT26-386210-5T	ML16	12.46
		ML16-GT26-386209-6T		
	GT32	ML16-GT32-389210-4T		12.48
		ML16-GT32-389209-5T		
	DECO13- EvoDECO16	ML16-DECO13-DUO		12.50
		ML16-DECO13-JET		
	DECO20/26 - EvoDECO20/32	ML16-DECO20-DUO		12.51
		ML16-DECO20-JET		
	SIGMA20/32	ML16-S20-DUO		12.52
		ML16-S20-JET		
	SWISS ST26	ML16-SWISS-ST26-DUO		12.53
		ML16-SWISS-ST26-JET		
	DT26	ML16-DT26-2020206-7T		12.54
Tsugami	B074	ML12-B074-1-6T	ML12	12.55
	B075	ML12-B075-1-8T		12.56
	PO34	ML12-PO34-1-5T		12.57
		ML12-PO34-1-7T		12.58
		ML12-PO34-2-4T		12.57
		ML12-PO34-2-10T		12.58

Citizen C12 / C16

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML12

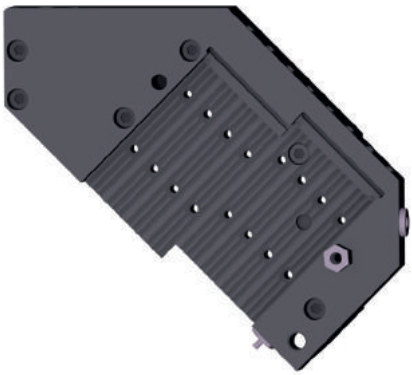




Outil ⧄ 12 mm possible avec module de serrage
Werkzeug ⧄ 12 mm mit Spannelement möglich
Tool ⧄ 12mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

Arrosage intégré
Integrierter Kühlmittel
Integrated coolant

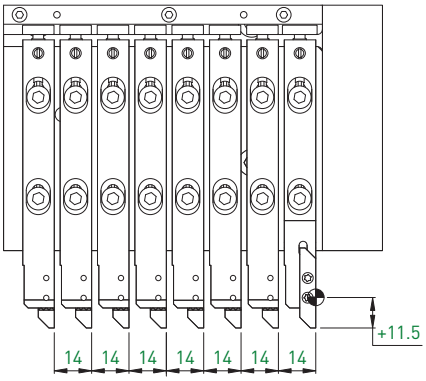


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-C16	ML12	> 12.63	**ML12-FIX-12/14**	**ML12-JET-5/16**	12.82

Citizen L12-1M7

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML12

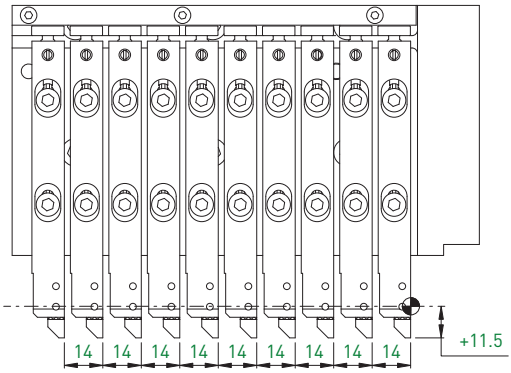


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-L12-1M7	ML12	> 12.63	–	ML12-JET-5/16	12.82

Citizen L12-2M10

+ 3 outils (max 10)
+ 3 Werkzeuge (max 10)
+ 3 tools (max 10)

ML12

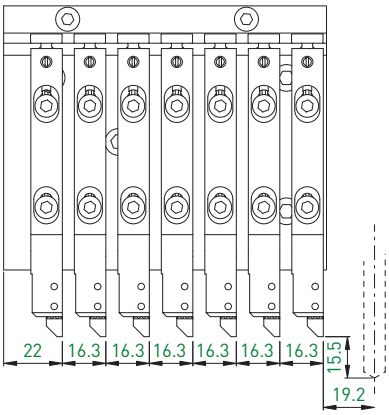


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-L12-2M10	ML12	> 12.63	–	**ML12-JET-5/16**	12.82

Citizen M16 V/VIII

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7)

ML12

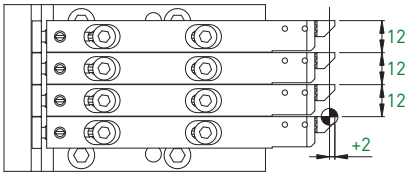


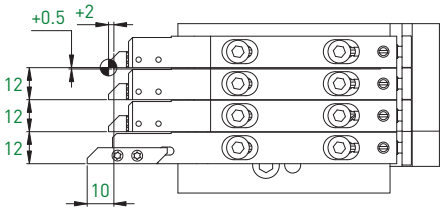
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-M16V/VIII	ML12	> 12.63	–	**ML12-JET-5/16**	12.82

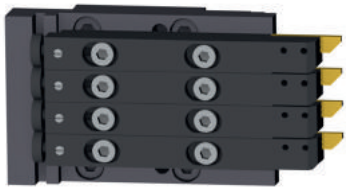
Citizen R04

+ 1 outil (max 8)
+ 1 Werkzeug (max 8)
+ 1 tool (max 8)

ML12







ML12-CITIZEN-R04-QTF5008-4T

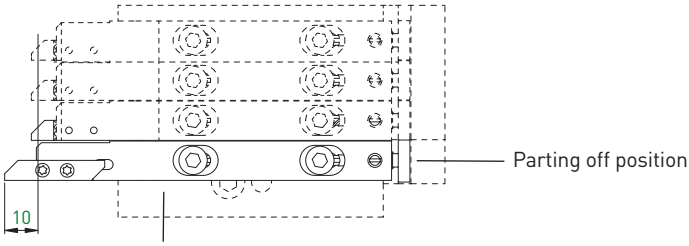
ML12-CITIZEN-R04-QTF5108-4T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	**ML12-CITIZEN-R04-QTF5008-4T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
	ML12-CITIZEN-R04-QTF5108-4T					

Citizen R04

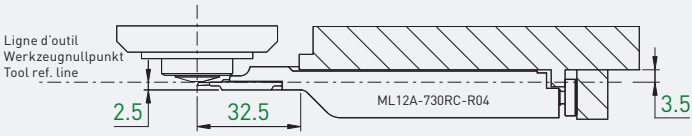
Porte-outils spéciaux de tronçonnage
Spezial Abstechwerkzeughalter
Special parting off tool holders

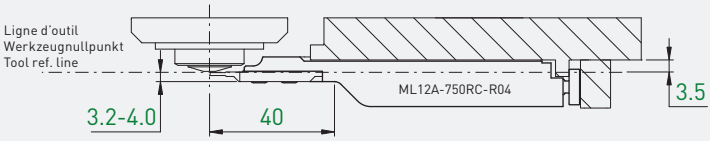
ML12

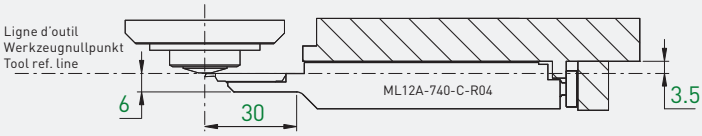


ML12-CITIZEN-R04-QTF5108-4T

avec canon
mit Führungsbuchse
with guide bush





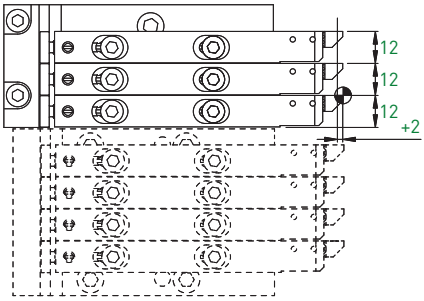


Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	**Art. N°**	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
Citizen R04	ML12	**ML12A-730RC-R04**	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-R04	751R... / 751RDSF	
		ML12A-740-C-R04	741 / 741SF	

Citizen R04

+ 3 outils (max 3)
+ 3 Werkzeuge (max 3)
+ 3 tools (max 3)

ML12

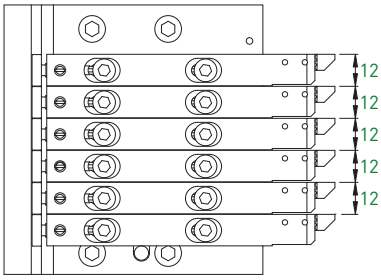


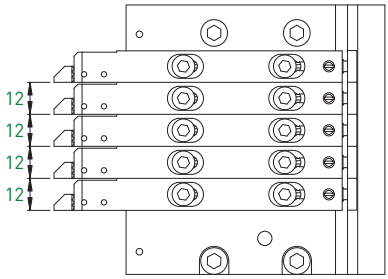
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-R04-QTF3101-3T	ML12	> 12.63	–	ML12-JET-5/16	12.82

Citizen R07

+ 1 outil (max 11)
+ 1 Werkzeug (max 11)
+ 1 tool (max 11)

ML12





ML12-CITIZEN-R07-QTF4108-6T

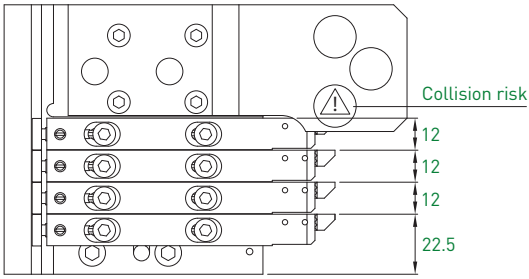
ML12-CITIZEN-R07-QTF4008-5T

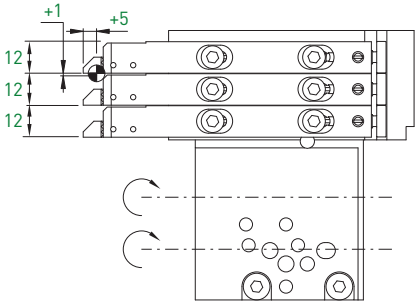
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML12-CITIZEN-R07-QTF4008-5T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
6T	**ML12-CITIZEN-R07-QTF4108-6T**					

Citizen R07

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML12





ML12-CITIZEN-R07-QTF4608-4T

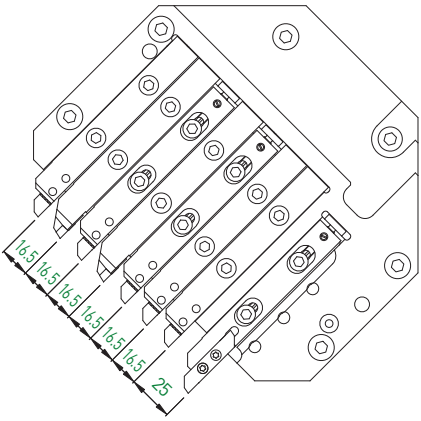
ML12-CITIZEN-R07-QTF4208-3T

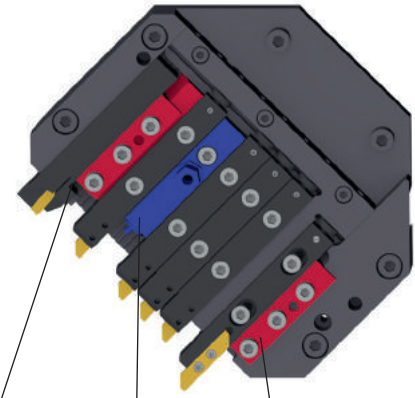
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	**ML12-CITIZEN-R07-QTF4208-3T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
4T	**ML12-CITIZEN-R07-QTF4608-4T**					

Citizen **K12 / K16**
K12E / K16E

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML16

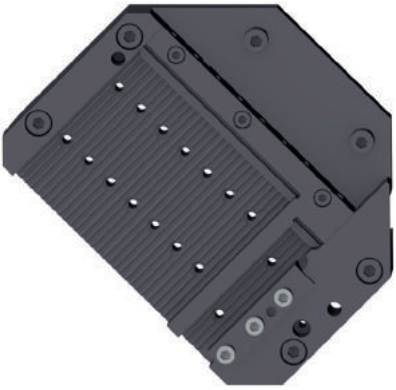




Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

1 serrage ML16-FIX-16 pour outil ⧄ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⧄ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⧄ 16 mm included

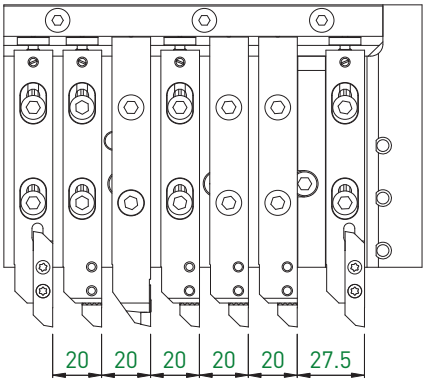


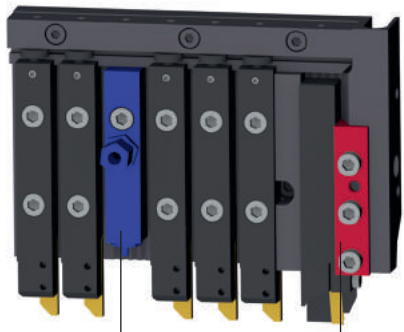
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-K16	ML16	> 12.63	**ML16-FIX-16/16.5**	**ML16-JET-7/16**	12.82

Citizen L16 / L20-5M1 / 5M7

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16





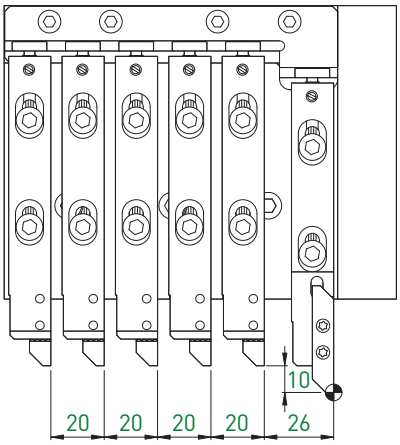
Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

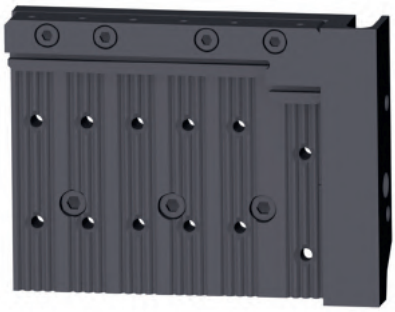
1 serrage ML16-FIX-16 pour outil ⧄ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⧄ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⧄ 16 mm included

			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20	ML16	> 12.63	–	ML16-JET-7/16	12.82

L20E-1M8 + 1 outil (max 6)
Citizen L20X-1M10 + 1 Werkzeug (max 6)
L20-2M8/2M12 + 1 tool (max 6)

ML16



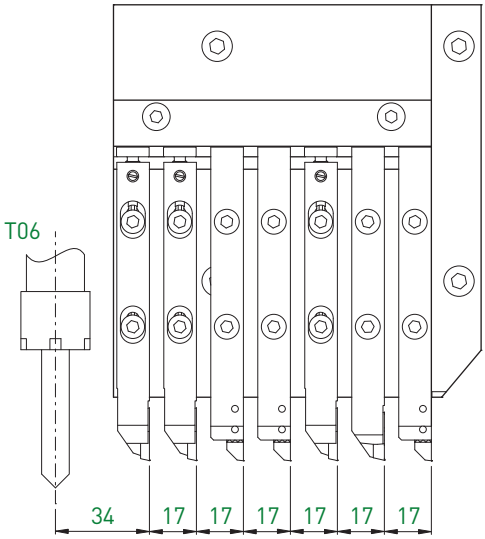


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20E	ML16	> 12.63	–	ML16-JET-7/16	12.82

Hanwha XD20M

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7)

ML12

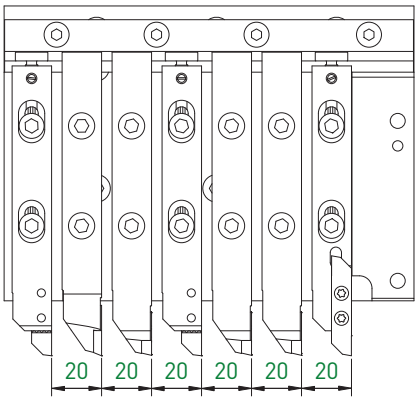


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-HANWHA-XD20M	ML12	> 12.63	-	ML12-JET-5/16	12.82

Hanwha SL12 / 16

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

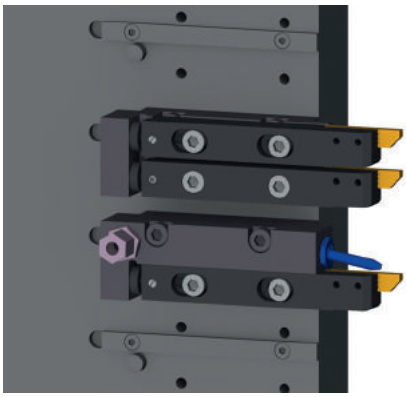
ML16



			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-HANWHA-SL12/16	ML16	> 12.63	–	ML16-JET-7/16	12.82

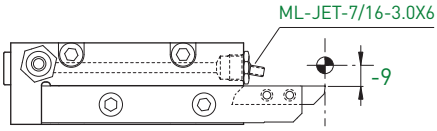
Manurhin KMX 426/526/626 Swing 20-26 MM

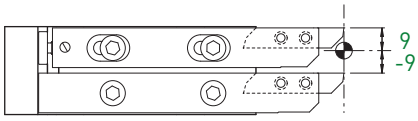
ML16



Jet

Duo





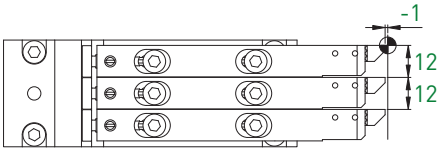
Jet

Duo

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML16-KMX26-JET**	ML16	> 12.63	–	**ML-JET-7/16...**	12.82
Duo	**ML16-KMX26-DUO**				**ML16-JET-7/16**	

D3 + 1 outil (max 3)
Metafil D10 + 1 Werkzeug (max 3)
D13 + 1 tool (max 3)

ML12

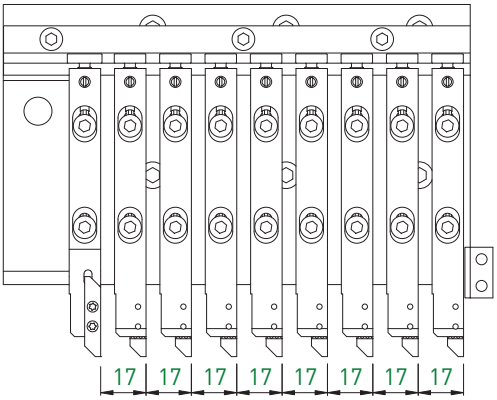


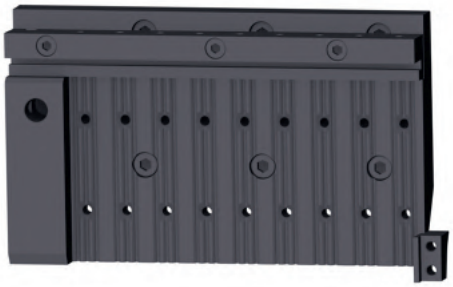
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-D10-3T	ML12	> 12.63	-	ML12-JET-5/16	12.82

Star SB-12RG

+ 2 outils (max 9)
+ 2 Werkzeuge (max 9)
+ 2 tools (max 9)

ML12



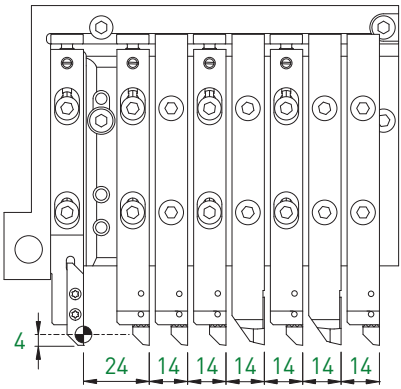


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SB-12RG	ML12	> 12.63	–	ML12-JET-5/16	12.82

Star SR-10J

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

ML12



1 serrage ML12-FIX-12 pour outil ⧄ 12 mm inclus
1 Spannung ML12-FIX-12 für Werkzeug ⧄ 12 mm inbegriffen
1 clamping ML12-FIX-12 for tool ⧄ 12 mm included

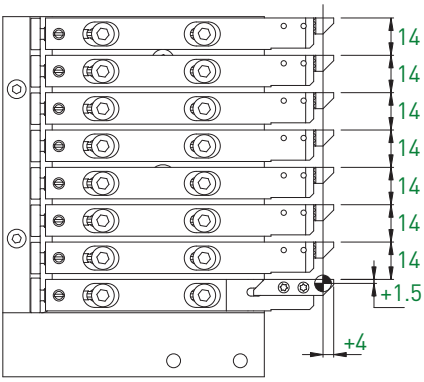
Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

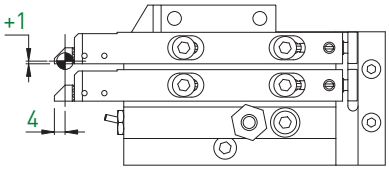
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SR-10J	ML12	> 12.63	**ML12-FIX-12/14**	**ML12-JET-5/16**	12.82

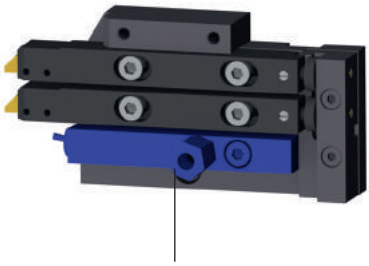
Star SW-12RII

+ 2 outils (max 10)
+ 2 Werkzeuge (max 10)
+ 2 tools (max 10)

ML12

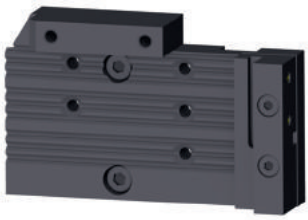






Position uniquement utilisable avec module d'arrosage, en option
Position nur mit Kühlmittelzufuhrelement verwendbar, optional
Position only with coolant supply unit usable, optional

ML12-STAR-SW-12RII-8T

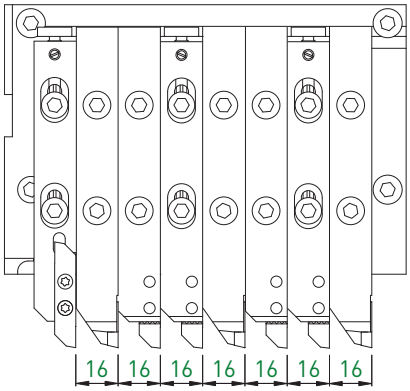


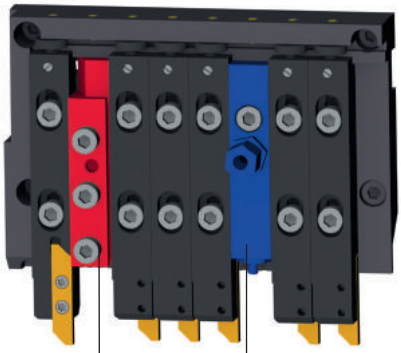
ML12-STAR-SW-12RII-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML12-STAR-SW-12RII-2T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
8T	**ML12-STAR-SW-12RII-8T**					

	SA-12	+ 2 outils (max 8)
Star	**SA-16**	+ 2 Werkzeuge (max 8)
	SA-16R	+ 2 tools (max 8)

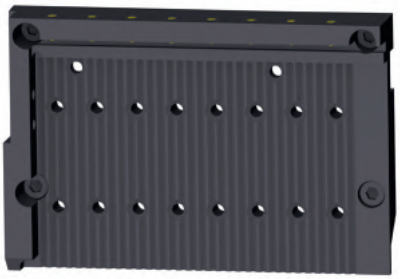
ML16





Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

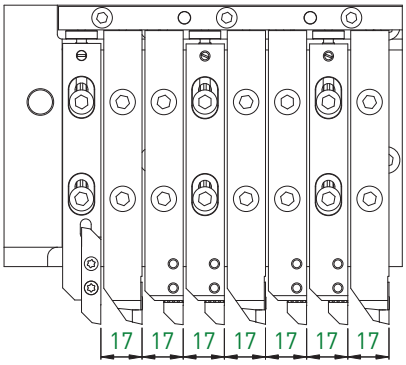


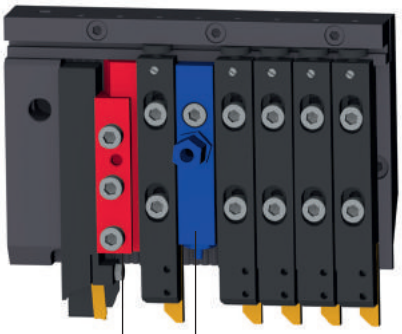
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SA-16	ML16	> 12.63	**ML16-FIX-16/16**	**ML16-JET-7/16**	12.82

Star SB-16

+ 3 outils (max 8)
+ 3 Werkzeuge (max 8)
+ 3 tools (max 8)

ML16





Outil ⌀ 16 mm possible avec module de serrage
Werkzeug ⌀ 16 mm mit Spannelement möglich
Tool ⌀ 16 mm possible with clamping unit

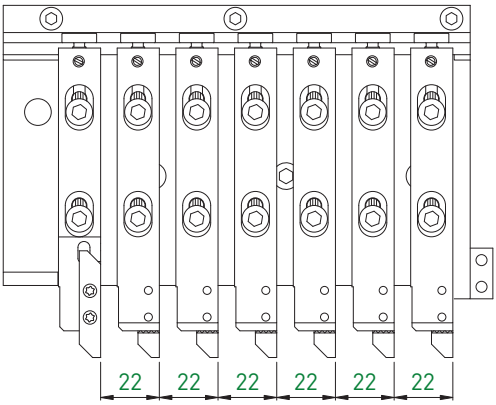
Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

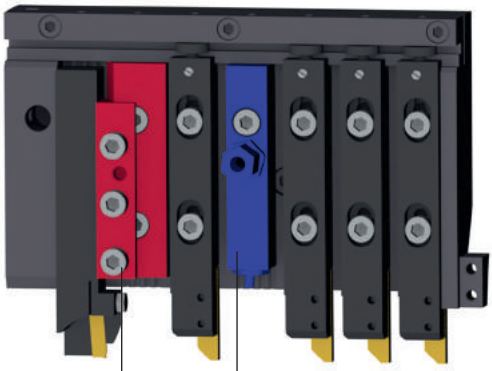
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16	ML16	> 12.63	**ML16-FIX-16/17**	**ML16-JET-7/16**	12.82

Star SB-16/20RG

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16





Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

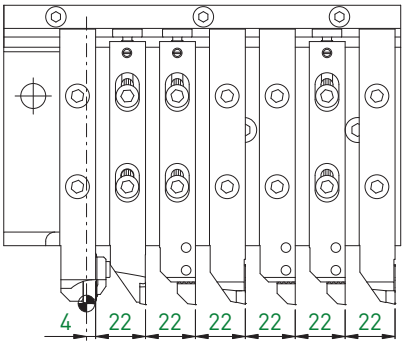
Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

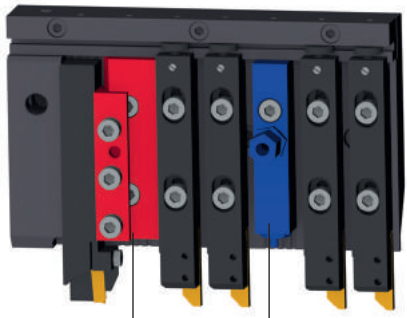
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16/20RG	ML16	> 12.63	**ML16-FIX-16/22**	**ML16-JET-7/16**	12.82

Star SB-20C/E

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16





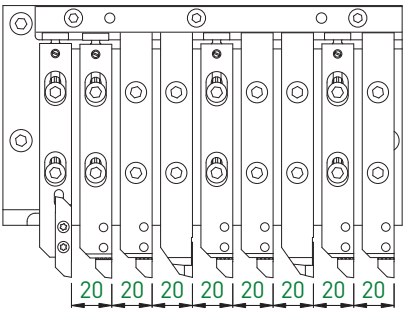
Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB20C/E	ML16	> 12.63	**ML16-FIX-16/22**	**ML16-JET-7/16**	12.82

Star **SR-16R** + 3 outils (max 9)
SR-20R + 3 Werkzeuge (max 9)
SR-20RII + 3 tools (max 9)

ML16



Outil ⌀ 16 mm possible avec module de serrage
Werkzeug ⌀ 16 mm mit Spannelement möglich
Tool ⌀ 16 mm possible with clamping unit

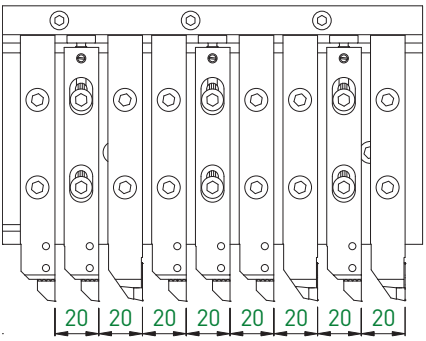
Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

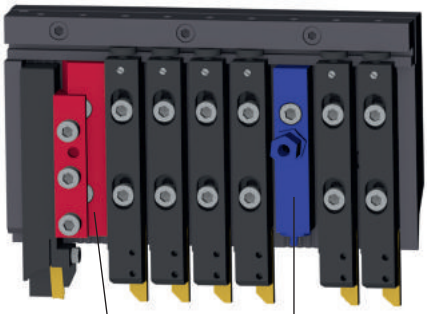
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20R	ML16	> 12.63	**ML16-FIX-16/20**	**ML16-JET-7/16**	12.82

Star **SR-20RIII**
SR-20J

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16





Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

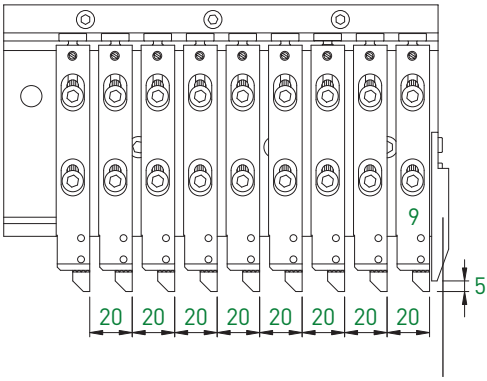
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20RIII	ML16	> 12.63	**ML16-FIX-16/20**	**ML16-JET-7/16**	12.82
ML16-STAR-SR-20J					

Star SR20JII type A/B

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16

new



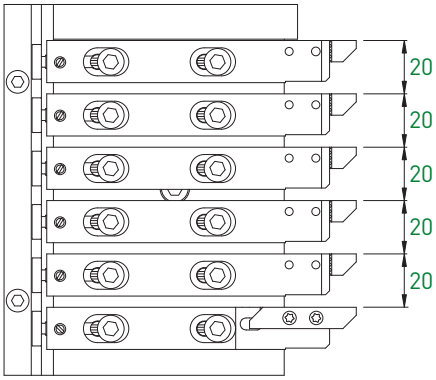
Risque de collision avec outil 9
Kollisionsrisiko mit Werkzeug 9
Collision risk with tool 9

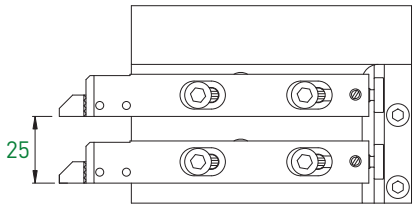
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR20JII-A/B	ML16	> 12.63	**ML16-FIX-16/20**	**ML16-JET-7/16**	12.82

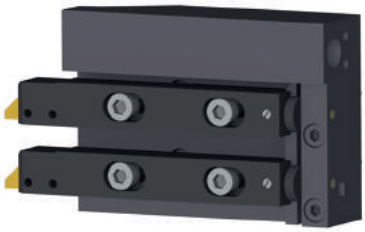
Star SR-20RIV

+ 1 outil (max 8)
+ 1 Werkzeug (max 8)
+ 1 tool (max 8)

ML16





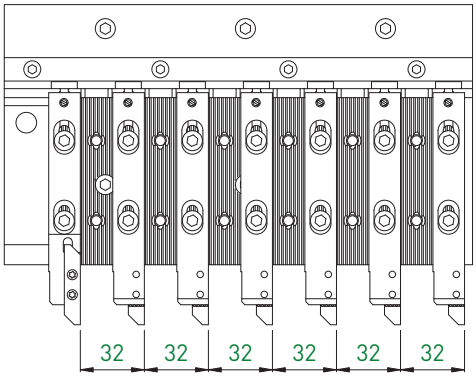


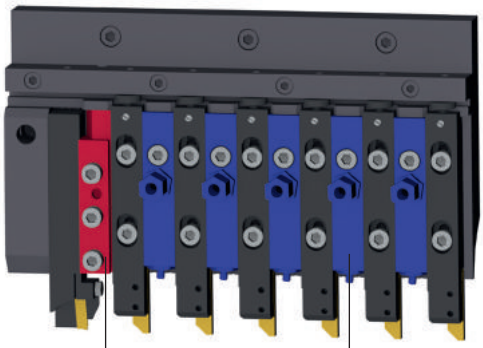
ML16-STAR-SR-20RIV-6T

ML16-STAR-SR-20RIV-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML16-STAR-SR-20RIV-2T**	ML16	> 12.63	–	**ML16-JET-7/16**	12.82
6T	**ML16-STAR-SR-20RIV-6T**					

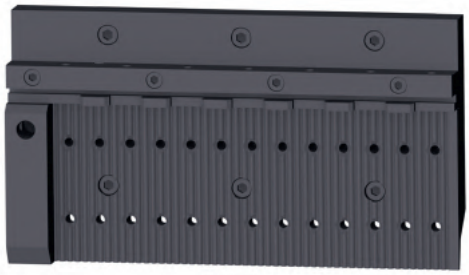
Star SR-32J | **Ø max 32 mm** + 1 outil (max 7) + 1 Werkzeug (max 7) + 1 tool (max 7) | **Ø max 16 mm** + 7 outils (max 13) + 7 Werkzeuge (max 13) + 7 tools (max 13) | **ML16**





Outil ⌀ 16 mm possible avec module de serrage
Werkzeug ⌀ 16 mm mit Spannelement möglich
Tool ⌀ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

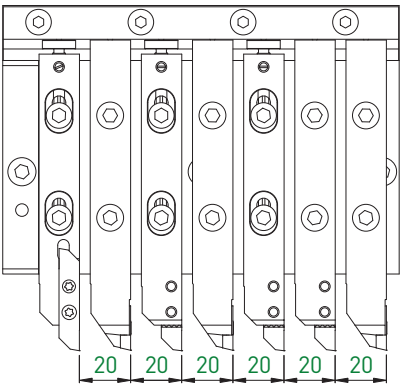


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-32J	ML16	> 12.63	**ML16-FIX-16/16**	**ML16-JET-7/16**	12.82

Star SV-12 / 20

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7

ML16



Outil ⧄ 16 mm possible avec module de serrage
Werkzeug ⧄ 16 mm mit Spannelement möglich
Tool ⧄ 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

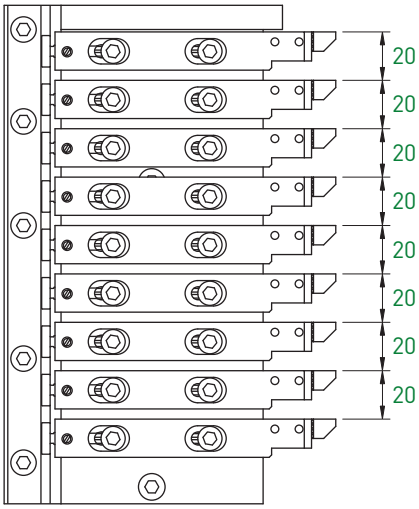
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-12/20	ML16	> 12.63	**ML16-FIX-16/20**	**ML16-JET-7/16**	12.82

Star SV-20R

+ 2 outils (max 9)
+ 2 Werkzeuge (max 9)
+ 2 tools (max 9)

ML16

new

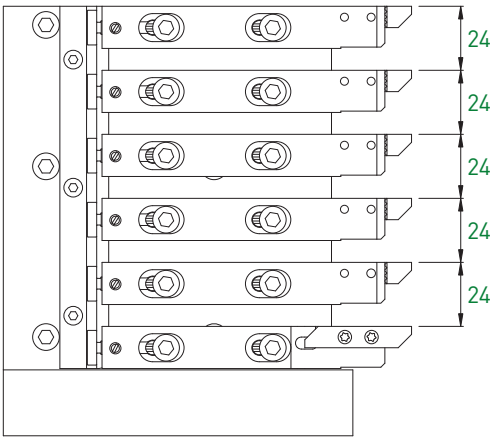


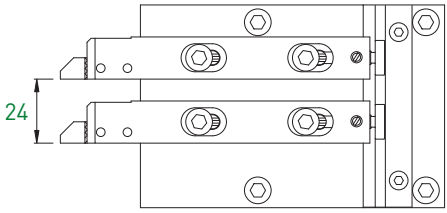
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-20R	ML16	> 12.63	**ML16-FIX-16/20**	**ML16-JET-7/16**	12.82

Star SW-20R

+ 1 outil (max 8)
+ 1 Werkzeug (max 8)
+ 1 tool (max 8)

ML16





ML16-STAR-SW-20R-6T

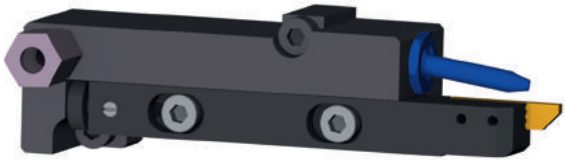
ML16-STAR-SW-20R-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML16-STAR-SW-20R-2T**	ML16	> 62	–	**ML16-JET-7/16**	12.82
6T	**ML16-STAR-SW-20R-6T**			**ML16-FIX-16/24**		

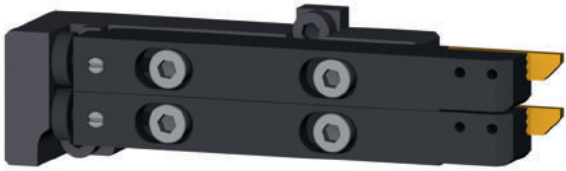
Tornos DECO 7 / 10 EvoDECO 10

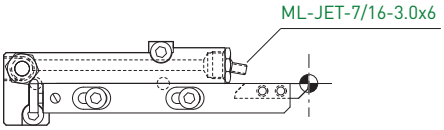
ML12

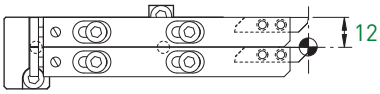
Jet



Duo







Jet

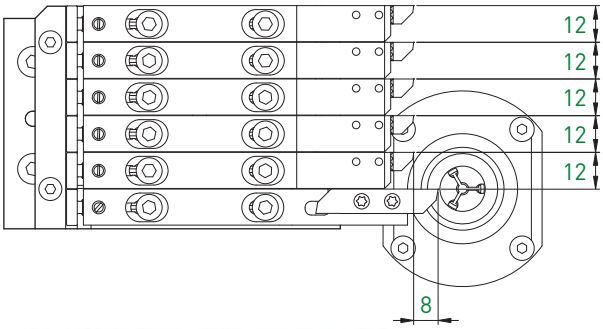
Duo

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML12-DECO10-JET**	ML12	> 12.63	–	**ML-JET-7/16...**	12.82
Duo	**ML12-DECO10-DUO**				**ML12-JET-5/16**	

Tornos SwissNano SwissNano 7

+ 2 outils (max 6)
+ 2 Werkzeuge (max 6)
+ 2 tools (max 6)

ML12



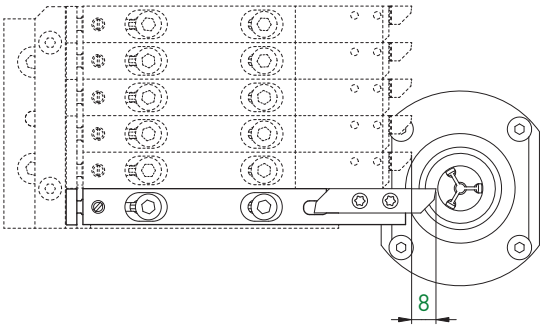
6T

6T

Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Accessoires Zubehöre Accessories Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
6T	**ML12-SWISS-NANO-6T**	ML12	> 12.63	–	ML12-JET-5/16	12.82

Tornos SwissNano SwissNano 7

ML12

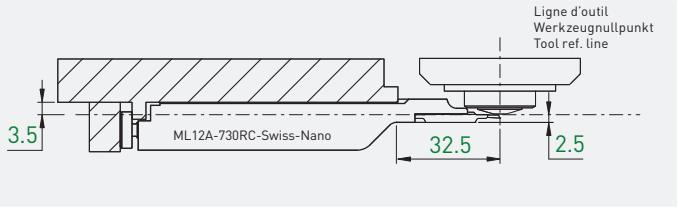


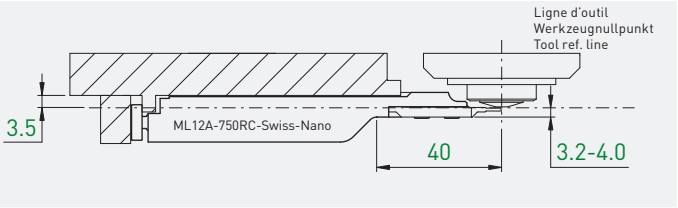
Tornos **SwissNano**
SwissNano 7

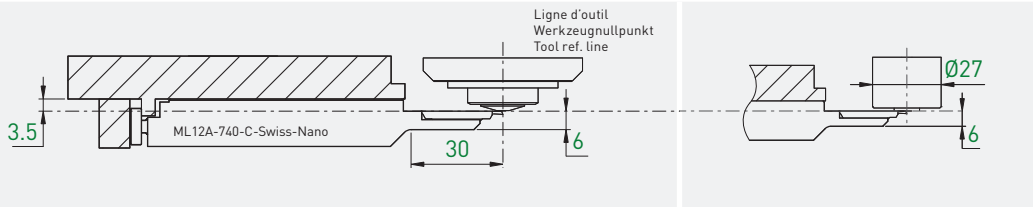
Porte-outils spéciaux de tronçonnage
Spezial Abstechwerkzeughalter
Special parting off tool holders

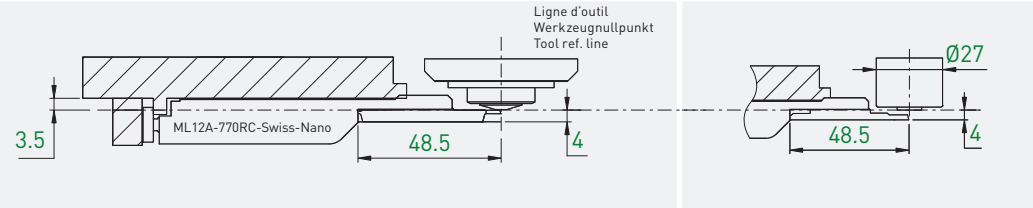
ML12

avec canon mit Führungsbuchse with guide bush	avec pince mit Spannzange with collet





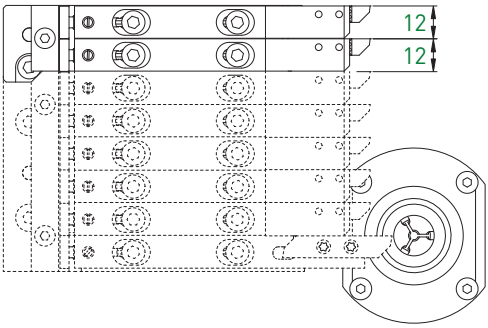


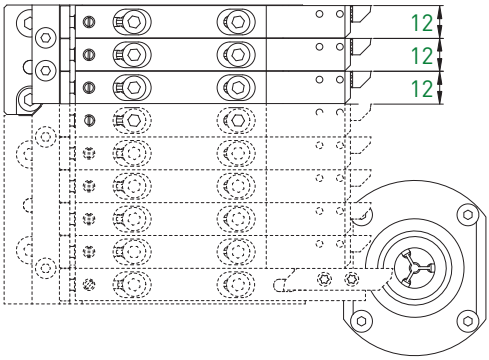


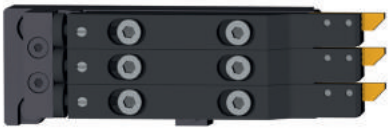
Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	**Art. N°**	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
SwissNano	ML12	**ML12A-730RC-SWISS-NANO**	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-SWISS-NANO	751R... / 751RDSF	
		ML12A-740-C-SWISS-NANO	741... / 741SF	
		ML12A-770RC-SWISS-NANO	771R...	> TOP-Line

Tornos SwissNano SwissNano 7

ML12







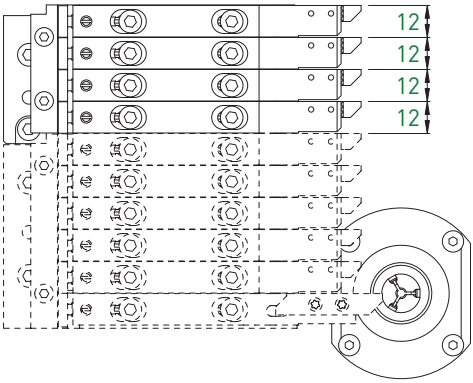
2T

3T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	**ML12-SWISS-NANO-2T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
3T	**ML12-SWISS-NANO-3T**					

Tornos SwissNano 7

ML12

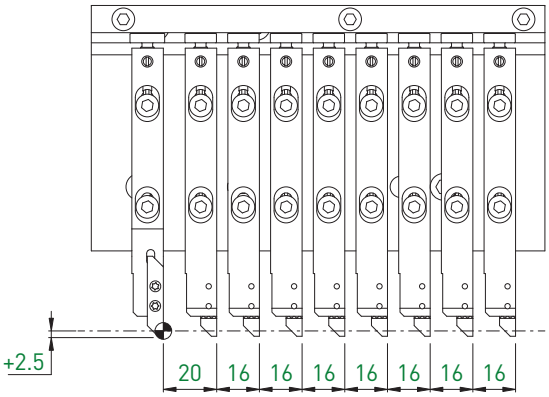


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	**ML12-SWISS-NANO-7-4T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82

Tornos DT 13

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML12

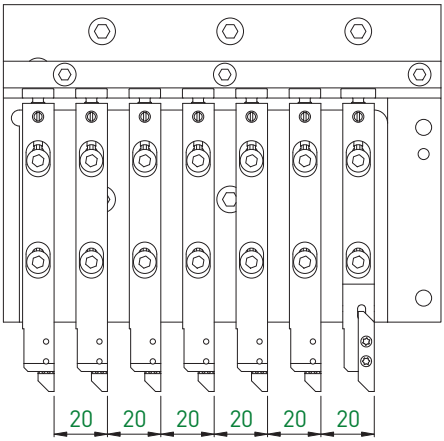


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
9T	**ML12-DT13-2020206-9T**	ML12	> 12.63	–	ML12-JET-5/16	12.82

Tornos CT 20

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML12

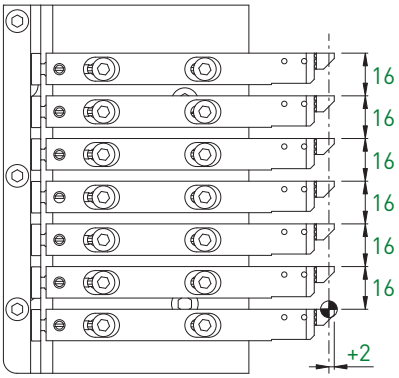


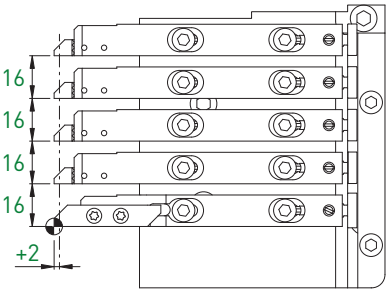
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML12-CT20-2020019-7T**	ML12	> 12.63	–	ML12-JET-5/16	12.82

Tornos GT 13

+ 5 outils (max 12)
+ 5 Werkzeuge (max 12)
+ 5 tools (max 12)

ML12





Tornos GT 13

ML12

ML12-GT13-390223-7T

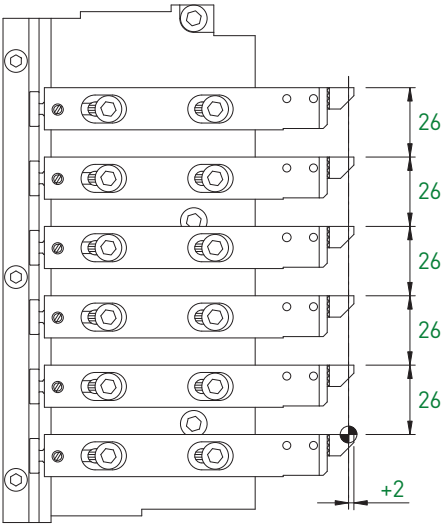
ML12-GT13-390224-5T

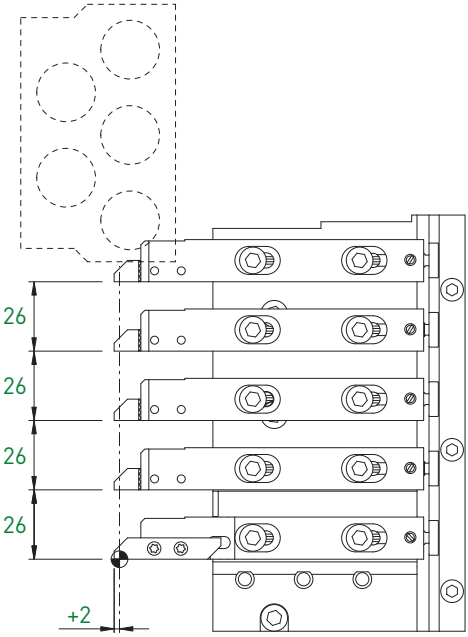
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML12-GT13-390224-5T**	ML12	> 12.63	–	ML12-JET-5/16	12.82
7T	**ML12-GT13-390223-7T**					

Tornos GT 26

+ 2 outils (max 11)
+ 2 Werkzeuge (max 11)
+ 2 tools (max 11)

ML16





1 serrage ML16-FIX-16 pour outil ⧄ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug ⧄ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool ⧄ 16 mm included

Tornos GT 26

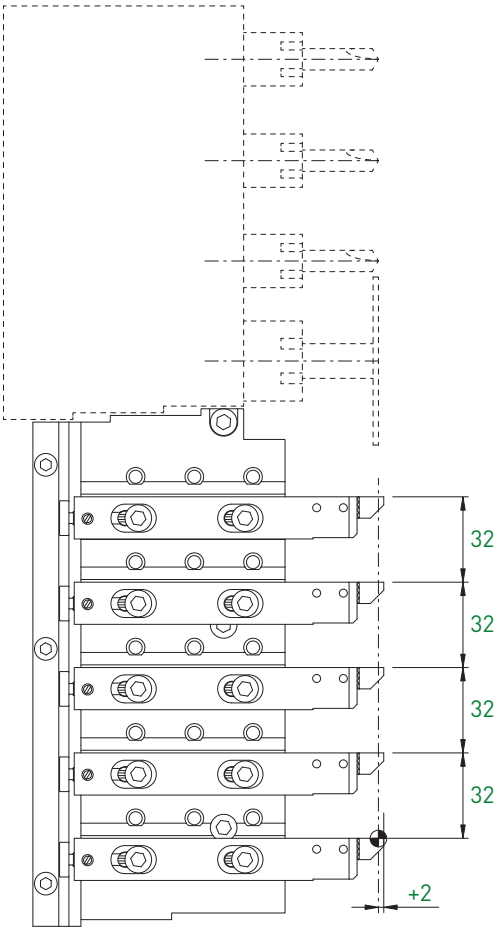
ML16

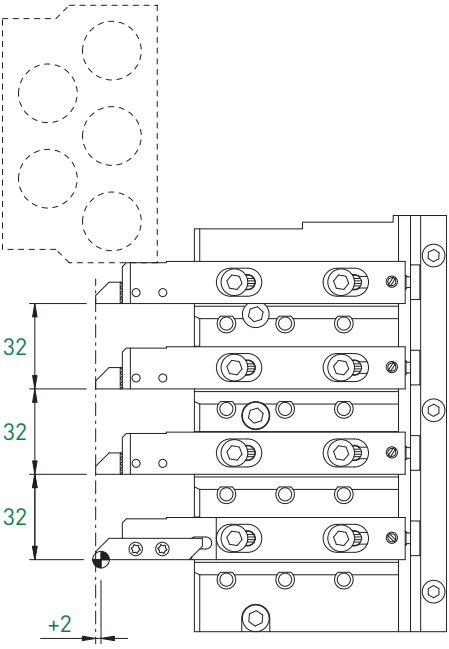
ML16-GT26-386209-6T

ML16-GT26-386210-5T

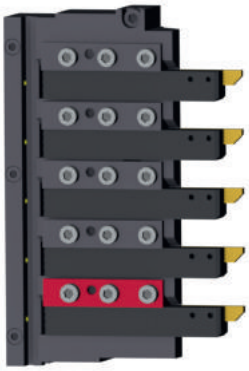
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	**ML16-GT26-386210-5T**	ML16	> 12.63	–	ML16-JET-7/16	12.82
6T	**ML16-GT26-386209-6T**					

Tornos GT 32 max + 9 outils + 9 Werkzeuge + 9 tools **ML16**





Holder ML16



Holder ⧄16

Holder ML16

Holder ⧄16

Tornos GT 32

ML16

ML16-GT32-386209-5T

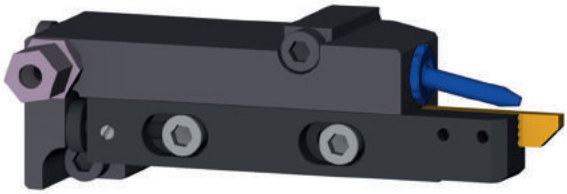
ML16-GT32-386210-4T

				Accessoires Zubehöre Accessories			
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit		Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Pages Seiten Pages
4T	**ML16-GT32-386210-4T**	ML16	> 12.63	**1x inclus 1x inbegriffen 1x included**	**Option ML16-FIX-16**	**ML16-JET-7/16**	12.82
5T	**ML16-GT32-386209-5T**						

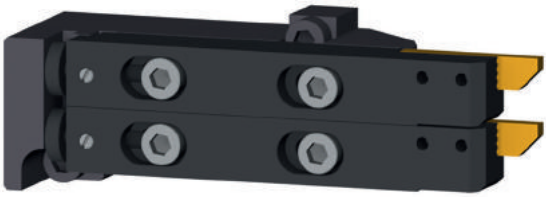
Tornos DECO 13 EvoDECO 16

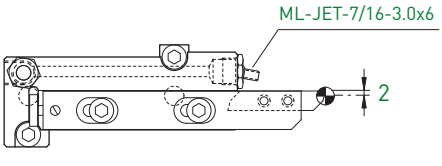
ML16

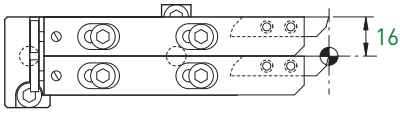
Jet



Duo







Jet

Duo

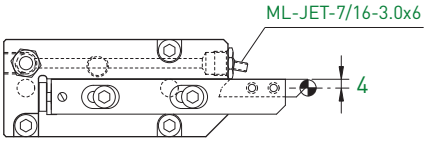
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML16-DECO13-JET**	ML16	> 12.63	–	**ML-JET-7/16...**	12.82
Duo	**ML16-DECO13-DUO**				**ML16-JET-7/16**	12.82

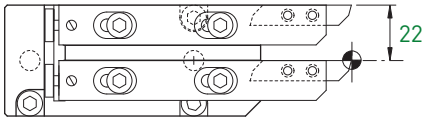
Tornos DECO 20 / 26 EvoDECO 20 / 32

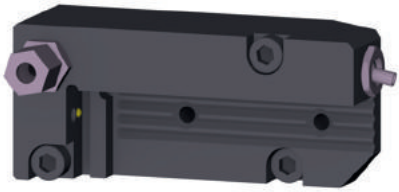
ML16

Jet

Duo







Jet

Duo

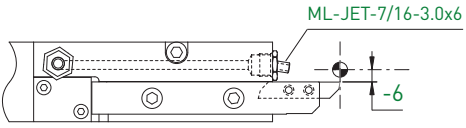
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML16-DECO20-JET**	ML16	> 12.63	–	**ML-JET-7/16...**	12.82
Duo	**ML16-DECO20-DUO**				**ML16-JET-7/16**	12.82

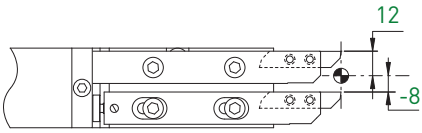
Tornos SIGMA 20 / 32

ML16

Jet

Duo





Jet

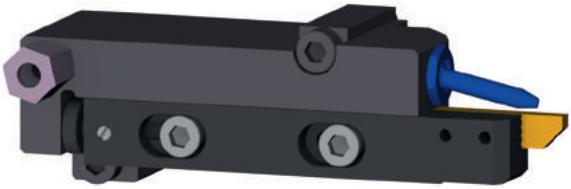
Duo

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML16-S20-JET**	ML16	> 12.63	–	**ML-JET-7/16...**	12.82
Duo	**ML16-S20-DUO**				**ML16-JET-7/16**	12.82

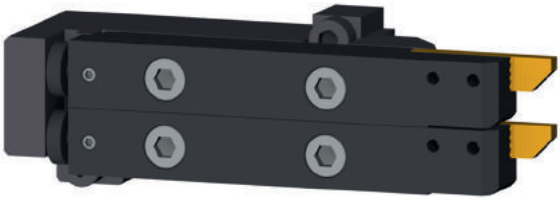
Tornos Swiss ST 26

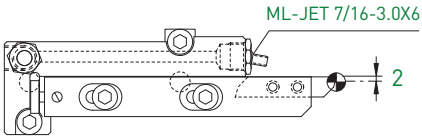
ML16

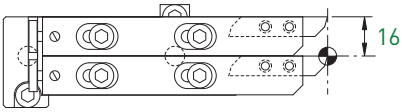
Jet



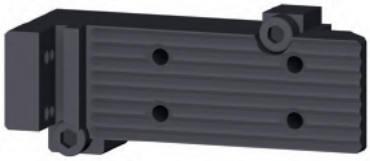
Duo







Jet



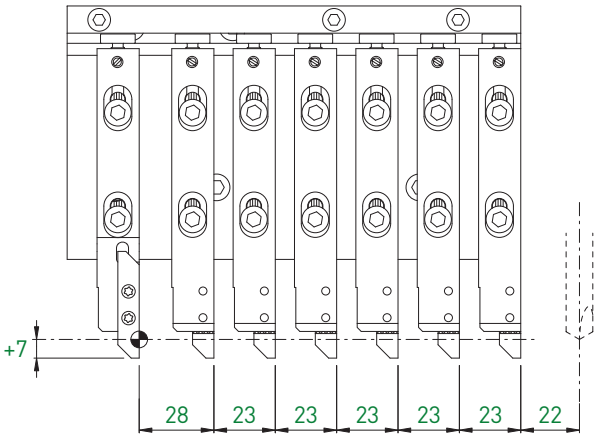
Duo

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
Jet	**ML16-SWISS-ST26-JET**	ML16	> 12.63	–	ML-JET-7/16...	12.82
Duo	**ML16-SWISS-ST26-DUO**				ML16-JET-7/16	12.82

Tornos DT 26

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

ML16

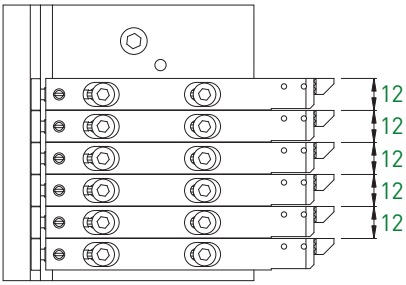


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML16-DT26-2020206-7T**	ML16	> 12.63	–	ML16-JET-7/16	12.82

Tsugami B074

+ 3 outils (max 6)
+ 3 Werkzeuge (max 6)
+ 3 tools (max 6)

ML12

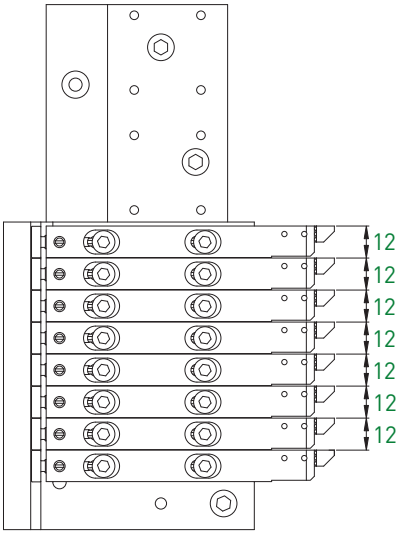


				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
6T	**ML12-B074-1-6T**	ML12	> 12.63	–	ML12-JET-5/16	12.82

Tsugami B075

+ 5 outils (max 8)
+ 5 Werkzeuge (max 8)
+ 5 tools (max 8)

ML12

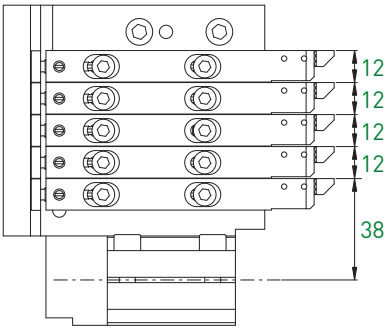


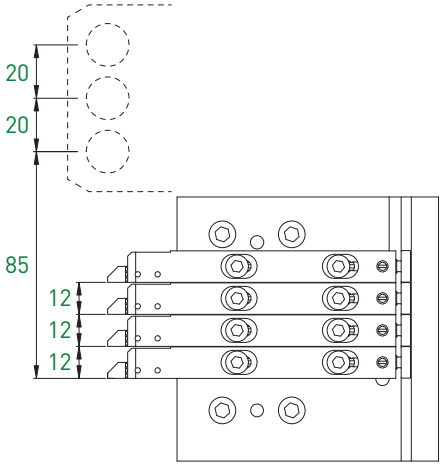
				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
8T	**ML12-B075-1-8T**	ML12	> 12.63	–	ML12-JET-5/16	12.82

Tsugami P034

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML12



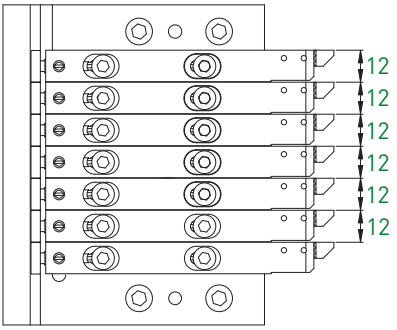


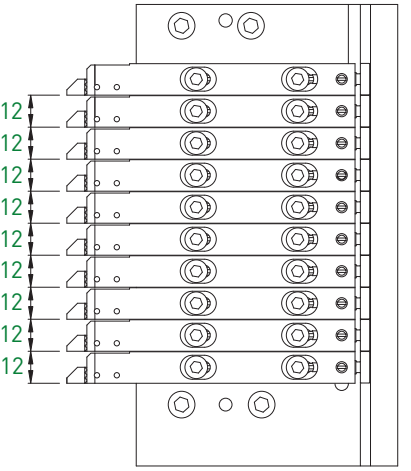
ML12-P034-1-5T

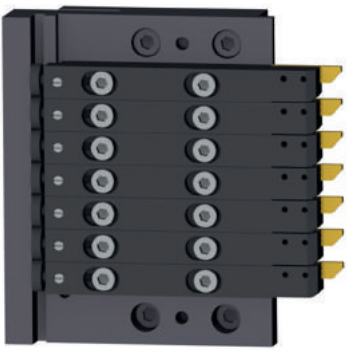
ML12-P034-2-4T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	**ML12-P034-2-4T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
5T	**ML12-P034-1-5T**					

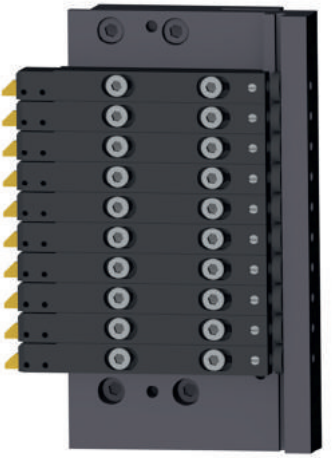
Tsugami P034 max + 17 outils + 17 Werkzeuge + 17 tools **ML12**







ML12-P034-1-7T



ML12-P034-2-10T

Tsugami P034

ML12

ML12-P034-1-7T

ML12-P034-2-10T

				Accessoires Zubehöre Accessories		
Type Typ Type	**Art. N°**	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	**ML12-P034-1-7T**	ML12	> 12.63	–	**ML12-JET-5/16**	12.82
10T	**ML12-P034-2-10T**					

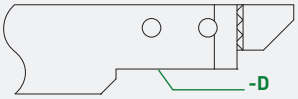
Les différents types de porte-outils
Die verschiedenen Haltertypen
The various types of holders

Type Standard

ML12A-740

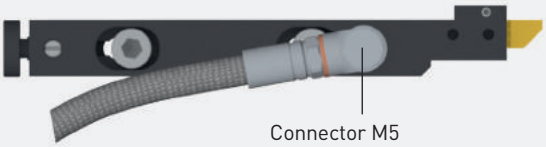
Type -D

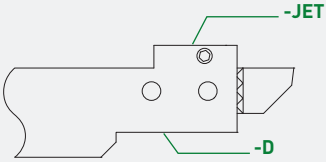
ML12A-740-**D**



Type -JET-D

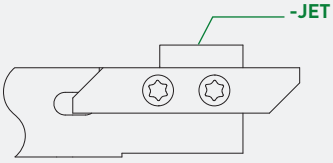
ML12A-740-**JET-D**





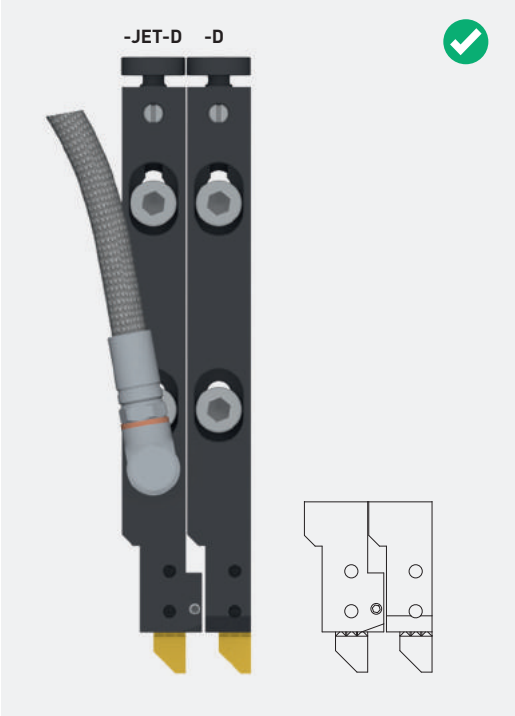
Type -JET

ML12A-740-**JET**



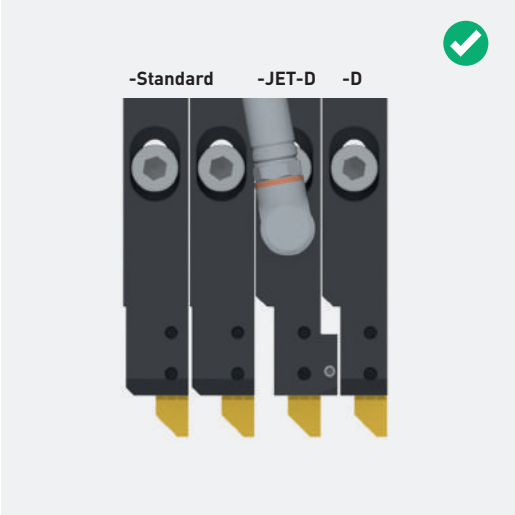
Compatibilité
Kompatibilität
Compatibility

OK

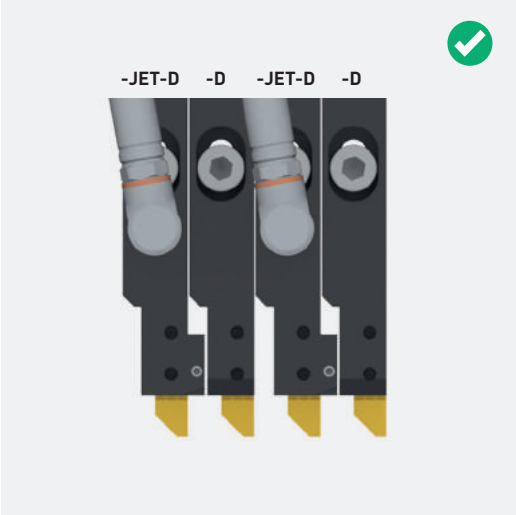


NOT OK

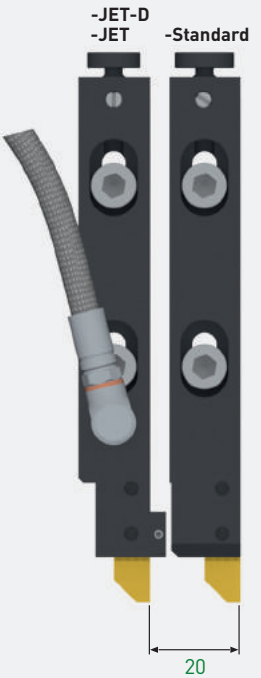
MIX



TYPE D



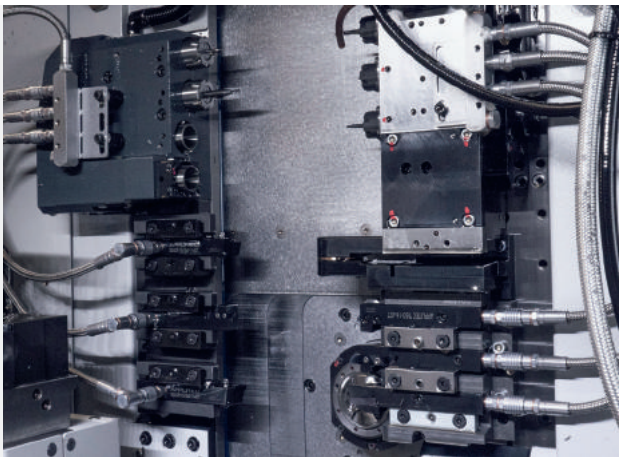
Exceptions
Ausnahmen
Exceptions

Exception ML12	Exception ML16
	
⩾ 15 mm = Total compatibility	⩾ 20 mm = Total compatibility

Brochure JET-Line:
Système de distribution du liquide de refroidissement pour haute pression

JET-Line Broschüre:
Kühlmittelverteilungssystem für hohen Druck

JET-Line brochure:
Coolant distribution system for high pressure

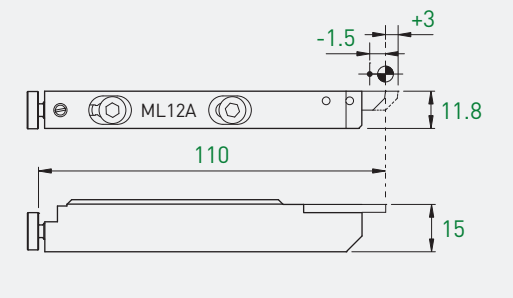


Porte-outils
Halter
Holders

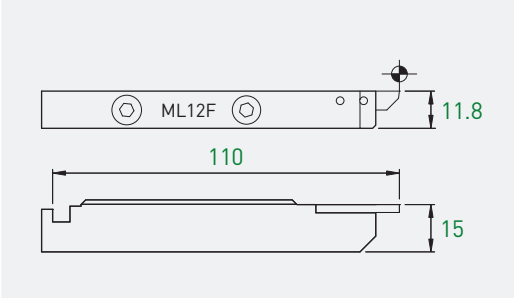
ML12 / ML16

Système de fixation Befestigungssystem Clamping system	
A = réglable einstellbar adjustable	**F** = longueur fixe fixlänge fixed length

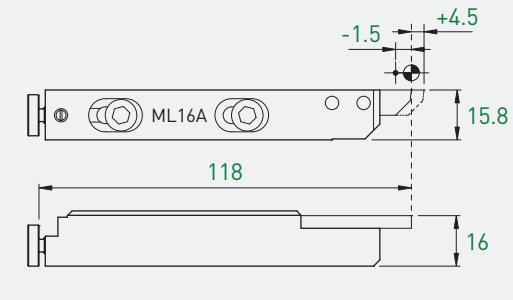
ML12A



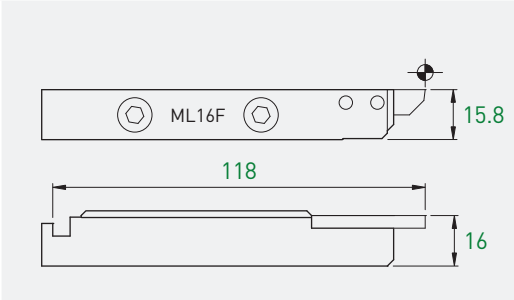
ML12F



ML16A

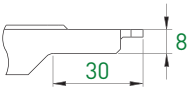


ML16F



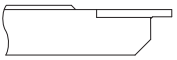
Porte-plaquettes
WSP-Halter
Insert holders

TOP-Line



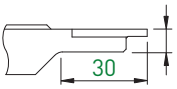
TOP-Line
731-737

	-D	
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-730-C-D new	-



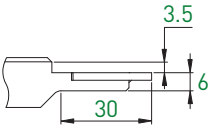
TOP-Line
741-747

Standard	-D	-JET-D
ML12	ML12	ML12
ML12A-740	ML12A-740-D	ML12A-740-JET-D
ML12F-740	ML12F-740-D	-
ML16	ML16	ML16
ML16A-740	ML16A-740-D	ML16A-740-JET-D
ML16F-740	-	-



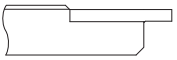
TOP-Line
741-747

ML12	ML12	ML12
ML12A-740-C	ML12A-740-C-D	ML12A-740-C-JET-D
ML12F-740-C	ML12F-740-C-D	-



TOP-Line
741

ML12	ML12	ML12
ML12A-740-C-R04	-	-
ML12A-740-C-SWISS-NANO	-	-

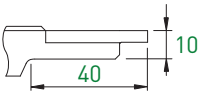


TOP-Line
761-767

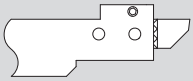
ML12	ML12	ML12
ML12A-760	ML12A-760-D	ML12A-760-JET-D
ML12F-760	ML12F-760-D	-
ML16	ML16	ML16
ML16A-760	ML16A-760-D	ML16A-760-JET-D
ML16F-760	-	-

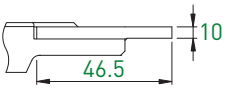
Porte-plaquettes
WSP-Halter
Insert holders

TOP-Line



TOP-Line
761-767

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
ML16A-760-C	ML16A-760-C-D	-
ML16F-760-C	-	-

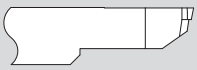
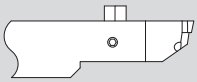


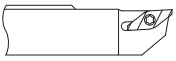
TOP-Line
781

ML16	ML16	ML16
-	ML16A-780-C-D	-

Porte-plaquettes
WSP-Halter
Insert holders

TURN-Line

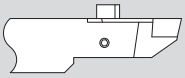
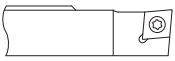
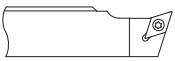
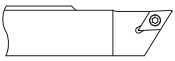
Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-340	ML12A-340-D	ML12A-340-JET-D
ML12F-340	ML12F-340-D	-
ML16	ML16	ML16
ML16A-340	ML16A-340-D	ML16A-340-JET-D
ML16F-340	-	-



TURN-Line
347-349

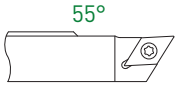
Porte-plaquettes
WSP-Halter
Insert holders

ISO-Line

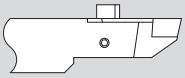
	Standard	-D	-JET-D
			
	Art. N°	Art. N°	Art. N°
80°  ISO-Line CC..-0602..	ML12	ML12	ML12
	ML12A-SCLCR06	ML12A-SCLCR06-D	ML12A-SCLCR06-JET-D
	ML12F-SCLCR06	ML12F-SCLCR06-D	-
	ML16	ML16	ML16
	ML16A-SCLCR06	ML16A-SCLCR06-D	ML16A-SCLCR06-JET-D
	ML16F-SCLCR06	ML16F-SCLCR06-D	-
80°  ISO-Line CC..-09T3..	ML12	ML12	ML12
	ML12A-SCLCR09	ML12A-SCLCR09-D	ML12A-SCLCR09-JET-D
	ML12F-SCLCR09	ML12F-SCLCR09-D	-
	ML16	ML16	ML16
	ML16A-SCLCR09	ML16A-SCLCR09-D	ML16A-SCLCR09-JET-D
	ML16F-SCLCR09	ML16F-SCLCR09-D	-
55°  ISO-Line DC..-0702..	ML16	ML16	ML16
	ML16A-SDHCR07	-	-
55°  ISO-Line DC..-0702..	ML12	ML12	ML12
	ML12A-SDJCR07	ML12A-SDJCR07-D	ML12A-SDJCR07-JET-D
	ML12F-SDJCR07	ML12F-SDJCR07-D	-
	ML16	ML16	ML16
	ML16A-SDJCR07	ML16A-SDJCR07-D	ML16A-SDJCR07-JET-D
	ML16F-SDJCR07	ML16F-SDJCR07-D	-

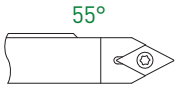
Porte-plaquettes
WSP-Halter
Insert holders

ISO-Line



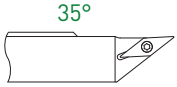
ISO-Line
DC..-11T3..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SDJCR11	ML12A-SDJCR11-D	ML12A-SDJCR11-JET-D
ML12F-SDJCR11	ML12F-SDJCR11-D	-
ML16	ML16	ML16
ML16A-SDJCR11	ML16A-SDJCR11-D	ML16A-SDJCR11-JET-D
ML16F-SDJCR11	ML16F-SDJCR11-D	-



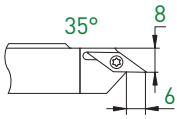
ISO-Line
DC..-11T3..

ML12	ML12	ML12
ML12A-SDNCN11	ML12A-SDNCN11-D	-
ML12F-SDNCN11	ML12F-SDNCN11-D	-
ML16	ML16	ML16
ML16A-SDNCN11	ML16A-SDNCN11-D	-
ML16F-SDNCN11	ML16F-SDNCN11-D	-



ISO-Line
VC..-1103..

ML12	ML12	ML12
ML12A-SVJCR11	ML12A-SVJCR11-D	ML12A-SVJCR11-JET-D
ML12F-SVJCR11	ML12F-SVJCR11-D	-
ML16	ML16	ML16
ML16A-SVJCR11	ML16A-SVJCR11-D	ML16A-SVJCR11-JET-D
ML16F-SVJCR11	ML16F-SVJCR11-D	-

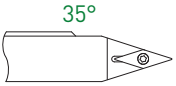


ISO-Line
VC..-1103..

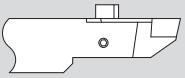
ML12	ML12	ML12
ML12A-SV-CR11	ML12A-SV-CR11-D	-
ML16	ML16	ML16
ML16A-SV-CR11	ML16A-SV-CR11-D	-

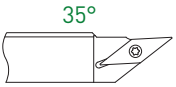
Porte-plaquettes
WSP-Halter
Insert holders

ISO-Line



ISO-Line
VC..-1103..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SVVCN11	ML12A-SVVCN11-D	ML12A-SVVCN11-JET-D
ML12F-SVVCN11	ML12F-SVVCN11-D	-
ML16	ML16	ML16
ML16A-SVVCN11	ML16A-SVVCN11-D	-
ML16F-SVVCN11	ML16F-SVVCN11-D	-

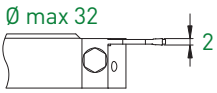


ISO-Line
VC..-1303..

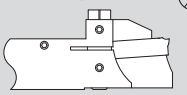
ML12	ML12	ML12
-	ML12A-SVJCR13-D	-
ML16	ML16	ML16
-	ML16A-SVJCR13-D	ML16A-SVJCR13-JET-D

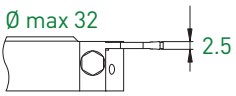
Porte-plaquettes
WSP-Halter
Insert holders

EVOCUT-Line



EVOCUT-Line
ET20..

		-JET -Ø 
Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET20-JET32

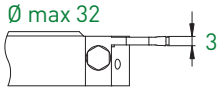


EVOCUT-Line
ET25..

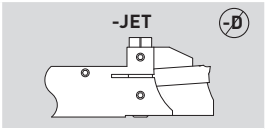
ML16	ML16	ML16
-	-	ML16A-ET25-JET32

Porte-plaquettes
WSP-Halter
Insert holders

EVOCUT-Line



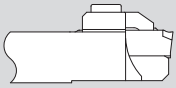
EVOCUT-Line
ET30..

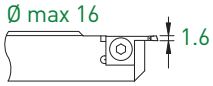


Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET30-JET32

Porte-plaquettes
WSP-Halter
Insert holders

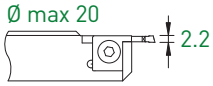
CUT-Line





CUT-Line
CUT16..

Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16	-	-
ML12F-CUT16	-	-
ML16	ML16	ML16
ML16A-CUT16	-	-
ML16F-CUT16	-	-

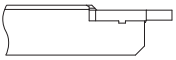


CUT-Line
CUT22..

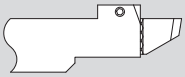
ML12	ML12	ML12
ML12A-CUT22	-	-
ML12F-CUT22	-	-
ML16	ML16	ML16
ML16A-CUT22	-	-
ML16F-CUT22	-	-

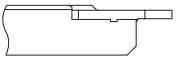
Porte-plaquettes
WSP-Halter
Insert holders

PRO-Line



PRO-Line
642-647

	-D 	-JET-D 
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-640-D	ML12A-640-JET-D
ML16	ML16	ML16
–	ML16A-640-D	ML16A-640-JET-D

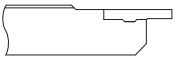


PRO-Line
661

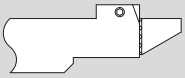
ML12	ML12	ML12
-	ML12A-660-D	ML12A-660-JET-D
ML16	ML16	ML16
-	ML16A-660-D	ML16A-660-JET-D

Porte-plaquettes
WSP-Halter
Insert holders

ECO-Line

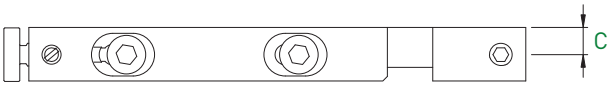


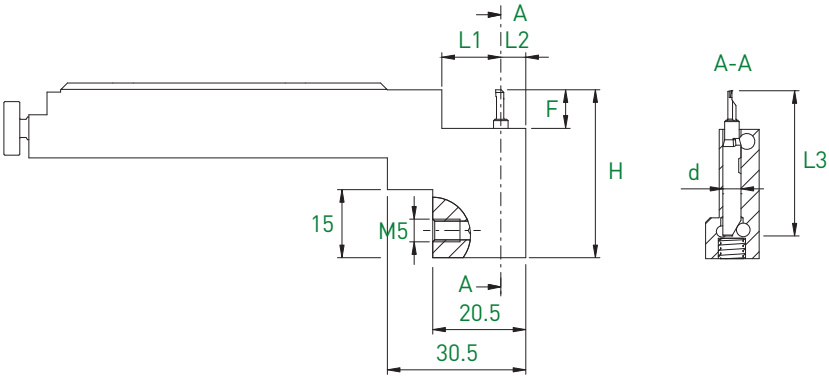
ECO-Line
261-266

Standard 	-D 	-JET-D 
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-260	ML12A-260-D	ML12A-260-JET-D
ML12F-260	ML12F-260-D	-
ML16	ML16	ML16
ML16A-260	ML16A-260-D	ML16A-260-JET-D
ML16F-260	-	-

Porte-outils
Halter
Holders

IN-Line

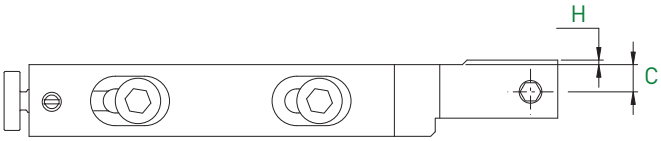


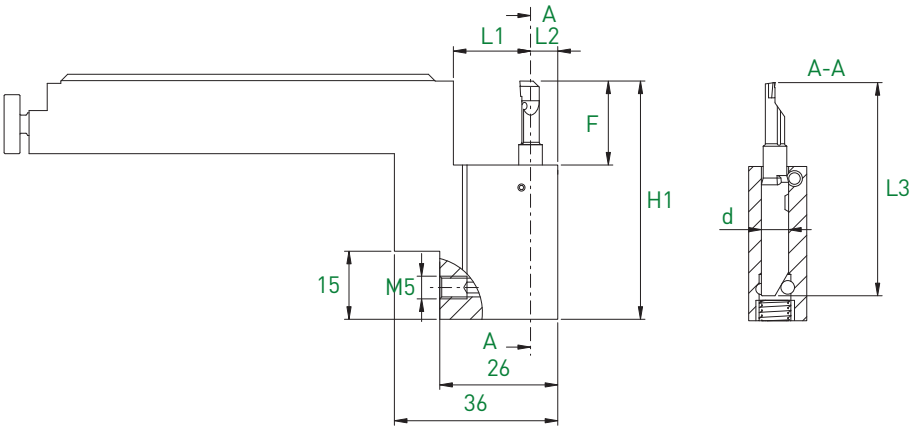


								ML12
d	Compatible bars	L3	F	H	C	L1	L2	**Art. N°**
4	BB4R... BF4R...	32	8.5	37	6	13	5.5	**ML12A-BHK4N-32R-D**
		37	13.5	42	6	13	5.5	**ML12A-BHK4N-37R-D**
		42	18.5	47	6	13	5.5	**ML12A-BHK4N-42R-D**

Porte-outils
Halter
Holders

IN-Line



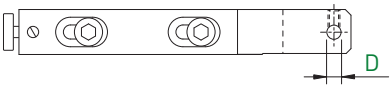


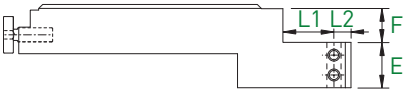
									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	**Art. N°**
4	BB4R... BF4R...	32	8.5	37	6	-	17.5	5.5	**ML16A-BHK4N-32R-D**
		37	13.5	42	6	-	17.5	5.5	**ML16A-BHK4N-37R-D**
		42	18.5	47	6	-	17.5	5.5	**ML16A-BHK4N-42R-D**

									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	**Art. N°**
6	BB4R... BF4R...	47	18.5	52.5	6	1	17	6	**ML16A-BHK6N-47R-D**
		57	28.5	62.5	6	1	17	6	**ML16A-BHK6N-57R-D**

Porte-outils
Halter
Holders

TOOLING-Line



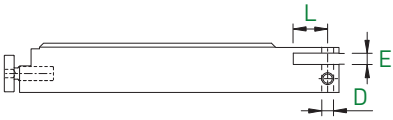


					ML12
F	D	E	L1	L2	Art. N°
8	3	12	13	6	ML12A-2440-8-3
8	4	12	13	6	ML12A-2440-8-4
8	5	12	13	6	ML12A-2440-8-5
12	6	12	13	6	ML12A-2440-12-6

					ML16
F	D	E	L1	L2	Art. N°
12	3	16	18	6	ML16A-2440-12-3
12	4	16	18	6	ML16A-2440-12-4
12	5	16	18	6	ML16A-2440-12-5
12	6	16	18	6	ML16A-2440-12-6
18	8	16	18	6	ML16A-2440-18-8

Porte-molettes
Rändelhalter
Knurl holders

TOOLING-Line



			ML12
E	D	L	Art. N°
4	4	8	ML12A-2402-44

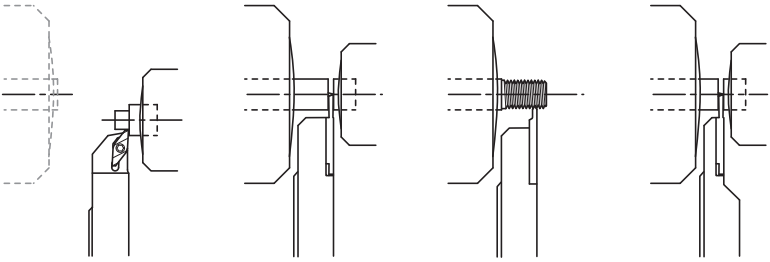
			ML16
E	D	L	Art. N°
4	4	11	ML16A-2402-44

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

Coupe à droite déportée ou usinage à gauche sur contre-broche

Rechtsschneidend versetzt oder linksschneidend auf Gegenspindel

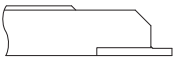
Right hand cut off line or left hand cut on subspindle



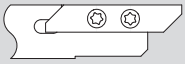
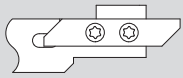
TURN-Line	TOP-Line	TOP-Line	TOP-Line
ISO-Line	EVOCUT-Line	EVOCUT-Line	PRO-Line
	CUT-Line	CUT-Line	ECO-Line
	PRO-Line	PRO-Line	
	ECO-Line	ECO-Line	

Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

TOP-Line

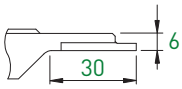


TOP-Line
731-737

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-730-V	**ML12A-730-V-D**	**ML12A-730-V-JET-D**
ML16	**ML16**	**ML16**
ML16A-730-V	**ML16A-730-V-D**	**ML16A-730-V-JET-D**

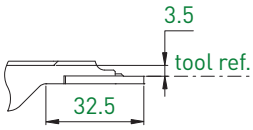
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

TOP-Line



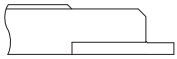
TOP-Line
731R

Standard	-D	-JET
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-730RC	-	ML12A-730RC-JET
		-JET-D
ML16	ML16	ML16
ML16A-730RC	ML16A-730RC-D	ML16A-730RC-JET-D



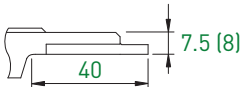
TOP-Line
731R

ML12	ML12	ML12
ML12A-730RC-R04	-	-
ML12A-730RC-SWISS-NANO	-	-



TOP-Line
751-757

ML12	ML12	ML12
ML12A-750-V	ML12A-750-V-D	ML12A-750-V-JET-D
ML16	ML16	ML16
ML16A-750-V	ML16A-750-V-D	ML16A-750-V-JET-D

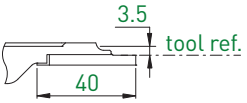


TOP-Line
751R

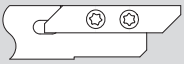
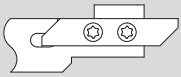
ML12	ML12	ML12
ML12A-750RC	-	ML12A-750RC-JET
ML16	ML16	ML16
ML16A-750RC	ML16A-750RC-D	ML16A-750RC-JET-D

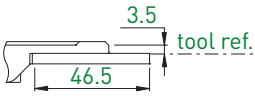
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

TOP-Line



TOP-Line
751R

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-750RC-R04	-	-
ML12A-750RC-SWISS-NANO	-	-



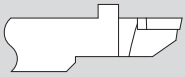
TOP-Line
771R

ML12	ML12	ML12
ML12A-770RC-SWISS-NANO	-	-

Porte-plaquettes – Contre-opération
WSP-Halter – Gegenspindel
Insert holders – Cut on subspindle

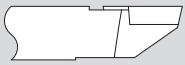
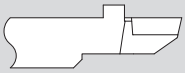
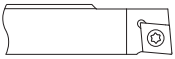
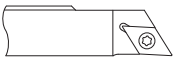
TURN-Line

TURN-Line
337-339

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-330-V	ML12A-330-V-D	ML12A-330-V-JET-D
ML16	ML16	ML16
ML16A-330-V	ML16A-330-V-D	ML16A-330-V-JET-D

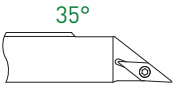
Porte-plaquettes – Contre-opération
WSP-Halter – Gegenspindel
Insert holders – Cut on subspindle

ISO-Line

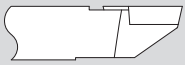
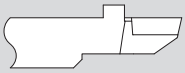
	Standard	-D	-JET-D
			
	Art. N°	Art. N°	Art. N°
80° 	ML12	ML12	ML12
	-	ML12A-SCLCL06-V-D	ML12A-SCLCL06-V-JET-D
ISO-Line CC..-0602..	ML16	ML16	ML16
	-	ML16A-SCLCL06-V-D	ML16A-SCLCL06-V-JET-D
80° 	ML12	ML12	ML12
	-	ML12A-SCLCL09-V-D	ML12A-SCLCL09-V-JET-D
ISO-Line CC..-9T3..	ML16	ML16	ML16
	-	ML16A-SCLCL09-V-D	ML16A-SCLCL09-V-JET-D
55° 	ML12	ML12	ML12
	-	ML12A-SDJCL07-V-D	ML12A-SDJCL07-V-JET-D
ISO-Line DC..-0702..	ML16	ML16	ML16
	-	ML16A-SDJCL07-V-D	ML16A-SDJCL07-V-JET-D
55° 	ML12	ML12	ML12
	ML12A-SDJCL11-V	ML12A-SDJCL11-V-D	ML12A-SDJCL11-V-JET-D
ISO-Line DC..-11T3..	ML16	ML16	ML16
	ML16A-SDJCL11-V	ML16A-SDJCL11-V-D	ML16A-SDJCL11-V-JET-D

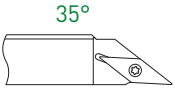
Porte-plaquettes – Contre-opération
WSP-Halter – Gegenspindel
Insert holders – Cut on subspindle

ISO-Line



ISO-Line
VC..-1103..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SVJCL11-V	ML12A-SVJCL11-V-D	ML12A-SVJCL11-V-JET-D
ML16	ML16	ML16
ML16A-SVJCL11-V	ML16A-SVJCL11-V-D	ML16A-SVJCL11-V-JET-D

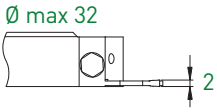


ISO-Line
VC..-1303..

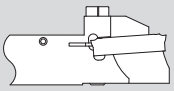
ML12	ML12	ML12
-	ML12A-SVJCL13-V-D	-
ML16	ML16	ML16
-	ML16A-SVJCL13-V-D	ML16A-SVJCL13-V-JET-D

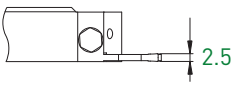
Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

EVOCUT-Line



EVOCUT-Line
ET20

		-JET -D 
Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET20-V-JET32



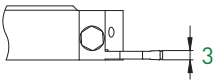
EVOCUT-Line
ET25

ML16	ML16	ML16
-	-	ML16A-ET25-V-JET32

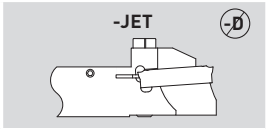
Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

EVOCUT-Line

Ø max 32



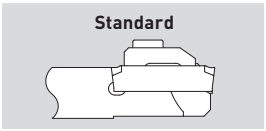
EVOCUT-Line
ET30



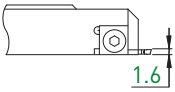
ML16	ML16	ML16
-	-	ML16A-ET30-V-JET32

Porte-plaquettes – Coupe déportée
WSP-Halter – Versetztes Schneiden
Insert holders – Cut off line

CUT-Line



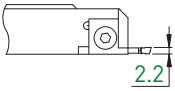
Ø max 16



CUT-Line
CUT16

Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16-V	-	-
ML12F-CUT16-V	-	-
ML16	ML16	ML16
ML16A-CUT16-V	-	-
ML16F-CUT16-V	-	-

Ø max 20

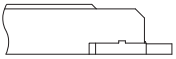


CUT-Line
CUT22

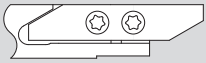
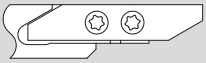
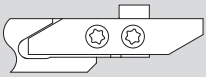
ML12	ML12	ML12
ML12A-CUT22-V	-	-
ML12F-CUT22-V	-	-
ML16	ML16	ML16
ML16A-CUT22-V	-	-
ML16F-CUT22-V	-	-

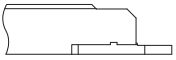
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

PRO-Line



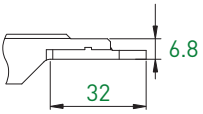
PRO-Line
632-636

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-630-V-D	ML12A-630-V-JET-D
ML16	ML16	ML16
-	ML16A-630-V-D	ML16A-630-V-JET-D



PRO-Line
651R

ML12	ML12	ML12
-	ML12A-650-V-D	ML12A-650-V-JET-D
ML16	ML16	ML16
-	ML16A-650-V-D	ML16A-650-V-JET-D

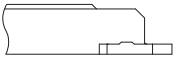


PRO-Line
651R

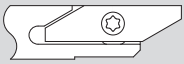
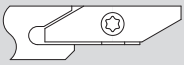
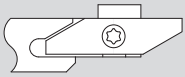
ML12	ML12	ML12
ML12A-650RC	ML12A-650RC-D	-
ML16	ML16	ML16
-	ML16A-650RC-D	ML16A-650RC-JET-D

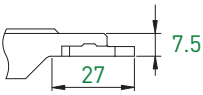
Porte-plaquettes – Coupe déportée & contre-opération
WSP-Halter – Versetztes Schneiden & Gegenspindel
Insert holders – Cut off line & cut on subspindle

ECO-Line



ECO-Line
251-261

Standard	-D	-JET-D
		
Art. N°	**Art. N°**	**Art. N°**
ML12	**ML12**	**ML12**
ML12A-250-V	**ML12A-250-V-D**	**ML12A-250-V-JET-D**
ML16	**ML16**	**ML16**
ML16A-250-V	**ML16A-250-V-D**	**ML16A-250-V-JET-D**



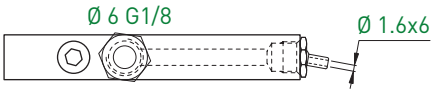
ECO-Line
251R

ML12	**ML12**	**ML12**
-	**ML12A-250RC-D**	**-**
ML16	**ML16**	**ML16**
-	**ML16A-250RC-D**	**-**

Modules d'arrosage
Kühlmittelzufuhrelemente
Coolant supply units

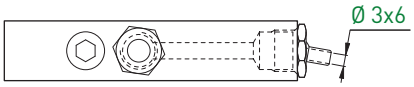
ML12 / ML16

ML12



Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML12 Art. N°
Ø 6 G 1/8	5/16"	**ML12-JET-5/16**

ML16

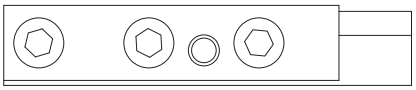


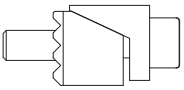
Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML16 Art. N°
Ø 6 G 1/8	7/16"	**ML16-JET-7/16**

buses optionnelles voir page 12.81
zusätzliche Düsen siehe Seite 12.81
optional nozzles see page 12.81

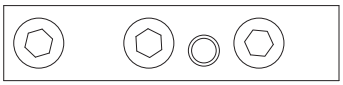
Modules de serrage
Spannelemente
Clamping units

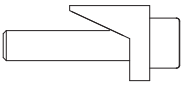
ML12 / ML16





ML12 Art. N°	ML16 Art. N°
ML12-FIX-12/14	**ML16-FIX-16/16**
–	**ML16-FIX-16/16.5**
–	**ML16-FIX-16/17**
–	**ML16-FIX-16/20**
–	**ML16-FIX-16/22**
–	**ML16-FIX-16/24**



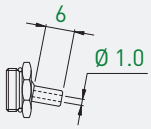
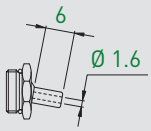
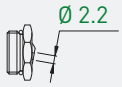


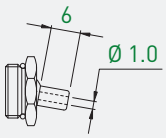
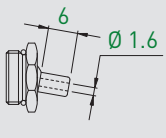
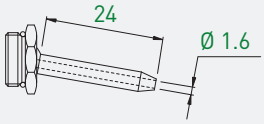
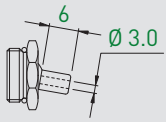
ML12 Art. N°	ML16 Art. N°
ML12-FIX-12	**ML16-FIX-16**

Buses d'arrosage
Kühlmitteldüsen
Coolant nozzles

5/16" / 7/16"

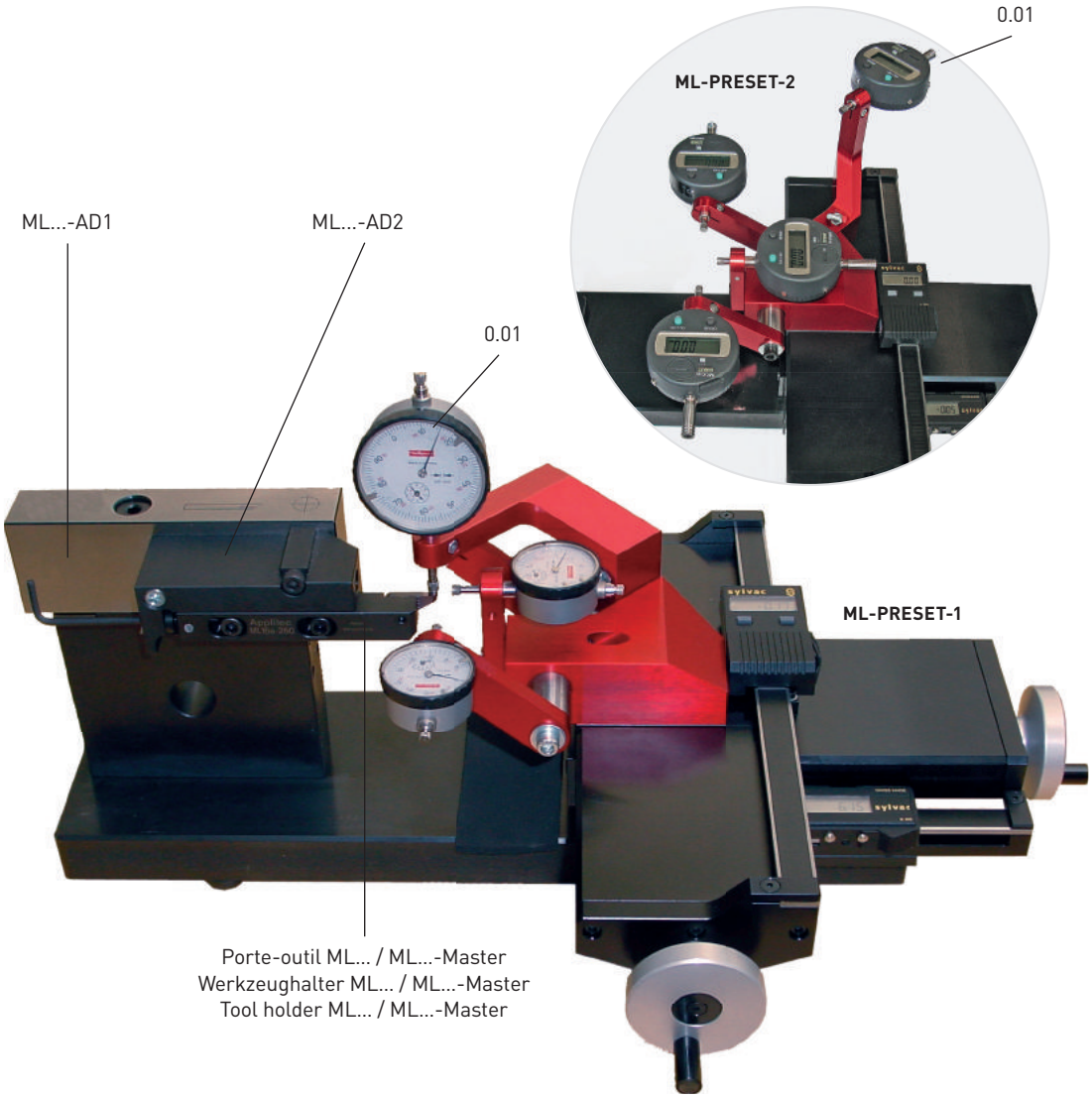
JET

5/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	**ML-JET 5/16-1.0X6**	**ML12-JET-5/1.6** une buse **ML-JET-5/16-1.6x6** est comprise eine Düse **ML-JET-5/16-1.6x6** ist inbegriffen a nozzle **ML-JET-5/16-1.6x6** is included
	**ML-JET 5/16-1.6X6**	
	**ML-JET 5/16-2.2X0**	

7/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	**ML-JET 7/16-1.0X6**	**ML16-KMX26-JET** **ML16-JET-7/16** **ML12-DECO10-JET** **ML16-DECO13-JET** **ML16-DECO20-JET** **ML16-S20-JET** **ML16-SWISS-ST26-JET** une buse **ML-JET-7/16-3.0x6** est comprise avec chaque article ci-dessus eine Düse **ML-JET 7/16-3.0x6** ist mit jedem vorstehenden Artikel inbegriffen a nozzle **ML-JET 7/16-3.0x6** is included with each above item
	**ML-JET 7/16-1.6X6**	
	**ML-JET-7/16-1.6X24**	
	**ML-JET-7/16-3.0X6**	

Banc de préréglage
Voreinstellgerät
Presetting device

ML12 / ML16

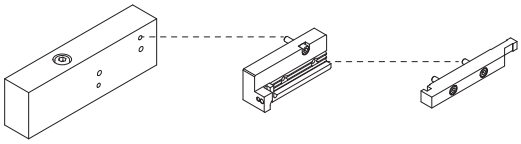


Art. N°
ML-PRESET-1
ML-PRESET-2

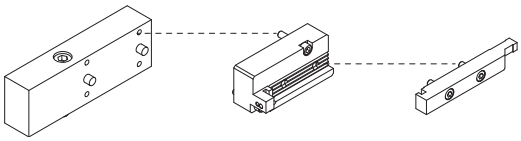
Banc de préréglage
Voreinstellgerät
Presetting device

ML12 / ML16

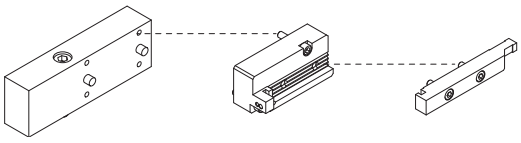
Type Typ Type	Fabricant Hersteller Manufacturer	Machines Maschinen Machines	Adaptateurs et jauges d'étalonnage Adapter und Einstellehre Adaptators and master gauges
ML12	CITIZEN	C12/C16	
		L12-1M7	
		L12-2M10	
		M16 V/VIII	
		R04	
		R07	
	HANWHA	XD20M	
	METAFIL	D3/D10/D13	
	STAR	SB-12RG	
		SR10-J	
		SW-12RII	
	TORNOS	DECO7/10 - EvoDECO 10	
		SwissNano/SwissNano 7	
		DT13	
		CT20	
		GT13	
	TSUGAMI	B074	
		B075	
		PO34	
ML16	CITIZEN	K12/K16/K12E/K16E	
		L16/L20	
		L20E	
	HANWHA	SL12/16	
	MANUHRIN	KMX 426/526/626/Swing 20-26 MM	
	STAR	SA-12/SA-16/SA-16R	
		SB-16	
		SB-16/20RG	
		SB-20C/E	
		SR-20J/SR-20RIII	
		SR-20JII-A/B	
		SR-16R/SR-20R/SR-20RII	
		SR-20RIII/SR-20J	
		SR-20RIV	
		SR-32J	
		SV-12/20/ SV-20R	
		SW-20R	
	TORNOS	DECO20/26 - EvoDECO20/32	
		SIGMA20/32	
		DT26	
		GT26	
		GT32	
ML16	TORNOS	DECO13-EvoDECO16	
		ST26	



ML12-AD1 **ML12-AD2** **ML12-MASTER**



ML16/20-AD1 **ML16-AD2** **ML16-MASTER**

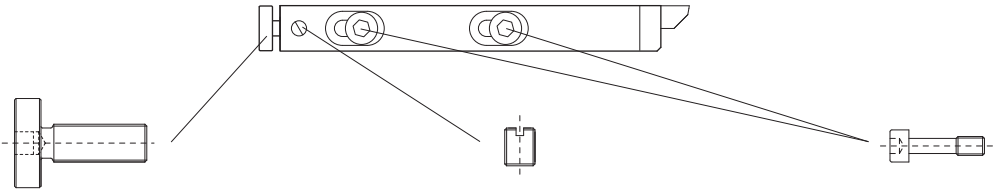


ML16-DECO13-AD1 **ML16-DECO13-AD2** **ML16-MASTER**

Pièces de rechange
Ersatzteile
Spare parts

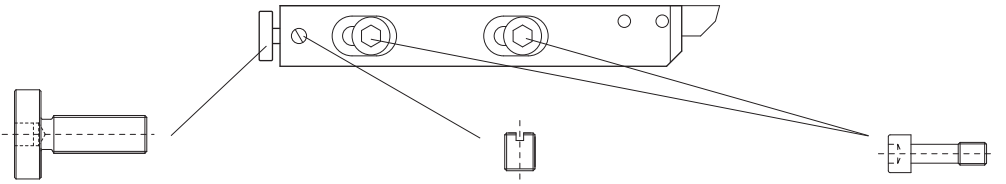
ML12 / ML16

ML12



Vis de réglage Einstellungsschraube Setting screw	Vis de blocage Blockierschraube Locking screw	Vis de fixation Befestigungsschraube Fixing screw
Art. N°	**Art. N°**	**Art. N°**
ML12A-M5X0.5	**ML-M4X4-T**	**ML12-M5XL20**

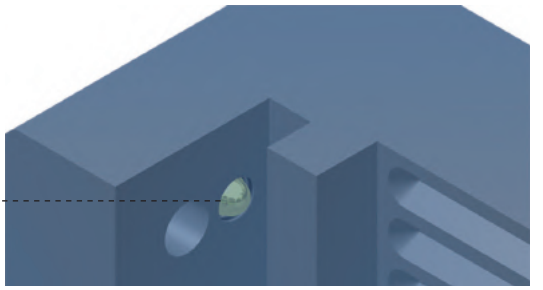
ML16



Vis de réglage Einstellungsschraube Setting screw	Vis de blocage Blockierschraube Locking screw	Vis de fixation Befestigungsschraube Fixing screw
Art. N°	**Art. N°**	**Art. N°**
ML16A-M5X0.5	**ML-M4X4-T**	**ML16/20-M6XL20**

Art. N°
ML-205004

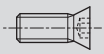
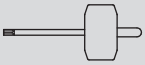
Butée à ressort
Federnde Schraube
Spring bumper



Pièces de rechange
Ersatzteile
Spare parts

ML12 / ML16

Vis et clés pour le serrage des plaquettes
Schrauben und Schlüsseln für WSP-Befestigung
Screws and keys for insert clamping

Porte-outils Halter Holders					
ML...250	V-M4X9-T15	C-T15	-	-	-
ML...260					
ML...330	V-M2.5X7.8-T8	C-T8	-	-	-
ML...340					
ML...630	V-M4X9-T15	C-T15	-	-	-
ML...640					
ML...650					
ML...650RC	V-M4X6.5-T15				
ML...660	V-M4X9-T15				
ML...730	V-M3X7-T8	C-T8	-	-	-
ML...730RC	V-M3X5.5-T8				
ML...730RC-R04	V-M3X4.5-T8 V-M3X7-T8				
ML...730RC-SWISS-NANO	V-M3X4.5-T8 V-M3X7-T8				
ML...740	V-M3X7-T8				
ML...750	V-M4X9-T15	C-T15	-	-	-
ML...750RC	V-M4X7.3-T15				
ML...750RC-R04	V-M4X5.6-T15 V-M4X7.3-T15				
ML...750RC-SWISS-NANO	V-M4X5.6-T15 V-M4X7.3-T15				
ML...760	V-M4X9-T15				
ML...770RC-SWISS-NANO	V-M4X7.3-T15				
ML...780	V-M4X9-T15				
ML...SC...06	V-M2.5X5.8-T8	C-T8	-	-	-
ML...SC...09	V-M4X7-T15-ISO	C-T15	-	-	-
ML...-SD...07	V-M2.5X7.8-T8	C-T8	-	-	-
ML...-SD...07-D	V-M2.5X5.8-T8				
ML12...-SDJ...11	V-M4X7-T15-ISO	C-T15	-	-	-
ML12...-SDN...11	V-M4X9-T15-ISO				
ML16...-SD...11					
ML...-SV...11	V-M2.5X7.8-T8	C-T8	-	-	-
ML...-SV...13	V-M3X7.3-T8-ISO				
ML...-CUT16	-	-	CUT16RS-SET	-	-
ML...-CUT16-V	-	-	CUT16LS-SET	-	-
ML...-CUT22	-	-	CUT22RS-SET	-	-
ML...-CUT16-V	-	-	CUT22LS-SET	-	-
ML16...-ET... JET32	-	-	-	V-M5X21-6P7-J	C-6PEX-7.0
ML16...-ET... V-JET32	-	-	-		
ML...-BHK	V-BHK-M4X0.5-T8	-	-		

APPLITEC

Outils et porte-outils traditionnels pour le décolletage et la mécanique de précision

- Porte-outils
- Forets à centrer
- Burins intérieurs
- Porte-molettes
- Molettes MD

Übliche Werkzeuge und Halter für Decolletage und Präzisionsmechanik

- Werkzeughalter
- Zentrierbohrer
- Innendrehwerkzeuge
- Rändelhalter
- Rändelrädchen

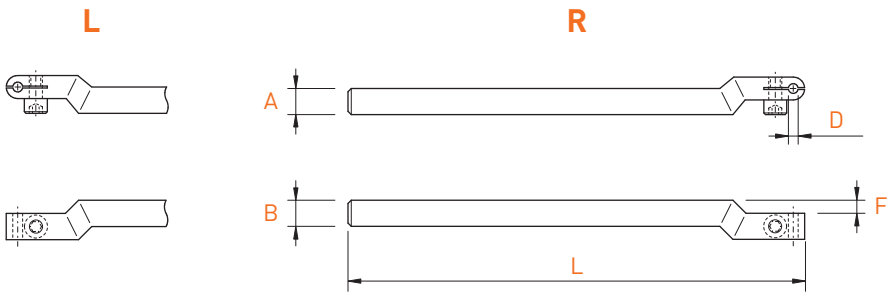
Usual tools and tool holders for automatic lathes and precision mecanics

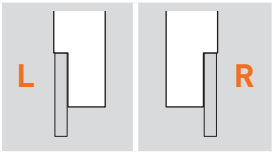
- Tool holders
- Centring drills
- Internal turning tools
- Knurl holders
- Knurling wheels

Index

Porte-outils
Werkzeughalter
Tool holders

1400-J / 2400-J

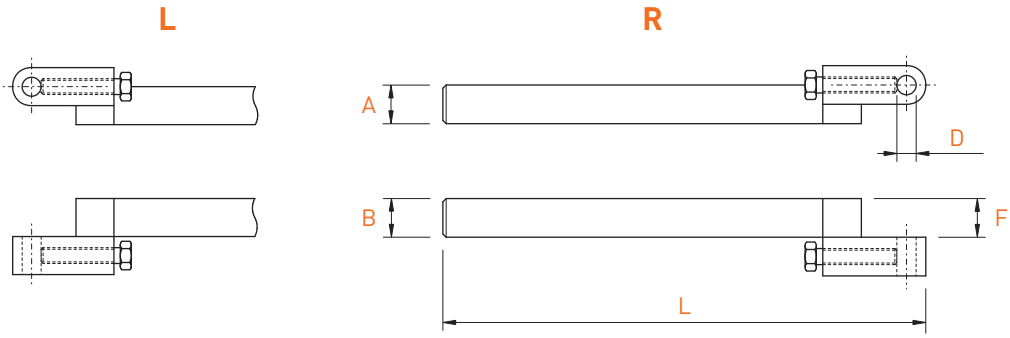


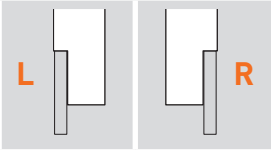


A x B	L	F	D	Art. N°	Art. N°
6 x 6	132	3	1.5	**1400-J-615**	**2400-J-615**
6 x 6	132	3	2.0	**1400-J-620**	**2400-J-620**
6 x 6	132	3	3.0	**1400-J-630**	**2400-J-630**
7 x 7	140	3	1.5	**1400-J-715**	**2400-J-715**
7 x 7	140	3	2.0	**1400-J-720**	**2400-J-720**
7 x 7	140	3	3.0	**1400-J-730**	**2400-J-730**
8 x 8	140	4	1.5	**1400-J-815**	**2400-J-815**
8 x 8	140	4	2.0	**1400-J-820**	**2400-J-820**
8 x 8	140	4	3.0	**1400-J-830**	**2400-J-830**

Porte-outils
Werkzeughalter
Tool holders

1401-K / 2401-K

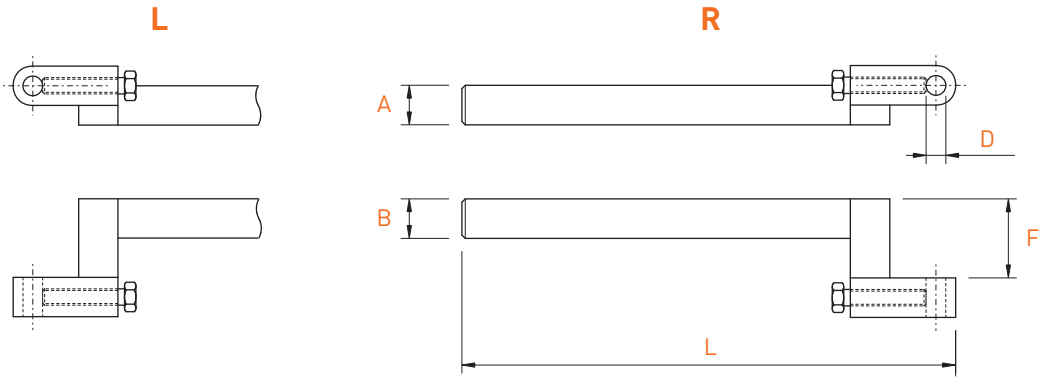


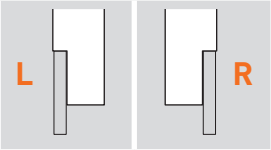


A x B	L	F	D	Art. N°	Art. N°
7 x 7	146	7	2.0	1401-K-720	-
7 x 7	146	7	3.0	1401-K-730	2401-K-730
7 x 7	146	7	4.0	1401-K-740	2401-K-740
8 x 8	146	8	2.0	1401-K-820	-
8 x 8	146	8	3.0	1401-K-830	2401-K-830
8 x 8	146	8	4.0	1401-K-840	2401-K-840
8 x 8	146	8	5.0	1401-K-850	2401-K-850
8 x 8	146	8	6.0	1401-K-860	2401-K-860
10 x 10	150	10	3.0	-	2401-K-1030
10 x 10	150	10	4.0	1401-K-1040	2401-K-1040
10 x 10	150	10	5.0	1401-K-1050	2401-K-1050
10 x 10	150	10	6.0	1401-K-1060	2401-K-1060
10 x 10	150	10	7.0	1401-K-1070	2401-K-1070
12 x 12	150	12	3.0	-	2401-K-1230
12 x 12	150	12	4.0	1401-K-1240	2401-K-1240
12 x 12	150	12	5.0	1401-K-1250	2401-K-1250
12 x 12	150	12	6.0	1401-K-1260	2401-K-1260
12 x 12	150	12	8.0	1401-K-1280	2401-K-1280
14 x 14	150	14	4.0	1401-K-1440	2401-K-1440
14 x 14	150	14	6.0	1401-K-1460	2401-K-1460
14 x 14	150	14	8.0	1401-K-1480	2401-K-1480

Porte-outils
Werkzeughalter
Tool holders

1420 / 2420





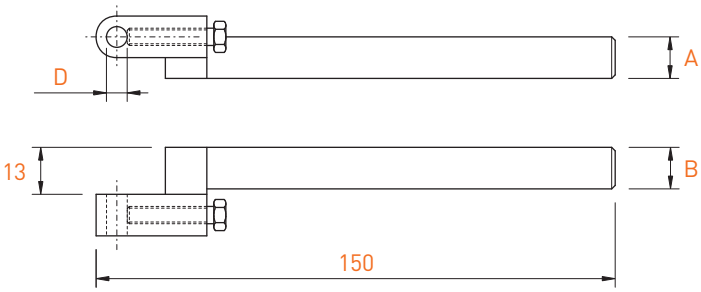
A x B	L	F	D	Art. N°	Art. N°
7 x 7	146	12	4.0	**1420-7124**	**2420-7124**
8 x 8	146	12	4.0	**1420-8124**	**2420-8124**
8 x 8	146	14	3.0	**1420-8143**	**2420-8143**
8 x 8	146	15	5.0	**1420-8155**	**2420-8155**
8 x 8	146	20	5.0	**1420-8205**	**2420-8205**
10 x 10	150	20	6.0	**1420-10206**	**2420-10206**
12 x 12	150	18	6.0	**1420-12186**	**2420-12186**
12 x 12	150	18	8.0	**1420-12188**	**-**
12 x 12	150	24	8.0	**1420-12248**	**2420-12248**
14 x 14	150	20	8.0	**1420-14208**	**2420-14208**
14 x 14	150	24	8.0	**1420-14248**	**2420-14248**

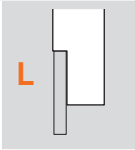
Porte-outils
Werkzeughalter
Tool holders

⧄ 12 x 12

1460

L



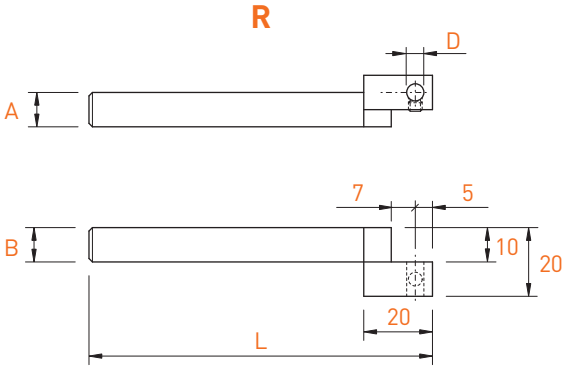


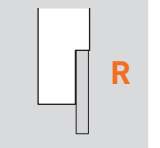
A x B	D	Art. N°
12 x 12	4.0	**1460-4**
12 x 12	5.0	**1460-5**
12 x 12	6.0	**1460-6**
12 x 12	8.0	**1460-8**

Porte-outils
Werkzeughalter
Tool holders

⧄ 10 x 10

2450-SP



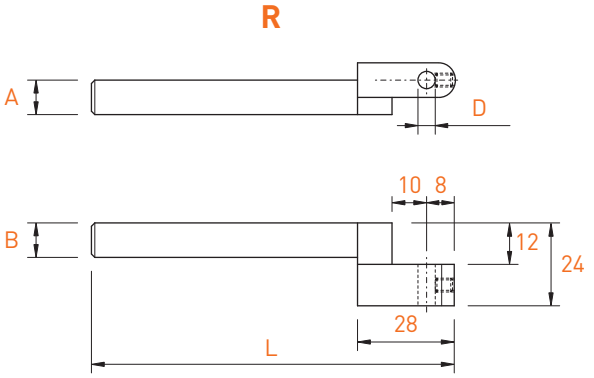


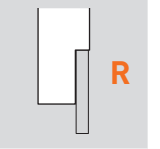
A x B	L	D	Art. N°
10 x 10	100	3.0	**2450-SP-3**
10 x 10	100	4.0	**2450-SP-4**
10 x 10	100	5.0	**2450-SP-5**
10 x 10	100	6.0	**2450-SP-6**
10 x 10	120	3.0	**2450-SP-3-120**
10 x 10	120	4.0	**2450-SP-4-120**
10 x 10	120	5.0	**2450-SP-5-120**
10 x 10	120	6.0	**2450-SP-6-120**

Porte-outils
Werkzeughalter
Tool holders

⧄ 10 x 10

2470



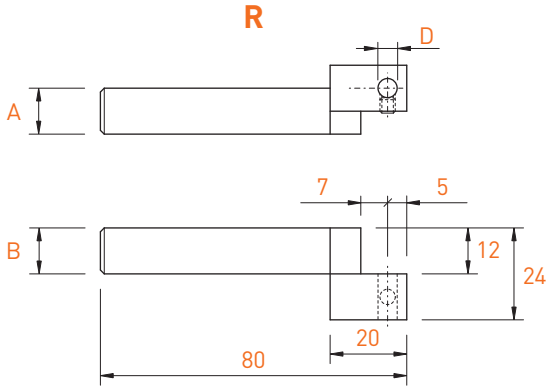


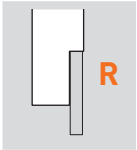
A x B	L	D	Art. N°
10 x 10	105	3.0	**2470-3**
10 x 10	105	4.0	**2470-4**
10 x 10	105	5.0	**2470-5**
10 x 10	105	6.0	**2470-6**
10 x 10	105	7.0	**2470-7**

Porte-outils
Werkzeughalter
Tool holders

⧄ 12 x 12

2450



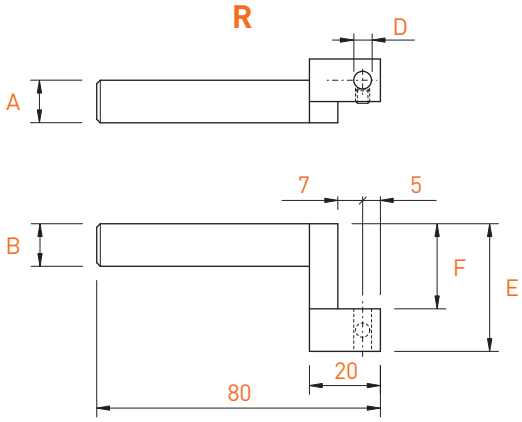


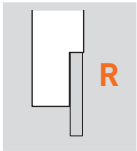
A x B	D	Art. N°
12 x 12	3.0	**2450-3**
12 x 12	4.0	**2450-4**
12 x 12	5.0	**2450-5**
12 x 12	6.0	**2450-6**
12 x 12	8.0	**2450-8**

Porte-outils
Werkzeughalter
Tool holders

⧄ 12 x 12

2460

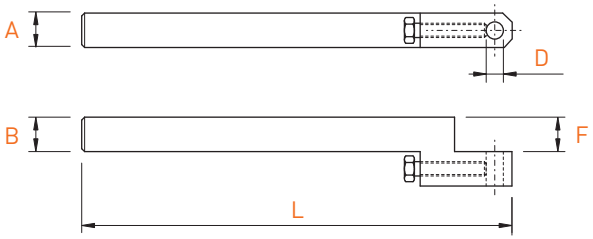




A x B	F	E	D	Art. N°
12 x 12	16	28	4.0	**2460-284**
12 x 12	16	28	6.0	**2460-286**
12 x 12	16	28	8.0	**2460-288**
12 x 12	20	32	4.0	**2460-324**
12 x 12	20	32	6.0	**2460-326**
12 x 12	20	32	8.0	**2460-328**
12 x 12	24	36	4.0	**2460-364**
12 x 12	24	36	6.0	**2460-366**
12 x 12	24	36	8.0	**2460-368**

Porte-outils
Werkzeughalter
Tool holders

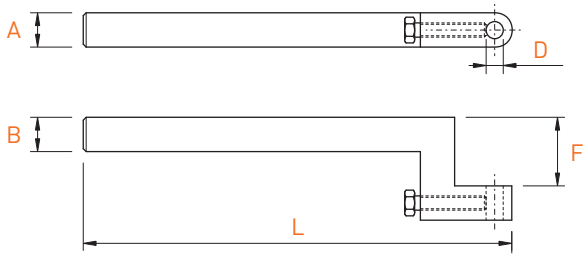
2405



A x B	L	F	D	Art. N°
8 x 8	120	8	3.0	**2405-K-830**
8 x 8	120	8	4.0	**2405-K-840**
8 x 8	120	8	5.0	**2405-K-850**
8 x 8	120	8	6.0	**2405-K-860**
10 x 10	100	10	4.0	**2405-K-1040**
10 x 10	100	10	5.0	**2405-K-1050**
10 x 10	100	10	6.0	**2405-K-1060**
12 x 12	150	12	4.0	**2405-K-1240**
12 x 12	150	12	6.0	**2405-K-1260**
12 x 12	150	12	8.0	**2405-K-1280**

Porte-outils
Werkzeughalter
Tool holders

2425

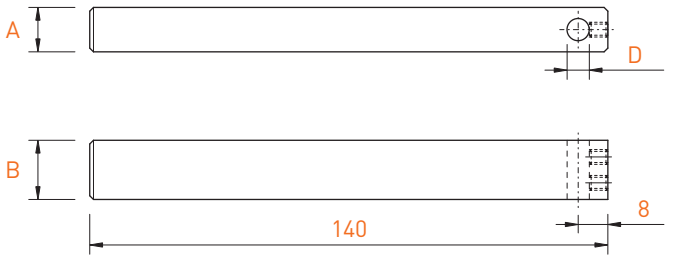


A x B	L	F	D	Art. N°
8 x 8	120	12	4.0	**2425-8124**
8 x 8	120	15	5.0	**2425-8155**
8 x 8	120	20	5.0	**2425-8205**
10 x 10	100	15	6.0	**2425-10156**
10 x 10	100	20	6.0	**2425-10206**
12 x 12	150	18	6.0	**2425-12186**
12 x 12	150	24	8.0	**2425-12248**

Porte-outils
Werkzeughalter
Tool holders

⧄ 12 x 16

2441

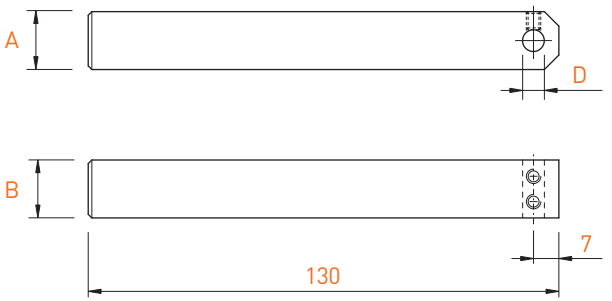


A x B	D	Art. N°
12 x 16	3.0	**2441-0-3**
12 x 16	4.0	**2441-0-4**
12 x 16	5.0	**2441-0-5**
12 x 16	6.0	**2441-0-6**

Porte-outils
Werkzeughalter
Tool holders

⧄ 16 x 16

2440-0

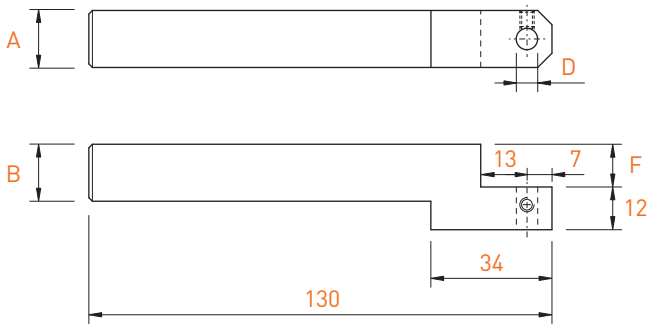


A x B	D	Art. N°
16 x 16	3.0	**2440-0-3**
16 x 16	4.0	**2440-0-4**
16 x 16	5.0	**2440-0-5**
16 x 16	6.0	**2440-0-6**

Porte-outils
Werkzeughalter
Tool holders

⍁ 16 x 16

2440-8 / 2440-12

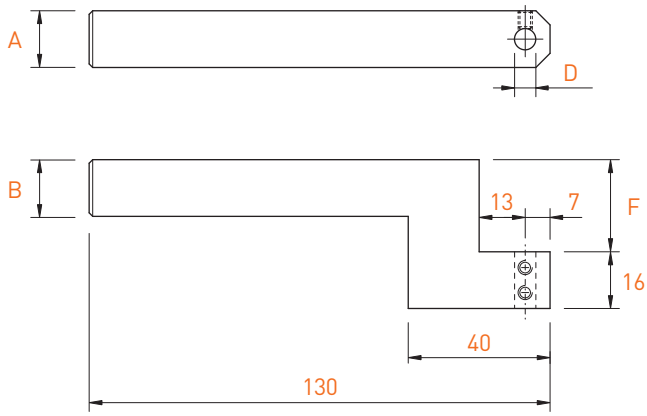


A x B	F	D	Art. N°
16 x 16	8	3.0	**2440-8-3**
16 x 16	8	4.0	**2440-8-4**
16 x 16	8	5.0	**2440-8-5**
16 x 16	8	6.0	**2440-8-6**
16 x 16	8	8.0	**2440-8-8**
16 x 16	12	3.0	**2440-12-3**
16 x 16	12	4.0	**2440-12-4**
16 x 16	12	5.0	**2440-12-5**
16 x 16	12	6.0	**2440-12-6**
16 x 16	12	8.0	**2440-12-8**

Porte-outils
Werkzeughalter
Tool holders

⍁ 16 x 16

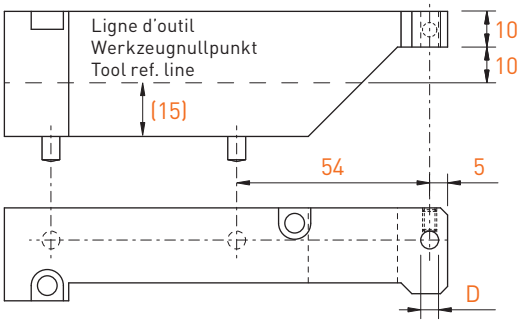
2440-18 / 2440-26



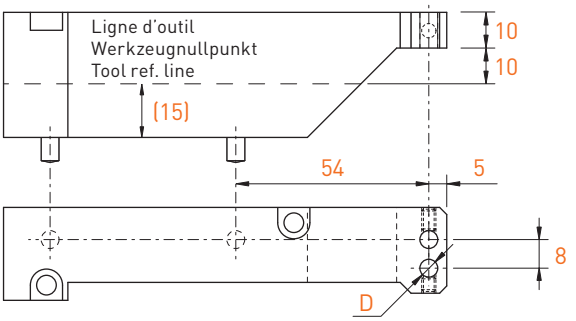
A x B	F	D	Art. N°
16 x 16	18	4.0	**2440-18-4**
16 x 16	18	5.0	**2440-18-5**
16 x 16	18	6.0	**2440-18-6**
16 x 16	18	8.0	**2440-18-8**
16 x 16	26	4.0	**2440-26-4**
16 x 16	26	5.0	**2440-26-5**
16 x 16	26	6.0	**2440-26-6**
16 x 16	26	8.0	**2440-26-8**

Porte-outils pour machines Tornos DECO 7/10 / EvoDECO 10
Werkzeughalter für Tornos DECO 7/10 / EvoDECO 10 Maschinen
Tool holders for Tornos DECO 7/10 / EvoDECO 10 machines

2435 / 2435-T



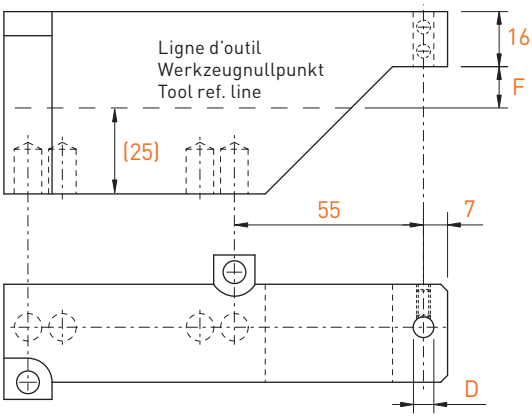
D	Art. N°
3.0	**2435-3**
4.0	**2435-4**
5.0	**2435-5**
6.0	**2435-6**



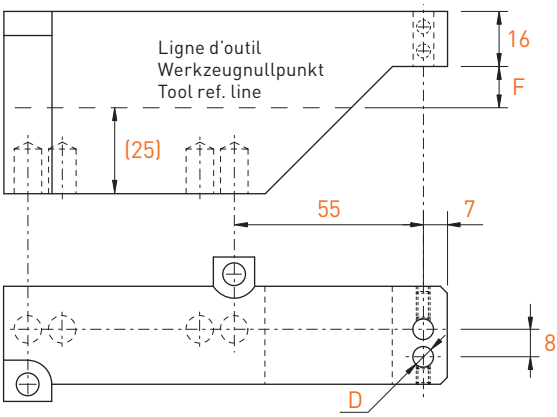
D	Art. N°
3.0	**2435-3-T**
4.0	**2435-4-T**
5.0	**2435-5-T**
6.0	**2435-6-T**

Porte-outils pour machines Tornos DECO 13 / EvoDECO 16
Werkzeughalter für Tornos DECO 13 / EvoDECO 16 Maschinen
Tool holders for Tornos DECO 13 / EvoDECO 16 machines

2436 / 2436T



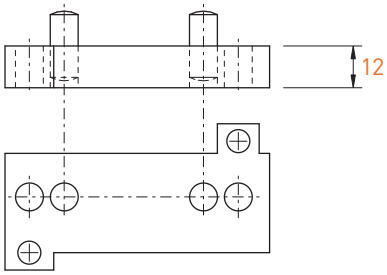
F	D	Art. N°
12	3.0	**2436-12-3**
12	4.0	**2436-12-4**
12	5.0	**2436-12-5**
12	6.0	**2436-12-6**
12	8.0	**2436-12-8**
18	3.0	**2436-18-3**
18	4.0	**2436-18-4**
18	5.0	**2436-18-5**
18	6.0	**2436-18-6**
18	8.0	**2436-18-8**



F	D	Art. N°
12	3.0	**2436T-12-3**
12	4.0	**2436T-12-4**
12	5.0	**2436T-12-5**
12	6.0	**2436T-12-6**
18	3.0	**2436T-18-3**
18	4.0	**2436T-18-4**
18	5.0	**2436T-18-5**
18	6.0	**2436T-18-6**

Entretoise
Erhöhungsplatte
Spacer

2436-S12



Art. N°
2436-S12

Forets à centrer plats
Zentrierflachbohrer
Centering flat drills

90°

1200 / 2200

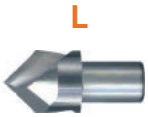
L

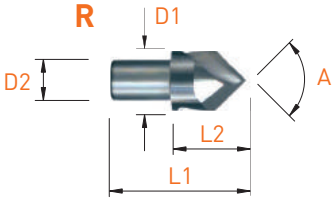
R

MD VHM HM			L	R
A	D	L	Art. N°	Art. N°
90°	3	17	**1200-317**	**2200-317**
90°	3	38	**1200-338**	**2200-338**
90°	4	40	**1200-440**	**2200-440**
90°	5	50	**1200-550**	**2200-550**
90°	6	50	**1200-650**	**2200-650**
90°	8	58	**1200-858**	**2200-858**
90°	10	66	**1200-1066**	**2200-1066**
90°	12	73	**1200-1273**	**2200-1273**

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

90° **1500 / 2520**

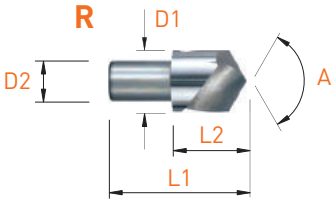




					HSS		MD / VHM / HM	
					L	R	L	R
A	D1	D2	L1	L2	Art. N°	Art. N°	Art. N°	Art. N°
90°	5	4	17	8	**1500-5-HSS**	**2520-5-HSS**	**1500-5**	**2520-5**
90°	7	5	17	8	**1500-7-HSS**	**2520-7-HSS**	**1500-7**	**2520-7**
90°	10	6	22	10	**1500-10-HSS**	**2520-10-HSS**	**1500-10**	**2520-10**
90°	12	8	26	12	**1500-12-HSS**	**2520-12-HSS**	**1500-12**	**2520-12**

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

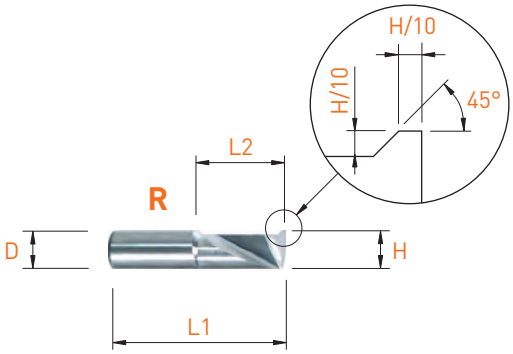
120° **1510 / 2530**



MD VHM HM					L	R
A	D1	D2	L1	L2	Art. N°	Art. N°
120°	5	4	17	8	**1510-5**	**2530-5**
120°	7	5	17	8	**1510-7**	**2530-7**
120°	10	6	22	10	**1510-10**	**2530-10**
120°	12	8	26	12	**1510-12**	**2530-12**

Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools

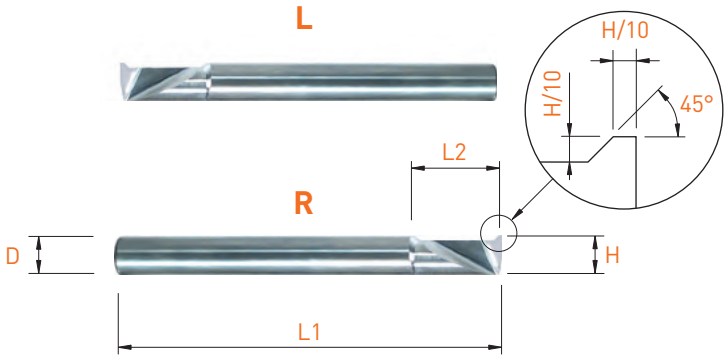
1600 / 2620



MD VHM HM				L	R
H 0/-0.05	D	L1	L2	Art. N°	Art. N°
2	3	13	4	**1600-2-4**	**2620-2-4**
3	3	15	6	**1600-3-6**	**2620-3-6**
4	4	17	8	**1600-4-8**	**2620-4-8**
4	4	21	12	**1600-4-12**	**2620-4-12**
5	5	21	10	**1600-5-10**	**2620-5-10**
5	5	26	15	**1600-5-15**	**2620-5-15**
6	6	25	12	**1600-6-12**	**2620-6-12**
6	6	31	18	**1600-6-18**	**2620-6-18**
8	8	32	16	**1600-8-16**	**2620-8-16**
8	8	40	24	**1600-8-24**	**2620-8-24**

Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools

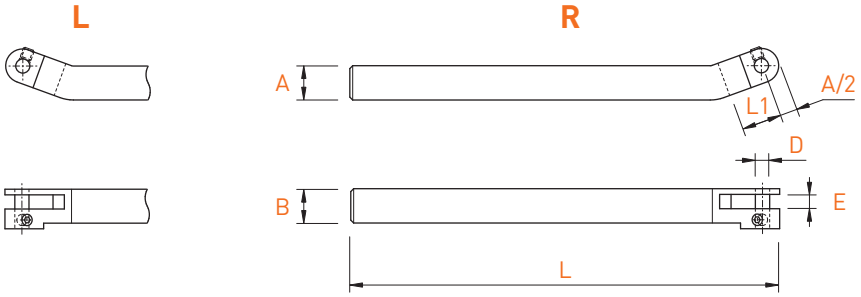
1610 / 2630



MD VHM HM				L	R
H 0/-0.05	D	L1	L2	Art. N°	Art. N°
2	3	38	4	**1610-2-4**	**2630-2-4**
3	3	38	6	**1610-3-6**	**2630-3-6**
4	4	40	8	**1610-4-8**	**2630-4-8**
4	4	40	12	**1610-4-12**	**2630-4-12**
5	5	50	10	**1610-5-10**	**2630-5-10**
5	5	54	15	**1610-5-15**	**2630-5-15**
6	6	50	12	**1610-6-12**	**2630-6-12**
6	6	57	18	**1610-6-18**	**2630-6-18**
8	8	58	16	**1610-8-16**	**2630-8-16**
8	8	63	24	**1610-8-24**	**2630-8-24**
10	10	72	30	**-**	**2630-10-30**
12	12	83	36	**-**	**2630-12-36**

Porte-molettes
Rändelhalter
Knurl holders

1402 / 2402

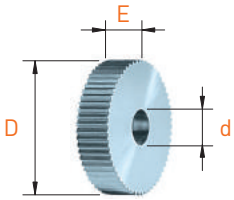


A x B	L	E	D	L1	A/2	L (Art. N°)	R (Art. N°)	Pièces de rechange / Ersatzteile / Spare parts * (Art. N°)
6 x 6	132	2	3	10	3	1402-623	2402-623	GP-3X10-A6H2.5
6 x 6	132	3	3	10	3	1402-633	2402-633	GP-3X10-A6H2.5
7 x 7	140	2	3	10	3.5	1402-723	2402-723	GP-3X12-A6H2.5
7 x 7	140	3	3	10	3.5	1402-733	2402-733	GP-3X12-A6H2.5
7 x 7	140	4	3	10	3.5	1402-743	2402-743	GP-3X12-A6H2.5
7 x 7	140	2	4	10	3.5	1402-724	2402-724	GP-4X12-A6H3.5
7 x 7	140	3	4	10	3.5	1402-734	2402-734	GP-4X12-A6H3.5
7 x 7	140	4	4	10	3.5	1402-744	2402-744	GP-4X12-A6H3.5
8 x 8	140	2	3	10	4	1402-823	2402-823	GP-3X12-A6H2.5
8 x 8	140	3	3	10	4	1402-833	2402-833	GP-3X12-A6H2.5
8 x 8	140	4	3	10	4	1402-843	2402-843	GP-3X12-A6H2.5
8 x 8	140	2	4	10	4	1402-824	2402-824	GP-4X12-A6H3.5
8 x 8	140	3	4	10	4	1402-834	2402-834	GP-4X12-A6H3.5
8 x 8	140	4	4	10	4	1402-844	2402-844	GP-4X12-A6H3.5
10 x 10	150	3	3	10	5	1402-1033	2402-1033	GP-3X14-A8H2.5
10 x 10	150	4	3	10	5	1402-1043	2402-1043	GP-3X14-A8H2.5
10 x 10	150	3	4	10	5	1402-1034	2402-1034	GP-4X14-A8H3.5
10 x 10	150	4	4	10	5	1402-1044	2402-1044	GP-4X14-A8H3.5
10 x 10	150	5	4	10	5	1402-1054	-	GP-4X14-A8H3.5
12 x 12	150	4	4	12	6	1402-1244	2402-1244	GP-4X14-A8H3.5
12 x 12	150	5	4	12	6	1402-1254	2402-1254	GP-4X14-A8H3.5
12 x 12	150	4	5	12	6	1402-1245	2402-1245	GP-5X14-A8H4.5
12 x 12	150	5	5	12	6	1402-1255	2402-1255	GP-5X14-A8H4.5
16 x 16	150	4	4	12	8	1402-1644	2402-1644	GP-4X16-A8H3.5
16 x 16	150	4	5	12	8	-	2402-1645	GP-5X16-A9H4.5
16 x 16	150	5	5	12	8	-	2402-1655	GP-5X16-A9H4.5
16 x 16	150	6	4	12	8	-	2402-1664	GP-4X16-A8H3.5
16 x 16	150	6	6	12	8	-	2402-1666	GP-6X16-A9H5.5
16 x 16	150	8	6	12	8	-	2402-1686	GP-6X16-A9H5.5

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

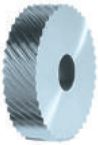
Molettes en métal dur
Vollhartmetall Rändelrädchen
Solid carbide knurling wheels

1107



AA

BL



BR

GE

Molettes standards Standard Rändelrädchen Standard knurls	D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)
AA (0°) BL 15° / BR 15° BL 30° / BR 30° BL 45° / BR 45° GE 30° GE 45°	8	2	3	0.2 - 0.6
	8	2	4	0.2 - 0.6
	8	3	3	0.2 - 0.6
	8	3	4	0.2 - 0.6
	8	4	3	0.2 - 0.6
	8	4	4	0.2 - 0.6
	10	2	3	0.2 - 0.8
	10	2	4	0.2 - 0.8
	10	3	3	0.2 - 0.8
	10	3	4	0.2 - 0.8
	10	4	3	0.2 - 0.8
	10	4	4	0.2 - 0.8
	12	4	4	0.3 - 1.0
	15	4	4	0.4 - 1.0
	15	4	5	0.4 - 1.0
	15	5	4	0.4 - 1.0
	15	5	5	0.4 - 1.0
	20	4	5	0.5 - 1.2
	20	5	5	0.5 - 1.2
	20	6	6	0.5 - 1.2
	20	8	6	0.5 - 1.2

Molettes "Quick" "Quick"-Rändelrädchen "Quick"-knurling wheels	D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)
AA (0°) BL 15° / BR 15° BL 30° / BR 30°	8.9	2.5	4	0.2 - 0.8
	14.5	3	5	0.4 - 1.0
	21.5	5	8	0.5 - 1.2

Exécutions spéciales sur demande
Sonderausführungen auf Anfrage
Special executions on request

APPLITEC

Index

Nuances
Sorten
Grades

N Non revêtu Unbeschichtet Uncoated	TiAlN Revêtement PDV à couche mince Dünnschicht PVD Beschichtung Thin PVD coating	new STF Revêtement PDV à couche mince Dünnschicht PVD Beschichtung Thin PVD coating
• Carbures de haute qualité et spécifiques selon les groupes produits • Tous les carbures ont une excellente dureté et résistance à la flexion exceptionnelle • Acuité d'arête maximale grâce à une finition super polie • Idéal pour l'usinage en super finition de matières non ferreuses ou faiblement alliées	• Revêtement de dernière génération couche mince et lisse • Idéal pour tous les aciers et aciers inoxidables • Bonne condition pour les grades de titane et alliage de nickel • Excellente variante universelle pour un fraisage en finition ou ébauche • Très bonne résistance à la température	• Revêtement haute performance • Premier choix pour les alliages de chrome/nickel, inox, titane, zirkonium • Spécialement adapté aux matières extrêmes en générale
• Hoch qualität und spezifische Hartmetalle gemäß den Produktgruppen • Alle Hartmetalle haben eine ausgezeichnete Härte und außergewöhnliche Biegefestigkeit • Maximale Kantenschärfe durch hochpoliertes Finish • Ideal für superfinish Bearbeitung von Nichteisen- oder niedriglegierten Materialien	• Neuesten Generation Besichtigung, dünne und glatte Schicht • Hervorragend für alle Stähle und rostfreie Stähle • Guter Zustand für Titan- und Nickellegierungssorten • Ausgezeichnete Universalsorte zum Schlicht- oder Schruppfräsen • Sehr gute Temperaturbeständigkeit	• Hochleistungsbeschichtung • Erste Wahl für Chrom/ Nickel, rostfreier Stahl, Titan, Zirkoniumlegierungen • Speziell angepasst für extreme Materialien im Allgemeinen
• High quality and specific carbides according to the product groups in our catalog • All carbides have excellent hardness and exceptional flexural strength • Maximum edge sharpness thanks to a super polished tool finish • Ideal for super-finish machining of non-ferrous or low-alloy materials	• Latest generation coating thin and smooth layer • Specially adapted for our tools Ideal for all basic steels and stainless steels • Good condition for Titan grades and Nickel alloy • Excellent universal variant for finishing or rough milling • Very good temperature resistance	• High performance coating • First choice for chrome/nickel, stainless steel, titan, zirkonium alloys • Specially adapted to extreme materials in general

Nuances
Sorten
Grades

TiCN

Revêtement PDV à couche mince
Dünnschicht PVD Beschichtung
Thin PVD coating

- Revêtement de dernière génération, excellente adhérence couche mince et lisse
- Idéal pour le fraisage en finition de tous les aciers et aciers inoxydables
- Excellente nuance pour les outils de petits diamètres (0.02-0.90 mm)

- Neuesten Generation Beschichtung, dünne und glatte Schicht
- Hervorragend für Schlichtfräsen aller Stähle und rostfreien Stähle
- Ausgezeichnete Sorte für Werkzeuge mit kleinem Durchmesser (0.02-0.90 mm)

- Latest generation coating excellent adhesion thin and smooth layer
- Specially adapted for small diameters (0.02-0.90 mm)
- Ideal for finish milling for all steels and stainless steel

DLC

Revêtement DLC à couche mince
Dünnschicht DLC Beschichtung
Thin DLC coating

- Revêtement très haute performance couche extra mince
- Très faible coéfficient de frottement
- Premier choix pour toutes les matières précieuses, non ferreuse et abrasives, telles que or, argent, laiton sans plomb, cuivre, aluminium, fibre de carbone, nacre et divers polymères...
- Angles de coupe parfaitement lisses et excellente acuité d'arrête
- Durée de vie de l'outil démultipliée

- Extra Dünnschicht Hochleistungsbeschichtung
- Sehr geringer Reibwert
- Erste Wahl für alle edlen, NE- und abrasiven Materialien wie Gold, Silber, bleifreies Messing, Kupfer, Aluminium, Kohlefaser, Perlmutter und diverse Polymere...
- Perfekt glatte Schnittwinkel und hervorragende Kantenschärfe
- Erhöhte Lebensdauer des Werkzeugs

- Very high-performance coating extra thin layer
- Very low ratio
- First choice for all precious, non-ferrous and abrasive materials, such as gold, silver, lead-free brass, copper, aluminum, carbon fiber, mother-of-pearl and various polymers...
- Perfectly smooth cutting angles and excellent edge sharpness
- Increased tool life

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

Index

Paramètres de coupe indicatif
Empfohlene Schnittwerte
Standard machining data

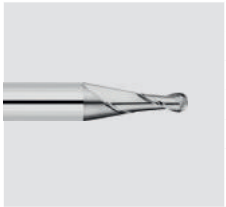
14.06

Sharp Corner | Radius Corner

Micro-fraises avec angles vifs
Mikropräzisionsfräser mit scharfkantigen Ecken
Micro end mills with sharp corners

Z	λ	L2	D1	D2	Type	page	
Z=1	0°	2x D1	Ø0.20 - 3.00	Ø3h4 / Ø4h5	3170-2	14.07	
		2x D1	Ø0.20 - 3.00	Ø3h4 / Ø4h5	3170R-2	14.08	
		3x D1	Ø0.20 - 3.00	Ø3h4 / Ø4h5	3170R-3	14.09	
		4x D1	Ø0.30 - 3.00	Ø3h4 / Ø4h5	3170R-4	14.10	
Z=2	30°	0.75x D1	Ø0.20 - 2.00	Ø3h4	3271-0.75	14.11	
		1x D1	Ø0.30 - 2.50	Ø3h4	3271-1	14.12	
		1.5x D1	Ø0.10 - 2.00	Ø3h4	3271-1.5	14.13	
		2x D1	Ø0.10 - 2.00	Ø3h4	3271-2	14.14	
		3x D1	Ø0.10 - 2.90	Ø3h4	3271-3	14.15	
		5x D1	Ø0.30 - 2.50	Ø3h4	3271-5	14.16	
		8x D1	Ø0.40 - 2.50	Ø3h4 / Ø4h5	3271-8	14.17	
		2x D1	Ø0.20 - 3.00	Ø3h4 / Ø6h5	3270S-3X	14.18	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3270S-6X	14.19	new
		2x D1	Ø0.40 - 3.00	Ø3h4 / Ø6h5	3270S-9X	14.20	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3279T-3X	14.21	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3279T-6X	14.22	new
		2x D1	Ø0.40 - 3.00	Ø3h4 / Ø6h5	3279T-9X	14.23	new
Z=3	30°	1.3x D1	Ø0.30 - 2.90	Ø3h4	3371-1.3	14.24	
		2x D1	Ø0.30 - 2.90	Ø3h4	3371-2	14.25	
		3x D1	Ø0.30 - 2.90	Ø3h4	3371-3	14.26	
		4x D1	Ø0.30 - 2.90	Ø3h4	3371-4	14.27	
		5x D1	Ø0.50 - 2.50	Ø3h4	3371-5	14.28	
		8x D1	Ø0.50 - 2.50	Ø3h4 / Ø4h5	3371-8	14.29	
	45°	2.5x D1	Ø0.30 - 2.90	Ø3h4	3375-2.5	14.30	
	36°-38°-40°	1.5x D1	Ø0.30 - 2.50	Ø3h4	DHD3371-1.5	14.31	
		3x D1	Ø0.30 - 2.50	Ø3h4	DHD3371-3	14.32	
	30°	2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3370S-3X	14.33	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3370S-6X	14.34	new
		2x D1	Ø0.40 - 3.00	Ø3h4 / Ø6h5	3370S-9X	14.35	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3379T-3X	14.36	new
		2x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3379T-6X	14.37	new
		2x D1	Ø0.40 - 3.00	Ø3h4 / Ø6h5	3379T-9X	14.38	new
Z=4	30°	1.5x D1	Ø0.30 - 2.90	Ø3h4	3471-1.5	14.39	
		3x D1	Ø0.30 - 2.90	Ø3h4	3471-3	14.40	
	35°-38°	3x D1	Ø0.50 - 2.50	Ø3h4	DHP3471-3	14.41	
	40°	2x D1	Ø0.30 - 2.90	Ø3h4	3472-2	14.42	
		4x D1	Ø0.40 - 2.90	Ø3h4	3472-4	14.43	

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

∪	Micro-fraises hémisphériques Vollradius Mikropräzisionsfräser Ball nose micro end mills						
	Z	λ	L2	Range	D2	Type	page
	Z = 2	30°	0.75x D1	Ø0.20 - 2.50	Ø3h4	3278-0.75	14.44
			1x D1	Ø0.20 - 2.90	Ø3h4	3278-1	14.45
			1.5x D1	Ø0.20 - 2.90	Ø3h4	3278-1.5	14.46
			3x D1	Ø0.20 - 2.90	Ø3h4	3278-3	14.47
			1.5x D1	Ø0.20 - 3.00	Ø3h4 / Ø6h5	3278H-3X	14.48 new
			1.5x D1	Ø0.30 - 3.00	Ø3h4 / Ø6h5	3278H-6X	14.49 new
			1.5x D1	Ø0.40 - 3.00	Ø3h4 / Ø6h5	3278H-9X	14.50 new

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

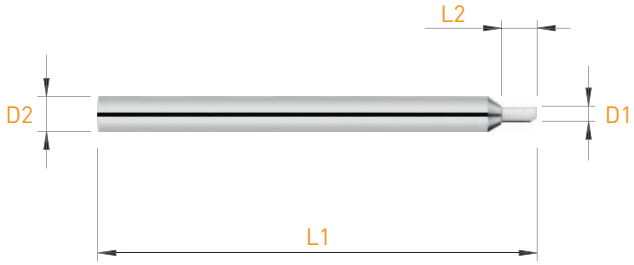
Matière Werkstoff Material		VC (m/min)	0.10 - 0.50 fz (mm)	0.60 - 1.50 fz (mm)	1.60 - 2.90 fz (mm)	N	TiAlN	STF	TiCN	DLC
Acier de décolletage Automatenstahl Free-cutting steel	P	80 - 130	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl < 600 N/mm² Steel	P	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl < 800 N/mm² Steel	P	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier Stahl > 800 N/mm² Steel	P	50 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	60 - 90	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	★★★	★★★	★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	40 - 70	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	★★★	★★★	★	-
Inox Rostfreistahl Stainless steel	M	40 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	★★★	★★★	★★	-
Aluminium	N	200 - 300	0.002 - 0.005	0.005 - 0.010	0.010 - 0.030	★★★	-	-	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 200	0.001 - 0.005	0.006 - 0.010	0.010 - 0.015	★★★	★★	★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material	N	200 - 700	0.002 - 0.004	0.006 - 0.015	0.015 - 0.050	★★★	★★	★★	★★	★★★
Métaux précieux Edelmetalle Precious metals	N	90 - 140	0.002 - 0.003	0.004 - 0.012	0.012 - 0.025	★★★	★★	★★	★	★★★
Titane Titan Titanium	S	25 - 70	0.001 - 0.003	0.004 - 0.010	0.006 - 0.015	-	★★★	★★★	★★	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	40 - 70	0.001 - 0.003	0.004 - 0.008	0.008 - 0.012	-	★★★	★★★	★★	-
Matière exotique Exotisches material Exotic material	O	15 - 25	0.001 - 0.002	0.003 - 0.005	0.006 - 0.010	-	★★★	★★★	★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170-2



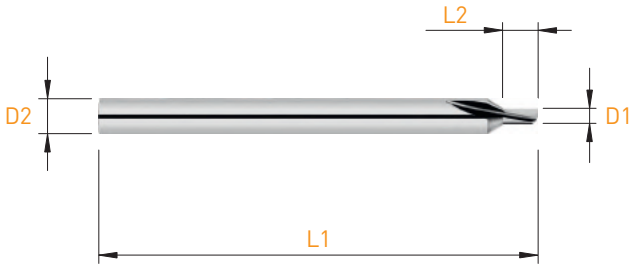
MD VHM HM | λ 0° | Sharp Corner | 2xD1 | Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	**3170-2-0.20**	■				
0.30	0.60	3.00	39	**3170-2-0.30**	■	■	■	■	■
0.40	0.80	3.00	39	**3170-2-0.40**	■	■	■	■	■
0.50	1.00	3.00	39	**3170-2-0.50**	■	■	■	■	■
0.60	1.20	3.00	39	**3170-2-0.60**	■	■	■	■	■
0.70	1.40	3.00	39	**3170-2-0.70**	■	■	■	■	■
0.80	1.60	3.00	39	**3170-2-0.80**	■	■	■	■	■
0.90	1.80	3.00	39	**3170-2-0.90**	■	■	■	■	■
1.00	2.00	3.00	39	**3170-2-1.00**	■	■	■	■	■
1.10	2.20	3.00	39	**3170-2-1.10**	■	■	■	■	■
1.20	2.40	3.00	39	**3170-2-1.20**	■	■	■	■	■
1.30	2.60	3.00	39	**3170-2-1.30**	■	■	■	■	■
1.40	2.80	3.00	39	**3170-2-1.40**	■	■	■	■	■
1.50	3.00	3.00	39	**3170-2-1.50**	■	■	■	■	■
1.60	3.20	3.00	39	**3170-2-1.60**	■	■	■	■	■
1.70	3.40	3.00	39	**3170-2-1.70**	■	■	■	■	■
1.80	3.60	3.00	39	**3170-2-1.80**	■	■	■	■	■
1.90	3.80	3.00	39	**3170-2-1.90**	■	■	■	■	■
2.00	4.00	3.00	39	**3170-2-2.00**	■	■	■	■	■
2.10	4.20	3.00	39	**3170-2-2.10**	■	■	■	■	■
2.20	4.40	3.00	39	**3170-2-2.20**	■	■	■	■	■
2.30	4.60	3.00	39	**3170-2-2.30**	■	■	■	■	■
2.40	4.80	3.00	39	**3170-2-2.40**	■	■	■	■	■
2.50	5.00	3.00	39	**3170-2-2.50**	■	■	■	■	■
2.60	5.20	3.00	39	**3170-2-2.60**	■	■	■	■	■
2.70	5.40	3.00	39	**3170-2-2.70**	■	■	■	■	■
2.80	5.60	3.00	39	**3170-2-2.80**	■	■	■	■	■
2.90	5.80	3.00	39	**3170-2-2.90**	■	■	■	■	■
3.00	6.00	4.00	40	**3170-2-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170R-2

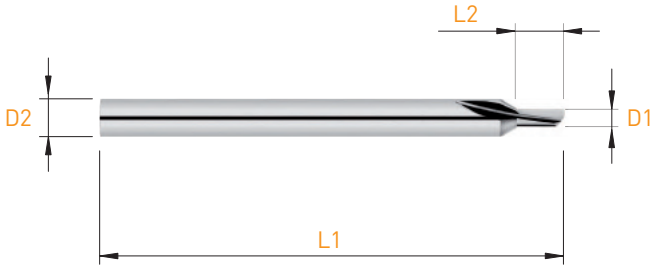


MD VHM HM | λ 0° | Sharp Corner | 2xD1 | Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	**3170R-2-0.20**	■				
0.30	0.60	3.00	39	**3170R-2-0.30**	■	■	■	■	■
0.40	0.80	3.00	39	**3170R-2-0.40**	■	■	■	■	■
0.50	1.00	3.00	39	**3170R-2-0.50**	■	■	■	■	■
0.60	1.20	3.00	39	**3170R-2-0.60**	■	■	■	■	■
0.70	1.40	3.00	39	**3170R-2-0.70**	■	■	■	■	■
0.80	1.60	3.00	39	**3170R-2-0.80**	■	■	■	■	■
0.90	1.80	3.00	39	**3170R-2-0.90**	■	■	■	■	■
1.00	2.00	3.00	39	**3170R-2-1.00**	■	■	■	■	■
1.10	2.20	3.00	39	**3170R-2-1.10**	■	■	■	■	■
1.20	2.40	3.00	39	**3170R-2-1.20**	■	■	■	■	■
1.30	2.60	3.00	39	**3170R-2-1.30**	■	■	■	■	■
1.40	2.80	3.00	39	**3170R-2-1.40**	■	■	■	■	■
1.50	3.00	3.00	39	**3170R-2-1.50**	■	■	■	■	■
1.60	3.20	3.00	39	**3170R-2-1.60**	■	■	■	■	■
1.70	3.40	3.00	39	**3170R-2-1.70**	■	■	■	■	■
1.80	3.60	3.00	39	**3170R-2-1.80**	■	■	■	■	■
1.90	3.80	3.00	39	**3170R-2-1.90**	■	■	■	■	■
2.00	4.00	3.00	39	**3170R-2-2.00**	■	■	■	■	■
2.10	4.10	3.00	39	**3170R-2-2.10**	■	■	■	■	■
2.20	4.40	3.00	39	**3170R-2-2.20**	■	■	■	■	■
2.30	4.60	3.00	39	**3170R-2-2.30**	■	■	■	■	■
2.40	4.80	3.00	39	**3170R-2-2.40**	■	■	■	■	■
2.50	5.00	3.00	39	**3170R-2-2.50**	■	■	■	■	■
2.60	5.20	3.00	39	**3170R-2-2.60**	■	■	■	■	■
2.70	5.40	3.00	39	**3170R-2-2.70**	■	■	■	■	■
2.80	5.60	3.00	39	**3170R-2-2.80**	■	■	■	■	■
2.90	5.80	3.00	39	**3170R-2-2.90**	■	■	■	■	■
3.00	6.00	4.00	40	**3170R-2-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170R-3



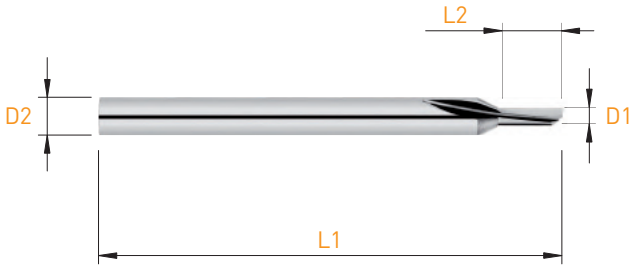
MD VHM HM | λ 0° | Sharp Corner | 3xD1 | Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.60	3.00	39	**3170R-3-0.20**	■				
0.30	0.90	3.00	39	**3170R-3-0.30**	■	■	■	■	■
0.40	1.20	3.00	39	**3170R-3-0.40**	■	■	■	■	■
0.50	1.50	3.00	39	**3170R-3-0.50**	■	■	■	■	■
0.60	1.80	3.00	39	**3170R-3-0.60**	■	■	■	■	■
0.70	2.10	3.00	39	**3170R-3-0.70**	■	■	■	■	■
0.80	2.40	3.00	39	**3170R-3-0.80**	■	■	■	■	■
0.90	2.70	3.00	39	**3170R-3-0.90**	■	■	■	■	■
1.00	3.00	3.00	39	**3170R-3-1.00**	■	■	■	■	■
1.10	3.30	3.00	39	**3170R-3-1.10**	■	■	■	■	■
1.20	3.60	3.00	39	**3170R-3-1.20**	■	■	■	■	■
1.30	3.90	3.00	39	**3170R-3-1.30**	■	■	■	■	■
1.40	4.20	3.00	39	**3170R-3-1.40**	■	■	■	■	■
1.50	4.50	3.00	39	**3170R-3-1.50**	■	■	■	■	■
2.00	6.00	3.00	39	**3170R-3-2.00**	■	■	■	■	■
2.50	7.50	3.00	39	**3170R-3-2.50**	■	■	■	■	■
3.00	9.00	4.00	40	**3170R-3-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3170R-4

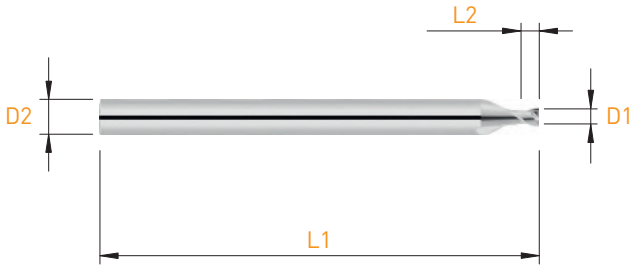


MD VHM HM | λ 0° | Sharp Corner | 4xD1 | Z=1

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	**3170R-4-0.30**	■	■	■	■	■
0.40	1.60	3.00	39	**3170R-4-0.40**	■	■	■	■	■
0.50	2.00	3.00	39	**3170R-4-0.50**	■	■	■	■	■
0.60	2.40	3.00	39	**3170R-4-0.60**	■	■	■	■	■
0.70	2.80	3.00	39	**3170R-4-0.70**	■	■	■	■	■
0.80	3.20	3.00	39	**3170R-4-0.80**	■	■	■	■	■
0.90	3.60	3.00	39	**3170R-4-0.90**	■	■	■	■	■
1.00	4.00	3.00	39	**3170R-4-1.00**	■	■	■	■	■
1.10	4.40	3.00	39	**3170R-4-1.10**	■	■	■	■	■
1.20	4.80	3.00	39	**3170R-4-1.20**	■	■	■	■	■
1.30	5.20	3.00	39	**3170R-4-1.30**	■	■	■	■	■
1.40	5.60	3.00	39	**3170R-4-1.40**	■	■	■	■	■
1.50	6.00	3.00	39	**3170R-4-1.50**	■	■	■	■	■
2.00	8.00	3.00	39	**3170R-4-2.00**	■	■	■	■	■
2.50	10.00	3.00	39	**3170R-4-2.50**	■	■	■	■	■
3.00	12.00	4.00	40	**3170R-4-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-0.75

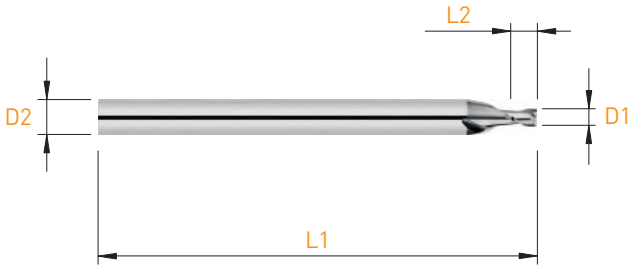


MD VHM HM | λ 30° | Sharp Corner | 0.75xD1 | Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.15	3.00	39	**3271-0.75-0.20**	■				
0.30	0.25	3.00	39	**3271-0.75-0.30**	■	■	■	■	■
0.40	0.30	3.00	39	**3271-0.75-0.40**	■	■	■	■	■
0.50	0.37	3.00	39	**3271-0.75-0.50**	■	■	■	■	■
0.60	0.45	3.00	39	**3271-0.75-0.60**	■	■	■	■	■
0.70	0.53	3.00	39	**3271-0.75-0.70**	■	■	■	■	■
0.80	0.60	3.00	39	**3271-0.75-0.80**	■	■	■	■	■
0.90	0.70	3.00	39	**3271-0.75-0.90**	■	■	■	■	■
1.00	0.75	3.00	39	**3271-0.75-1.00**	■	■	■	■	■
1.10	0.90	3.00	39	**3271-0.75-1.10**	■	■	■	■	■
1.20	0.90	3.00	39	**3271-0.75-1.20**	■	■	■	■	■
1.30	1.00	3.00	39	**3271-0.75-1.30**	■	■	■	■	■
1.40	1.10	3.00	39	**3271-0.75-1.40**	■	■	■	■	■
1.50	1.15	3.00	39	**3271-0.75-1.50**	■	■	■	■	■
1.60	1.20	3.00	39	**3271-0.75-1.60**	■	■	■	■	■
1.70	1.30	3.00	39	**3271-0.75-1.70**	■	■	■	■	■
1.80	1.40	3.00	39	**3271-0.75-1.80**	■	■	■	■	■
1.90	1.45	3.00	39	**3271-0.75-1.90**	■	■	■	■	■
2.00	1.50	3.00	39	**3271-0.75-2.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-1

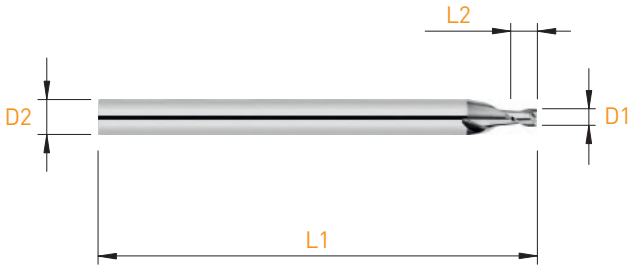


MD VHM HM | λ 30° | Sharp Corner | 1xD1 | Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.30	3.00	39	**3271-1-0.30**	■	■	■	■	■
0.40	0.40	3.00	39	**3271-1-0.40**	■	■	■	■	■
0.50	0.50	3.00	39	**3271-1-0.50**	■	■	■	■	■
0.60	0.60	3.00	39	**3271-1-0.60**	■	■	■	■	■
0.70	0.70	3.00	39	**3271-1-0.70**	■	■	■	■	■
0.80	0.80	3.00	39	**3271-1-0.80**	■	■	■	■	■
0.90	0.90	3.00	39	**3271-1-0.90**	■	■	■	■	■
1.00	1.00	3.00	39	**3271-1-1.00**	■	■	■	■	■
1.10	1.10	3.00	39	**3271-1-1.10**	■	■	■	■	■
1.20	1.20	3.00	39	**3271-1-1.20**	■	■	■	■	■
1.30	1.30	3.00	39	**3271-1-1.30**	■	■	■	■	■
1.40	1.40	3.00	39	**3271-1-1.40**	■	■	■	■	■
1.50	1.50	3.00	39	**3271-1-1.50**	■	■	■	■	■
1.60	1.60	3.00	39	**3271-1-1.60**	■	■	■	■	■
1.70	1.70	3.00	39	**3271-1-1.70**	■	■	■	■	■
1.80	1.80	3.00	39	**3271-1-1.80**	■	■	■	■	■
1.90	1.90	3.00	39	**3271-1-1.90**	■	■	■	■	■
2.00	2.00	3.00	39	**3271-1-2.00**	■	■	■	■	■
2.50	2.50	3.00	39	**3271-1-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-1.5



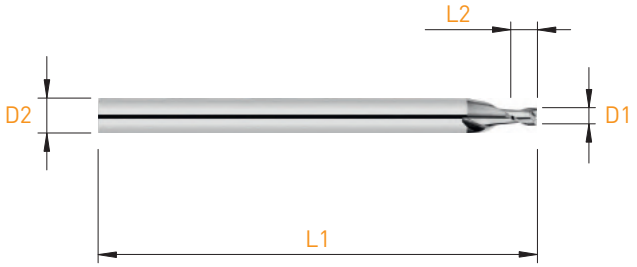
MD VHM HM | λ 30° | Sharp Corner | 1.5xD1 | Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.15	3.00	39	**3271-1.5-0.10**	■				
0.15	0.20	3.00	39	**3271-1.5-0.15**	■				
0.20	0.30	3.00	39	**3271-1.5-0.20**	■				
0.25	0.35	3.00	39	**3271-1.5-0.25**	■				
0.30	0.45	3.00	39	**3271-1.5-0.30**	■	■	■	■	■
0.40	0.60	3.00	39	**3271-1.5-0.40**	■	■	■	■	■
0.45	0.70	3.00	39	**3271-1.5-0.45**	■	■	■	■	■
0.50	0.75	3.00	39	**3271-1.5-0.50**	■	■	■	■	■
0.60	0.90	3.00	39	**3271-1.5-0.60**	■	■	■	■	■
0.70	1.05	3.00	39	**3271-1.5-0.70**	■	■	■	■	■
0.80	1.20	3.00	39	**3271-1.5-0.80**	■	■	■	■	■
0.90	1.35	3.00	39	**3271-1.5-0.90**	■	■	■	■	■
1.00	1.50	3.00	39	**3271-1.5-1.00**	■	■	■	■	■
1.10	1.65	3.00	39	**3271-1.5-1.10**	■	■	■	■	■
1.20	1.80	3.00	39	**3271-1.5-1.20**	■	■	■	■	■
1.30	1.95	3.00	39	**3271-1.5-1.30**	■	■	■	■	■
1.40	2.10	3.00	39	**3271-1.5-1.40**	■	■	■	■	■
1.50	2.25	3.00	39	**3271-1.5-1.50**	■	■	■	■	■
1.60	2.40	3.00	39	**3271-1.5-1.60**	■	■	■	■	■
1.70	2.55	3.00	39	**3271-1.5-1.70**	■	■	■	■	■
1.80	2.70	3.00	39	**3271-1.5-1.80**	■	■	■	■	■
1.90	2.85	3.00	39	**3271-1.5-1.90**	■	■	■	■	■
2.00	3.00	3.00	39	**3271-1.5-2.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-2

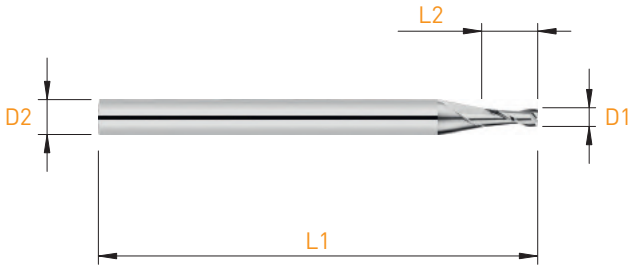


MD VHM HM | λ 30° | Sharp Corner | 2xD1 | Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.20	3.00	39	**3271-2-0.10**	■				
0.15	0.30	3.00	39	**3271-2-0.15**	■				
0.20	0.40	3.00	39	**3271-2-0.20**	■				
0.25	0.50	3.00	39	**3271-2-0.25**	■				
0.30	0.60	3.00	39	**3271-2-0.30**	■	■	■	■	■
0.40	0.80	3.00	39	**3271-2-0.40**	■	■	■	■	■
0.50	1.00	3.00	39	**3271-2-0.50**	■	■	■	■	■
0.60	1.20	3.00	39	**3271-2-0.60**	■	■	■	■	■
0.70	1.40	3.00	39	**3271-2-0.70**	■	■	■	■	■
0.80	1.60	3.00	39	**3271-2-0.80**	■	■	■	■	■
0.90	1.80	3.00	39	**3271-2-0.90**	■	■	■	■	■
1.00	2.00	3.00	39	**3271-2-1.00**	■	■	■	■	■
1.10	2.20	3.00	39	**3271-2-1.10**	■	■	■	■	■
1.20	2.40	3.00	39	**3271-2-1.20**	■	■	■	■	■
1.30	2.60	3.00	39	**3271-2-1.30**	■	■	■	■	■
1.40	2.80	3.00	39	**3271-2-1.40**	■	■	■	■	■
1.50	3.00	3.00	39	**3271-2-1.50**	■	■	■	■	■
1.60	3.20	3.00	39	**3271-2-1.60**	■	■	■	■	■
1.70	3.40	3.00	39	**3271-2-1.70**	■	■	■	■	■
1.80	3.60	3.00	39	**3271-2-1.80**	■	■	■	■	■
1.90	3.80	3.00	39	**3271-2-1.90**	■	■	■	■	■
2.00	4.00	3.00	39	**3271-2-2.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-3



MD VHM HM | λ 30° | Sharp Corner | 3xD1 | Z=2

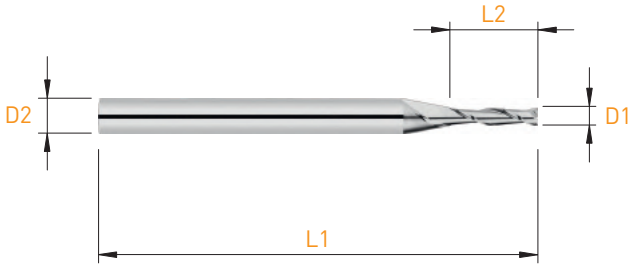
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.10	0.25	3.00	39	**3271-3-0.10**	■				
0.15	0.45	3.00	39	**3271-3-0.15**	■				
0.20	0.50	3.00	39	**3271-3-0.20**	■				
0.25	0.75	3.00	39	**3271-3-0.25**	■				
0.30	1.00	3.00	39	**3271-3-0.30**	■	■	■	■	■
0.35	1.10	3.00	39	**3271-3-0.35**	■	■	■	■	■
0.40	1.20	3.00	39	**3271-3-0.40**	■	■	■	■	■
0.50	1.50	3.00	39	**3271-3-0.50**	■	■	■	■	■
0.60	2.00	3.00	39	**3271-3-0.60**	■	■	■	■	■
0.65	2.00	3.00	39	**3271-3-0.65**	■	■	■	■	■
0.70	2.00	3.00	39	**3271-3-0.70**	■	■	■	■	■
0.75	2.00	3.00	39	**3271-3-0.75**	■	■	■	■	■
0.80	2.50	3.00	39	**3271-3-0.80**	■	■	■	■	■
0.90	2.50	3.00	39	**3271-3-0.90**	■	■	■	■	■
0.95	3.00	3.00	39	**3271-3-0.95**	■	■	■	■	■
1.00	3.00	3.00	39	**3271-3-1.00**	■	■	■	■	■
1.05	3.00	3.00	39	**3271-3-1.05**	■	■	■	■	■
1.10	3.00	3.00	39	**3271-3-1.10**	■	■	■	■	■
1.15	3.50	3.00	39	**3271-3-1.15**	■	■	■	■	■
1.20	4.00	3.00	39	**3271-3-1.20**	■	■	■	■	■
1.30	4.00	3.00	39	**3271-3-1.30**	■	■	■	■	■
1.35	4.00	3.00	39	**3271-3-1.35**	■	■	■	■	■
1.40	4.00	3.00	39	**3271-3-1.40**	■	■	■	■	■
1.45	4.40	3.00	39	**3271-3-1.45**	■	■	■	■	■
1.50	4.50	3.00	39	**3271-3-1.50**	■	■	■	■	■
1.55	4.50	3.00	39	**3271-3-1.55**	■	■	■	■	■
1.60	4.50	3.00	39	**3271-3-1.60**	■	■	■	■	■
1.65	5.00	3.00	39	**3271-3-1.65**	■	■	■	■	■
1.70	5.00	3.00	39	**3271-3-1.70**	■	■	■	■	■
1.75	5.30	3.00	39	**3271-3-1.75**	■	■	■	■	■

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
1.80	6.00	3.00	39	**3271-3-1.80**	■	■	■	■	■
1.85	6.00	3.00	39	**3271-3-1.85**	■	■	■	■	■
1.90	6.00	3.00	39	**3271-3-1.90**	■	■	■	■	■
1.95	6.00	3.00	39	**3271-3-1.95**	■	■	■	■	■
2.00	6.00	3.00	39	**3271-3-2.00**	■	■	■	■	■
2.10	6.00	3.00	39	**3271-3-2.10**	■	■	■	■	■
2.20	6.50	3.00	39	**3271-3-2.20**	■	■	■	■	■
2.30	7.00	3.00	39	**3271-3-2.30**	■	■	■	■	■
2.40	7.00	3.00	39	**3271-3-2.40**	■	■	■	■	■
2.50	7.50	3.00	39	**3271-3-2.50**	■	■	■	■	■
2.60	7.50	3.00	39	**3271-3-2.60**	■	■	■	■	■
2.70	8.00	3.00	39	**3271-3-2.70**	■	■	■	■	■
2.80	8.00	3.00	39	**3271-3-2.80**	■	■	■	■	■
2.90	8.00	3.00	39	**3271-3-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-5

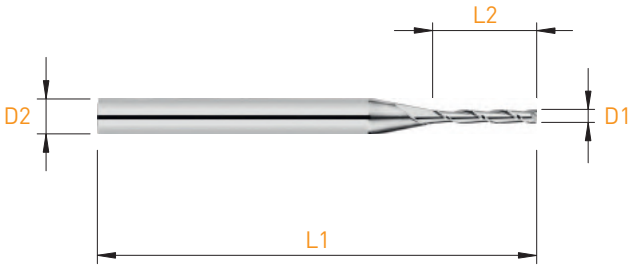


MD VHM HM | λ 30° | Sharp Corner | 5xD1 | Z=2

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.50	3.00	39	**3271-5-0.30**	■	■	■	■	■
0.35	1.80	3.00	39	**3271-5-0.35**	■	■	■	■	■
0.40	2.00	3.00	39	**3271-5-0.40**	■	■	■	■	■
0.50	2.50	3.00	39	**3271-5-0.50**	■	■	■	■	■
0.55	2.80	3.00	39	**3271-5-0.55**	■	■	■	■	■
0.60	3.00	3.00	39	**3271-5-0.60**	■	■	■	■	■
0.65	3.30	3.00	39	**3271-5-0.65**	■	■	■	■	■
0.70	3.50	3.00	39	**3271-5-0.70**	■	■	■	■	■
0.75	3.80	3.00	39	**3271-5-0.75**	■	■	■	■	■
0.80	4.00	3.00	39	**3271-5-0.80**	■	■	■	■	■
0.85	4.30	3.00	39	**3271-5-0.85**	■	■	■	■	■
0.90	4.50	3.00	39	**3271-5-0.90**	■	■	■	■	■
0.95	4.80	3.00	39	**3271-5-0.95**	■	■	■	■	■
1.00	5.00	3.00	39	**3271-5-1.00**	■	■	■	■	■
1.10	5.50	3.00	39	**3271-5-1.10**	■	■	■	■	■
1.20	6.00	3.00	39	**3271-5-1.20**	■	■	■	■	■
1.50	7.50	3.00	39	**3271-5-1.50**	■	■	■	■	■
2.00	10.00	3.00	39	**3271-5-2.00**	■	■	■	■	■
2.50	12.50	3.00	39	**3271-5-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3271-8



MD VHM HM | λ 30° | Sharp Corner | 8xD1 | Z=2

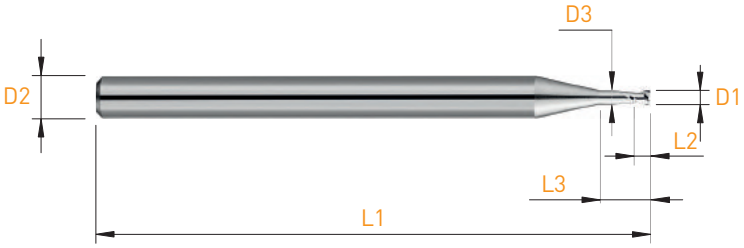
D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	3.20	3.00	39	**3271-8-0.40**	■	■	■	■	■
0.50	4.00	3.00	39	**3271-8-0.50**	■	■	■	■	■
0.60	5.00	3.00	39	**3271-8-0.60**	■	■	■	■	■
0.70	5.60	3.00	39	**3271-8-0.70**	■	■	■	■	■
0.80	6.00	3.00	39	**3271-8-0.80**	■	■	■	■	■
0.90	7.20	3.00	39	**3271-8-0.90**	■	■	■	■	■
1.00	8.00	3.00	39	**3271-8-1.00**	■	■	■	■	■
1.20	9.00	3.00	39	**3271-8-1.20**	■	■	■	■	■
1.50	12.00	4.00	50	**3271-8-1.50**	■	■	■	■	■
2.00	16.00	4.00	50	**3271-8-2.00**	■	■	■	■	■
2.50	20.00	4.00	50	**3271-8-2.50**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3270S-3X

new



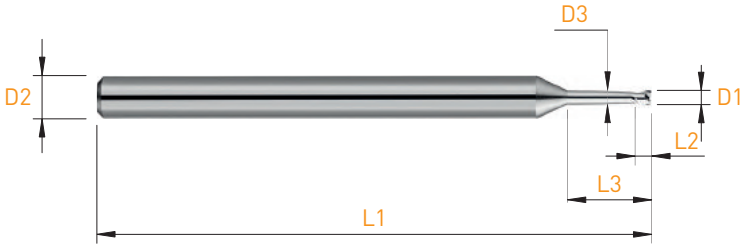
MD VHM HM | λ 30° | Sharp Corner | L3 3xD1 | Z=2

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.40	0.60	0.17	3.00	39	**3270S-3X-0.20**	■				
0.30	0.60	0.90	0.27	3.00	39	**3270S-3X-0.30**	■	■	■	■	■
0.40	0.80	1.20	0.37	3.00	39	**3270S-3X-0.40**	■	■	■	■	■
0.50	1.00	1.50	0.45	3.00	39	**3270S-3X-0.50**	■	■	■	■	■
0.60	1.20	1.80	0.55	3.00	39	**3270S-3X-0.60**	■	■	■	■	■
0.70	1.40	2.10	0.65	3.00	39	**3270S-3X-0.70**	■	■	■	■	■
0.80	1.60	2.40	0.75	3.00	39	**3270S-3X-0.80**	■	■	■	■	■
0.90	1.80	2.70	0.85	3.00	39	**3270S-3X-0.90**	■	■	■	■	■
1.00	2.00	3.00	0.95	3.00	39	**3270S-3X-1.00**	■	■	■	■	■
1.10	2.20	3.30	1.05	3.00	39	**3270S-3X-1.10**	■	■	■	■	■
1.20	2.40	3.60	1.15	3.00	39	**3270S-3X-1.20**	■	■	■	■	■
1.30	2.60	3.90	1.25	3.00	39	**3270S-3X-1.30**	■	■	■	■	■
1.40	2.80	4.20	1.35	3.00	39	**3270S-3X-1.40**	■	■	■	■	■
1.50	3.00	4.50	1.45	3.00	39	**3270S-3X-1.50**	■	■	■	■	■
1.60	3.20	4.80	1.55	3.00	39	**3270S-3X-1.60**	■	■	■	■	■
1.70	3.40	5.10	1.65	3.00	39	**3270S-3X-1.70**	■	■	■	■	■
1.80	3.60	5.40	1.75	3.00	39	**3270S-3X-1.80**	■	■	■	■	■
1.90	3.80	5.70	1.85	3.00	39	**3270S-3X-1.90**	■	■	■	■	■
2.00	4.00	6.00	1.95	6.00	50	**3270S-3X-2.00**	■	■	■	■	■
2.10	4.20	6.30	2.05	6.00	50	**3270S-3X-2.10**	■	■	■	■	■
2.20	4.40	6.60	2.15	6.00	50	**3270S-3X-2.20**	■	■	■	■	■
2.30	4.60	6.90	2.25	6.00	50	**3270S-3X-2.30**	■	■	■	■	■
2.40	4.80	7.20	2.35	6.00	50	**3270S-3X-2.40**	■	■	■	■	■
2.50	5.00	7.50	2.45	6.00	50	**3270S-3X-2.50**	■	■	■	■	■
3.00	6.00	9.00	2.95	6.00	50	**3270S-3X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3270S-6X

new



MD VHM HM | λ 30° | Sharp Corner | L3 6xD1 | Z=2

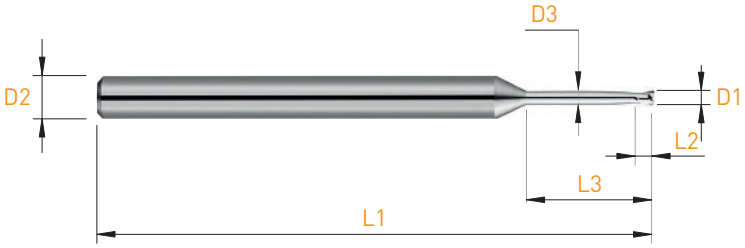
D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	**3270S-6X-0.30**	■	■	■	■	■
0.40	0.80	2.40	0.37	3.00	39	**3270S-6X-0.40**	■	■	■	■	■
0.50	1.00	3.00	0.45	3.00	39	**3270S-6X-0.50**	■	■	■	■	■
0.60	1.20	3.60	0.55	3.00	39	**3270S-6X-0.60**	■	■	■	■	■
0.70	1.40	4.20	0.65	3.00	39	**3270S-6X-0.70**	■	■	■	■	■
0.80	1.60	4.80	0.75	3.00	39	**3270S-6X-0.80**	■	■	■	■	■
0.90	1.80	5.40	0.85	3.00	39	**3270S-6X-0.90**	■	■	■	■	■
1.00	2.00	6.00	0.95	3.00	39	**3270S-6X-1.00**	■	■	■	■	■
1.10	2.20	6.60	1.05	3.00	39	**3270S-6X-1.10**	■	■	■	■	■
1.20	2.40	7.20	1.15	3.00	39	**3270S-6X-1.20**	■	■	■	■	■
1.30	2.60	7.80	1.25	3.00	39	**3270S-6X-1.30**	■	■	■	■	■
1.40	2.80	8.40	1.35	3.00	39	**3270S-6X-1.40**	■	■	■	■	■
1.50	3.00	9.00	1.45	3.00	39	**3270S-6X-1.50**	■	■	■	■	■
1.60	3.20	9.60	1.55	3.00	39	**3270S-6X-1.60**	■	■	■	■	■
1.70	3.40	10.20	1.65	3.00	39	**3270S-6X-1.70**	■	■	■	■	■
1.80	3.60	10.80	1.75	3.00	39	**3270S-6X-1.80**	■	■	■	■	■
1.90	3.80	11.40	1.85	3.00	39	**3270S-6X-1.90**	■	■	■	■	■
2.00	4.00	12.00	1.95	6.00	50	**3270S-6X-2.00**	■	■	■	■	■
2.10	4.20	12.60	2.05	6.00	50	**3270S-6X-2.10**	■	■	■	■	■
2.20	4.40	13.20	2.15	6.00	50	**3270S-6X-2.20**	■	■	■	■	■
2.30	4.60	13.80	2.25	6.00	50	**3270S-6X-2.30**	■	■	■	■	■
2.40	4.80	14.40	2.35	6.00	50	**3270S-6X-2.40**	■	■	■	■	■
2.50	5.00	15.00	2.45	6.00	50	**3270S-6X-2.50**	■	■	■	■	■
3.00	6.00	18.00	2.95	6.00	50	**3270S-6X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3270S-9X

new



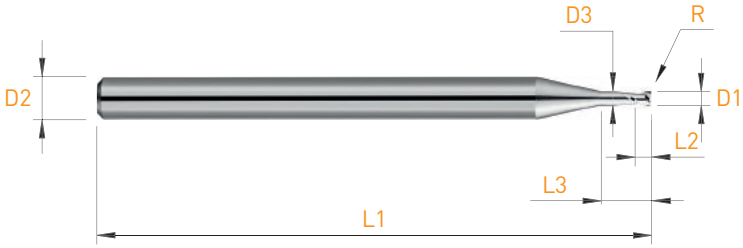
MD VHM HM | λ 30° | Sharp Corner | L3 9xD1 | Z=2

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	**3270S-9X-0.40**	■	■	■	■	■
0.50	1.00	4.50	0.45	3.00	39	**3270S-9X-0.50**	■	■	■	■	■
0.60	1.20	5.40	0.55	3.00	39	**3270S-9X-0.60**	■	■	■	■	■
0.70	1.40	6.30	0.65	3.00	39	**3270S-9X-0.70**	■	■	■	■	■
0.80	1.60	7.20	0.75	3.00	39	**3270S-9X-0.80**	■	■	■	■	■
0.90	1.80	8.10	0.85	3.00	39	**3270S-9X-0.90**	■	■	■	■	■
1.00	2.00	9.00	0.95	3.00	39	**3270S-9X-1.00**	■	■	■	■	■
1.10	2.20	9.90	1.05	3.00	39	**3270S-9X-1.10**	■	■	■	■	■
1.20	2.40	10.80	1.15	3.00	39	**3270S-9X-1.20**	■	■	■	■	■
1.30	2.60	11.70	1.25	3.00	39	**3270S-9X-1.30**	■	■	■	■	■
1.40	2.80	12.60	1.35	3.00	39	**3270S-9X-1.40**	■	■	■	■	■
1.50	3.00	13.50	1.45	3.00	39	**3270S-9X-1.50**	■	■	■	■	■
1.60	3.20	14.40	1.55	3.00	39	**3270S-9X-1.60**	■	■	■	■	■
1.70	3.40	15.30	1.65	3.00	39	**3270S-9X-1.70**	■	■	■	■	■
1.80	3.60	16.20	1.75	3.00	39	**3270S-9X-1.80**	■	■	■	■	■
1.90	3.80	17.10	1.85	3.00	39	**3270S-9X-1.90**	■	■	■	■	■
2.00	4.00	18.00	1.95	6.00	50	**3270S-9X-2.00**	■	■	■	■	■
2.10	4.20	18.90	2.05	6.00	50	**3270S-9X-2.10**	■	■	■	■	■
2.20	4.40	19.80	2.15	6.00	50	**3270S-9X-2.20**	■	■	■	■	■
2.30	4.60	20.70	2.25	6.00	50	**3270S-9X-2.30**	■	■	■	■	■
2.40	4.80	21.60	2.35	6.00	50	**3270S-9X-2.40**	■	■	■	■	■
2.50	5.00	22.50	2.45	6.00	50	**3270S-9X-2.50**	■	■	■	■	■
3.00	6.00	27.00	2.95	6.00	50	**3270S-9X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3279T-3X

new



MD VHM HM | λ 30° | Radius Corner | L3 3xD1 | Z=2

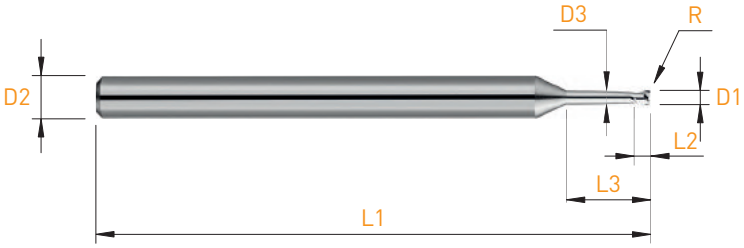
D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	**3279T-3X-0.30**	■	■	■	■	■
0.40	0.05	0.80	1.20	0.37	3.00	39	**3279T-3X-0.40**	■	■	■	■	■
0.50	0.05	1.00	1.50	0.45	3.00	39	**3279T-3X-0.50**	■	■	■	■	■
0.60	0.05	1.20	1.80	0.55	3.00	39	**3279T-3X-0.60**	■	■	■	■	■
0.70	0.05	1.40	2.10	0.65	3.00	39	**3279T-3X-0.70**	■	■	■	■	■
0.80	0.05	1.60	2.40	0.75	3.00	39	**3279T-3X-0.80**	■	■	■	■	■
0.90	0.05	1.80	2.70	0.85	3.00	39	**3279T-3X-0.90**	■	■	■	■	■
1.00	0.10	2.00	3.00	0.95	3.00	39	**3279T-3X-1.00**	■	■	■	■	■
1.10	0.10	2.20	3.30	1.05	3.00	39	**3279T-3X-1.10**	■	■	■	■	■
1.20	0.10	2.40	3.60	1.15	3.00	39	**3279T-3X-1.20**	■	■	■	■	■
1.30	0.10	2.60	3.90	1.25	3.00	39	**3279T-3X-1.30**	■	■	■	■	■
1.40	0.10	2.80	4.20	1.35	3.00	39	**3279T-3X-1.40**	■	■	■	■	■
1.50	0.20	3.00	4.50	1.45	3.00	39	**3279T-3X-1.50**	■	■	■	■	■
1.60	0.20	3.20	4.80	1.55	3.00	39	**3279T-3X-1.60**	■	■	■	■	■
1.70	0.20	3.40	5.10	1.65	3.00	39	**3279T-3X-1.70**	■	■	■	■	■
1.80	0.20	3.60	5.40	1.75	3.00	39	**3279T-3X-1.80**	■	■	■	■	■
1.90	0.20	3.80	5.70	1.85	3.00	39	**3279T-3X-1.90**	■	■	■	■	■
2.00	0.20	4.00	6.00	1.95	6.00	50	**3279T-3X-2.00**	■	■	■	■	■
2.10	0.20	4.20	6.30	2.05	6.00	50	**3279T-3X-2.10**	■	■	■	■	■
2.20	0.20	4.40	6.60	2.15	6.00	50	**3279T-3X-2.20**	■	■	■	■	■
2.30	0.20	4.60	6.90	2.25	6.00	50	**3279T-3X-2.30**	■	■	■	■	■
2.40	0.20	4.80	7.20	2.35	6.00	50	**3279T-3X-2.40**	■	■	■	■	■
2.50	0.20	5.00	7.50	2.45	6.00	50	**3279T-3X-2.50**	■	■	■	■	■
3.00	0.20	6.00	9.00	2.95	6.00	50	**3279T-3X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3279T-6X

new



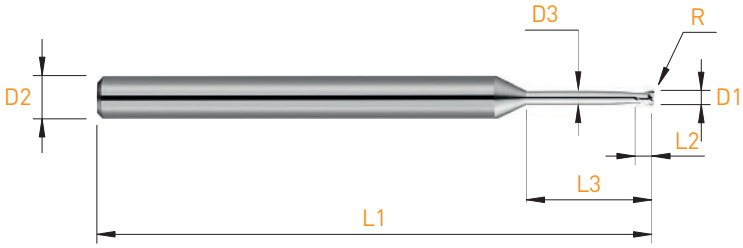
MD VHM HM | λ 30° | Radius Corner | L3 6xD1 | Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	**3279T-6X-0.30**	■	■	■	■	■
0.40	0.05	0.80	2.40	0.37	3.00	39	**3279T-6X-0.40**	■	■	■	■	■
0.50	0.05	1.00	3.00	0.45	3.00	39	**3279T-6X-0.50**	■	■	■	■	■
0.60	0.05	1.20	3.60	0.55	3.00	39	**3279T-6X-0.60**	■	■	■	■	■
0.70	0.05	1.40	4.20	0.65	3.00	39	**3279T-6X-0.70**	■	■	■	■	■
0.80	0.05	1.60	4.80	0.75	3.00	39	**3279T-6X-0.80**	■	■	■	■	■
0.90	0.05	1.80	5.40	0.85	3.00	39	**3279T-6X-0.90**	■	■	■	■	■
1.00	0.10	2.00	6.00	0.95	3.00	39	**3279T-6X-1.00**	■	■	■	■	■
1.10	0.10	2.20	6.60	1.05	3.00	39	**3279T-6X-1.10**	■	■	■	■	■
1.20	0.10	2.40	7.20	1.15	3.00	39	**3279T-6X-1.20**	■	■	■	■	■
1.30	0.10	2.60	7.80	1.25	3.00	39	**3279T-6X-1.30**	■	■	■	■	■
1.40	0.10	2.80	8.40	1.35	3.00	39	**3279T-6X-1.40**	■	■	■	■	■
1.50	0.20	3.00	9.00	1.45	3.00	39	**3279T-6X-1.50**	■	■	■	■	■
1.60	0.20	3.20	9.60	1.55	3.00	39	**3279T-6X-1.60**	■	■	■	■	■
1.70	0.20	3.40	10.20	1.65	3.00	39	**3279T-6X-1.70**	■	■	■	■	■
1.80	0.20	3.60	10.80	1.75	3.00	39	**3279T-6X-1.80**	■	■	■	■	■
1.90	0.20	3.80	11.40	1.85	3.00	39	**3279T-6X-1.90**	■	■	■	■	■
2.00	0.20	4.00	12.00	1.95	6.00	50	**3279T-6X-2.00**	■	■	■	■	■
2.10	0.20	4.20	12.60	2.05	6.00	50	**3279T-6X-2.10**	■	■	■	■	■
2.20	0.20	4.40	13.20	2.15	6.00	50	**3279T-6X-2.20**	■	■	■	■	■
2.30	0.20	4.60	13.80	2.25	6.00	50	**3279T-6X-2.30**	■	■	■	■	■
2.40	0.20	4.80	14.40	2.35	6.00	50	**3279T-6X-2.40**	■	■	■	■	■
2.50	0.20	5.00	15.00	2.45	6.00	50	**3279T-6X-2.50**	■	■	■	■	■
3.00	0.20	6.00	18.00	2.95	6.00	50	**3279T-6X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3279T-9X

new



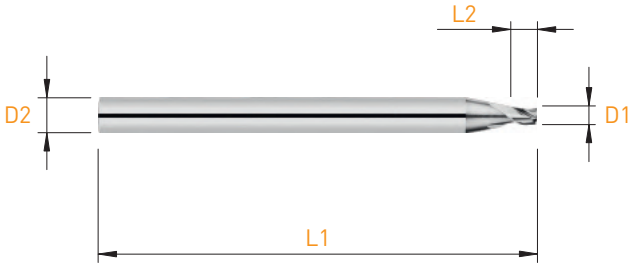
MD VHM HM | λ 30° | Radius Corner | L3 9xD1 | Z=2

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	**3279T-9X-0.40**	■	■	■	■	■
0.50	0.05	1.00	4.50	0.45	3.00	39	**3279T-9X-0.50**	■	■	■	■	■
0.60	0.05	1.20	5.40	0.55	3.00	39	**3279T-9X-0.60**	■	■	■	■	■
0.70	0.05	1.40	6.30	0.65	3.00	39	**3279T-9X-0.70**	■	■	■	■	■
0.80	0.05	1.60	7.20	0.75	3.00	39	**3279T-9X-0.80**	■	■	■	■	■
0.90	0.05	1.80	8.10	0.85	3.00	39	**3279T-9X-0.90**	■	■	■	■	■
1.00	0.10	2.00	9.00	0.95	3.00	39	**3279T-9X-1.00**	■	■	■	■	■
1.10	0.10	2.20	9.90	1.05	3.00	39	**3279T-9X-1.10**	■	■	■	■	■
1.20	0.10	2.40	10.80	1.15	3.00	39	**3279T-9X-1.20**	■	■	■	■	■
1.30	0.10	2.60	11.70	1.25	3.00	39	**3279T-9X-1.30**	■	■	■	■	■
1.40	0.10	2.80	12.60	1.35	3.00	39	**3279T-9X-1.40**	■	■	■	■	■
1.50	0.20	3.00	13.50	1.45	3.00	39	**3279T-9X-1.50**	■	■	■	■	■
1.60	0.20	3.20	14.40	1.55	3.00	39	**3279T-9X-1.60**	■	■	■	■	■
1.70	0.20	3.40	15.30	1.65	3.00	39	**3279T-9X-1.70**	■	■	■	■	■
1.80	0.20	3.60	16.20	1.75	3.00	39	**3279T-9X-1.80**	■	■	■	■	■
1.90	0.20	3.80	17.10	1.85	3.00	39	**3279T-9X-1.90**	■	■	■	■	■
2.00	0.20	4.00	18.00	1.95	6.00	50	**3279T-9X-2.00**	■	■	■	■	■
2.10	0.20	4.20	18.90	2.05	6.00	50	**3279T-9X-2.10**	■	■	■	■	■
2.20	0.20	4.40	19.80	2.15	6.00	50	**3279T-9X-2.20**	■	■	■	■	■
2.30	0.20	4.60	20.70	2.25	6.00	50	**3279T-9X-2.30**	■	■	■	■	■
2.40	0.20	4.80	21.60	2.35	6.00	50	**3279T-9X-2.40**	■	■	■	■	■
2.50	0.20	5.00	22.50	2.45	6.00	50	**3279T-9X-2.50**	■	■	■	■	■
3.00	0.20	6.00	27.00	2.95	6.00	50	**3279T-9X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-1.3

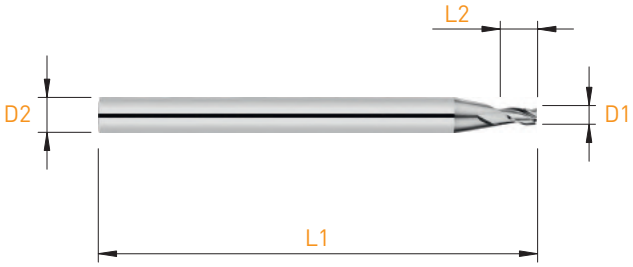


MD VHM HM | λ 30° | Sharp Corner | 1.3xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.40	3.00	39	**3371-1.3-0.30**	■	■	■	■	■
0.35	0.50	3.00	39	**3371-1.3-0.35**	■	■	■	■	■
0.40	0.50	3.00	39	**3371-1.3-0.40**	■	■	■	■	■
0.45	0.60	3.00	39	**3371-1.3-0.45**	■	■	■	■	■
0.50	0.70	3.00	39	**3371-1.3-0.50**	■	■	■	■	■
0.60	0.80	3.00	39	**3371-1.3-0.60**	■	■	■	■	■
0.70	0.90	3.00	39	**3371-1.3-0.70**	■	■	■	■	■
0.80	1.00	3.00	39	**3371-1.3-0.80**	■	■	■	■	■
0.90	1.30	3.00	39	**3371-1.3-0.90**	■	■	■	■	■
1.00	1.30	3.00	39	**3371-1.3-1.00**	■	■	■	■	■
1.10	1.50	3.00	39	**3371-1.3-1.10**	■	■	■	■	■
1.20	1.60	3.00	39	**3371-1.3-1.20**	■	■	■	■	■
1.30	1.80	3.00	39	**3371-1.3-1.30**	■	■	■	■	■
1.40	1.80	3.00	39	**3371-1.3-1.40**	■	■	■	■	■
1.50	2.00	3.00	39	**3371-1.3-1.50**	■	■	■	■	■
1.55	2.00	3.00	39	**3371-1.3-1.55**	■	■	■	■	■
1.60	2.00	3.00	39	**3371-1.3-1.60**	■	■	■	■	■
1.65	2.00	3.00	39	**3371-1.3-1.65**	■	■	■	■	■
1.70	2.00	3.00	39	**3371-1.3-1.70**	■	■	■	■	■
1.80	2.40	3.00	39	**3371-1.3-1.80**	■	■	■	■	■
1.90	2.40	3.00	39	**3371-1.3-1.90**	■	■	■	■	■
2.00	2.60	3.00	39	**3371-1.3-2.00**	■	■	■	■	■
2.05	2.70	3.00	39	**3371-1.3-2.05**	■	■	■	■	■
2.20	3.00	3.00	39	**3371-1.3-2.20**	■	■	■	■	■
2.50	3.30	3.00	39	**3371-1.3-2.50**	■	■	■	■	■
2.80	3.50	3.00	39	**3371-1.3-2.80**	■	■	■	■	■
2.90	3.50	3.00	39	**3371-1.3-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-2



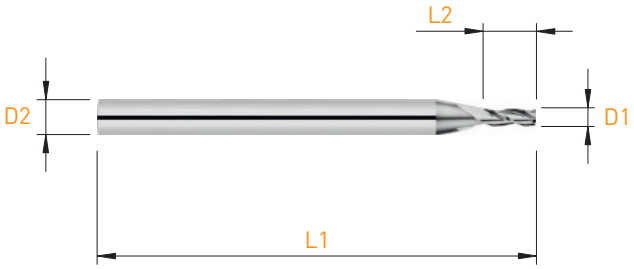
MD VHM HM | λ 30° | Sharp Corner | 2xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	**3371-2-0.30**	■	■	■	■	■
0.35	0.70	3.00	39	**3371-2-0.35**	■	■	■	■	■
0.40	0.80	3.00	39	**3371-2-0.40**	■	■	■	■	■
0.45	0.90	3.00	39	**3371-2-0.45**	■	■	■	■	■
0.50	1.00	3.00	39	**3371-2-0.50**	■	■	■	■	■
0.60	1.20	3.00	39	**3371-2-0.60**	■	■	■	■	■
0.70	1.40	3.00	39	**3371-2-0.70**	■	■	■	■	■
0.75	1.50	3.00	39	**3371-2-0.75**	■	■	■	■	■
0.80	1.60	3.00	39	**3371-2-0.80**	■	■	■	■	■
0.90	1.80	3.00	39	**3371-2-0.90**	■	■	■	■	■
0.95	1.90	3.00	39	**3371-2-0.95**	■	■	■	■	■
1.00	2.00	3.00	39	**3371-2-1.00**	■	■	■	■	■
1.10	2.20	3.00	39	**3371-2-1.10**	■	■	■	■	■
1.20	2.40	3.00	39	**3371-2-1.20**	■	■	■	■	■
1.30	2.60	3.00	39	**3371-2-1.30**	■	■	■	■	■
1.40	2.80	3.00	39	**3371-2-1.40**	■	■	■	■	■
1.50	3.00	3.00	39	**3371-2-1.50**	■	■	■	■	■
1.60	3.20	3.00	39	**3371-2-1.60**	■	■	■	■	■
1.70	3.40	3.00	39	**3371-2-1.70**	■	■	■	■	■
1.80	3.60	3.00	39	**3371-2-1.80**	■	■	■	■	■
1.90	3.80	3.00	39	**3371-2-1.90**	■	■	■	■	■
2.00	4.00	3.00	39	**3371-2-2.00**	■	■	■	■	■
2.10	4.20	3.00	39	**3371-2-2.10**	■	■	■	■	■
2.20	4.40	3.00	39	**3371-2-2.20**	■	■	■	■	■
2.30	4.60	3.00	39	**3371-2-2.30**	■	■	■	■	■
2.40	4.80	3.00	39	**3371-2-2.40**	■	■	■	■	■
2.50	5.00	3.00	39	**3371-2-2.50**	■	■	■	■	■
2.60	5.20	3.00	39	**3371-2-2.60**	■	■	■	■	■
2.70	5.40	3.00	39	**3371-2-2.70**	■	■	■	■	■
2.80	5.60	3.00	39	**3371-2-2.80**	■	■	■	■	■
2.90	5.80	3.00	39	**3371-2-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-3



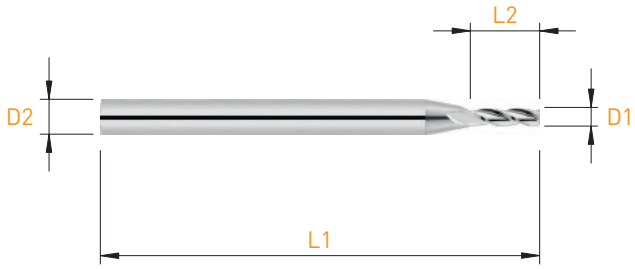
MD VHM HM | λ 30° | Sharp Corner | 3xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**3371-3-0.30**	■	■	■	■	■
0.40	1.20	3.00	39	**3371-3-0.40**	■	■	■	■	■
0.45	1.40	3.00	39	**3371-3-0.45**	■	■	■	■	■
0.50	1.50	3.00	39	**3371-3-0.50**	■	■	■	■	■
0.55	1.80	3.00	39	**3371-3-0.55**	■	■	■	■	■
0.60	2.00	3.00	39	**3371-3-0.60**	■	■	■	■	■
0.65	2.00	3.00	39	**3371-3-0.65**	■	■	■	■	■
0.70	2.00	3.00	39	**3371-3-0.70**	■	■	■	■	■
0.75	2.00	3.00	39	**3371-3-0.75**	■	■	■	■	■
0.80	2.50	3.00	39	**3371-3-0.80**	■	■	■	■	■
0.85	2.50	3.00	39	**3371-3-0.85**	■	■	■	■	■
0.90	2.50	3.00	39	**3371-3-0.90**	■	■	■	■	■
0.95	2.90	3.00	39	**3371-3-0.95**	■	■	■	■	■
1.00	3.00	3.00	39	**3371-3-1.00**	■	■	■	■	■
1.05	3.20	3.00	39	**3371-3-1.05**	■	■	■	■	■
1.10	3.30	3.00	39	**3371-3-1.10**	■	■	■	■	■
1.15	3.50	3.00	39	**3371-3-1.15**	■	■	■	■	■
1.20	4.00	3.00	39	**3371-3-1.20**	■	■	■	■	■
1.25	4.00	3.00	39	**3371-3-1.25**	■	■	■	■	■
1.30	4.00	3.00	39	**3371-3-1.30**	■	■	■	■	■
1.35	4.00	3.00	39	**3371-3-1.35**	■	■	■	■	■
1.40	4.00	3.00	39	**3371-3-1.40**	■	■	■	■	■
1.45	4.50	3.00	39	**3371-3-1.45**	■	■	■	■	■
1.50	4.50	3.00	39	**3371-3-1.50**	■	■	■	■	■
1.60	4.50	3.00	39	**3371-3-1.60**	■	■	■	■	■
1.65	5.00	3.00	39	**3371-3-1.65**	■	■	■	■	■
1.70	5.00	3.00	39	**3371-3-1.70**	■	■	■	■	■
1.80	6.00	3.00	39	**3371-3-1.80**	■	■	■	■	■
1.85	6.00	3.00	39	**3371-3-1.85**	■	■	■	■	■
1.90	6.00	3.00	39	**3371-3-1.90**	■	■	■	■	■
1.95	6.00	3.00	39	**3371-3-1.95**	■	■	■	■	■

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
2.00	6.00	3.00	39	**3371-3-2.00**	■	■	■	■	■
2.10	6.00	3.00	39	**3371-3-2.10**	■	■	■	■	■
2.20	6.50	3.00	39	**3371-3-2.20**	■	■	■	■	■
2.30	7.00	3.00	39	**3371-3-2.30**	■	■	■	■	■
2.40	7.00	3.00	39	**3371-3-2.40**	■	■	■	■	■
2.50	7.50	3.00	39	**3371-3-2.50**	■	■	■	■	■
2.60	7.50	3.00	39	**3371-3-2.60**	■	■	■	■	■
2.70	8.00	3.00	39	**3371-3-2.70**	■	■	■	■	■
2.80	8.00	3.00	39	**3371-3-2.80**	■	■	■	■	■
2.90	8.50	3.00	39	**3371-3-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-4



MD
VHM
HM

λ 30°

Sharp Corner

4xD1

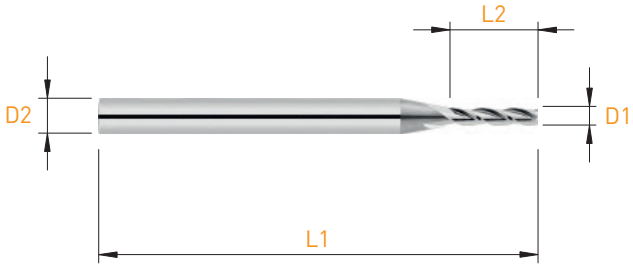
Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	**3371-4-0.30**	■	■	■	■	■
0.40	1.60	3.00	39	**3371-4-0.40**	■	■	■	■	■
0.50	2.00	3.00	39	**3371-4-0.50**	■	■	■	■	■
0.60	2.40	3.00	39	**3371-4-0.60**	■	■	■	■	■
0.70	2.80	3.00	39	**3371-4-0.70**	■	■	■	■	■
0.80	3.20	3.00	39	**3371-4-0.80**	■	■	■	■	■
0.90	3.60	3.00	39	**3371-4-0.90**	■	■	■	■	■
1.00	4.00	3.00	39	**3371-4-1.00**	■	■	■	■	■
1.10	4.40	3.00	39	**3371-4-1.10**	■	■	■	■	■
1.20	4.80	3.00	39	**3371-4-1.20**	■	■	■	■	■
1.30	5.20	3.00	39	**3371-4-1.30**	■	■	■	■	■
1.40	5.60	3.00	39	**3371-4-1.40**	■	■	■	■	■
1.50	6.00	3.00	39	**3371-4-1.50**	■	■	■	■	■
1.60	6.40	3.00	39	**3371-4-1.60**	■	■	■	■	■
1.70	6.80	3.00	39	**3371-4-1.70**	■	■	■	■	■
1.80	7.20	3.00	39	**3371-4-1.80**	■	■	■	■	■
1.90	7.60	3.00	39	**3371-4-1.90**	■	■	■	■	■
2.00	8.00	3.00	39	**3371-4-2.00**	■	■	■	■	■
2.10	8.40	3.00	39	**3371-4-2.10**	■	■	■	■	■
2.20	8.80	3.00	39	**3371-4-2.20**	■	■	■	■	■
2.30	9.20	3.00	39	**3371-4-2.30**	■	■	■	■	■
2.40	9.60	3.00	39	**3371-4-2.40**	■	■	■	■	■
2.50	10.00	3.00	39	**3371-4-2.50**	■	■	■	■	■
2.60	10.40	3.00	39	**3371-4-2.60**	■	■	■	■	■
2.70	10.80	3.00	39	**3371-4-2.70**	■	■	■	■	■
2.80	11.20	3.00	39	**3371-4-2.80**	■	■	■	■	■
2.90	11.60	3.00	39	**3371-4-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-5

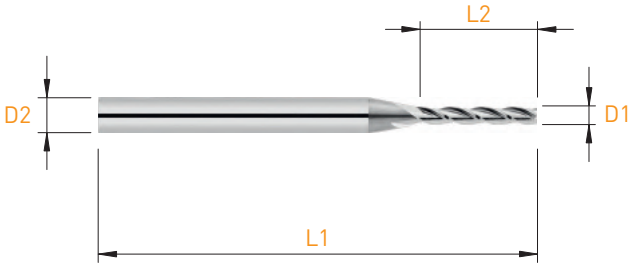


MD VHM HM | λ 30° | Sharp Corner | 5xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	2.50	3.00	39	**3371-5-0.50**	■	■	■	■	■
0.60	3.00	3.00	39	**3371-5-0.60**	■	■	■	■	■
0.70	3.50	3.00	39	**3371-5-0.70**	■	■	■	■	■
0.80	4.00	3.00	39	**3371-5-0.80**	■	■	■	■	■
0.90	4.50	3.00	39	**3371-5-0.90**	■	■	■	■	■
1.00	5.00	3.00	39	**3371-5-1.00**	■	■	■	■	■
1.10	5.50	3.00	39	**3371-5-1.10**	■	■	■	■	■
1.20	6.00	3.00	39	**3371-5-1.20**	■	■	■	■	■
1.50	7.50	3.00	39	**3371-5-1.50**	■	■	■	■	■
2.00	10.00	3.00	39	**3371-5-2.00**	■	■	■	■	■
2.50	12.50	3.00	39	**3371-5-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3371-8



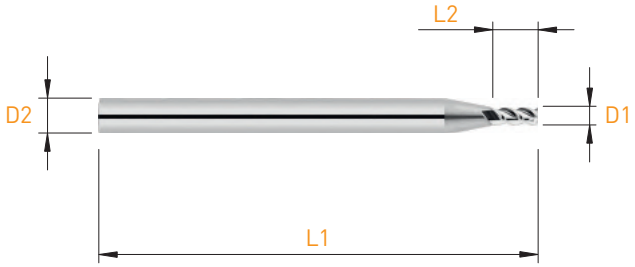
MD VHM HM | λ 30° | Sharp Corner | 8xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	4.00	3.00	39	**3371-8-0.50**	■	■	■	■	■
0.60	5.00	3.00	39	**3371-8-0.60**	■	■	■	■	■
0.70	5.60	3.00	39	**3371-8-0.70**	■	■	■	■	■
0.80	6.00	3.00	39	**3371-8-0.80**	■	■	■	■	■
0.90	7.20	3.00	39	**3371-8-0.90**	■	■	■	■	■
1.00	8.00	3.00	39	**3371-8-1.00**	■	■	■	■	■
1.20	9.00	3.00	39	**3371-8-1.20**	■	■	■	■	■
1.30	11.00	3.00	39	**3371-8-1.30**	■	■	■	■	■
1.50	12.00	4.00	50	**3371-8-1.50**	■	■	■	■	■
2.00	16.00	4.00	50	**3371-8-2.00**	■	■	■	■	■
2.50	20.00	4.00	50	**3371-8-2.50**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3375-2.5

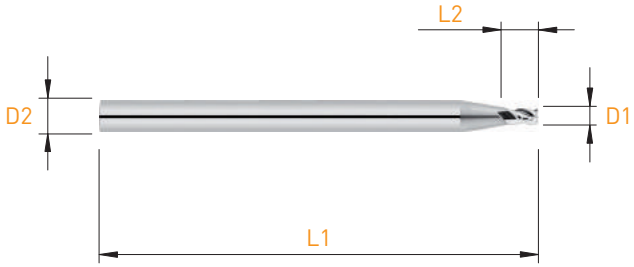


MD VHM HM | λ 45° | Sharp Corner | 2.5xD1 | Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.80	3.00	39	**3375-2.5-0.30**	■	■	■	■	■
0.40	1.00	3.00	39	**3375-2.5-0.40**	■	■	■	■	■
0.50	1.30	3.00	39	**3375-2.5-0.50**	■	■	■	■	■
0.60	1.50	3.00	39	**3375-2.5-0.60**	■	■	■	■	■
0.70	1.70	3.00	39	**3375-2.5-0.70**	■	■	■	■	■
0.80	2.00	3.00	39	**3375-2.5-0.80**	■	■	■	■	■
0.90	2.30	3.00	39	**3375-2.5-0.90**	■	■	■	■	■
1.00	2.50	3.00	39	**3375-2.5-1.00**	■	■	■	■	■
1.10	2.80	3.00	39	**3375-2.5-1.10**	■	■	■	■	■
1.20	3.00	3.00	39	**3375-2.5-1.20**	■	■	■	■	■
1.30	3.30	3.00	39	**3375-2.5-1.30**	■	■	■	■	■
1.40	3.50	3.00	39	**3375-2.5-1.40**	■	■	■	■	■
1.50	3.80	3.00	39	**3375-2.5-1.50**	■	■	■	■	■
1.60	4.00	3.00	39	**3375-2.5-1.60**	■	■	■	■	■
1.70	4.30	3.00	39	**3375-2.5-1.70**	■	■	■	■	■
1.80	4.50	3.00	39	**3375-2.5-1.80**	■	■	■	■	■
1.90	4.80	3.00	39	**3375-2.5-1.90**	■	■	■	■	■
2.00	5.00	3.00	39	**3375-2.5-2.00**	■	■	■	■	■
2.10	5.30	3.00	39	**3375-2.5-2.10**	■	■	■	■	■
2.20	5.50	3.00	39	**3375-2.5-2.20**	■	■	■	■	■
2.30	5.80	3.00	39	**3375-2.5-2.30**	■	■	■	■	■
2.40	6.00	3.00	39	**3375-2.5-2.40**	■	■	■	■	■
2.50	6.30	3.00	39	**3375-2.5-2.50**	■	■	■	■	■
2.60	6.50	3.00	39	**3375-2.5-2.60**	■	■	■	■	■
2.70	6.80	3.00	39	**3375-2.5-2.70**	■	■	■	■	■
2.80	7.00	3.00	39	**3375-2.5-2.80**	■	■	■	■	■
2.90	7.30	3.00	39	**3375-2.5-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

DHD3371-1.5



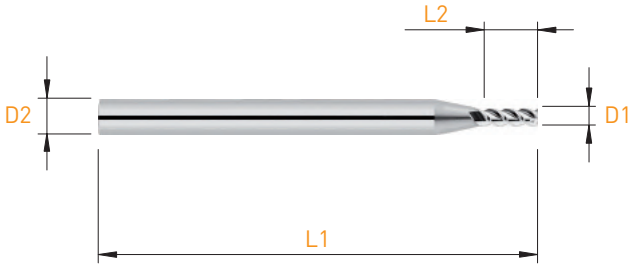
MD VHM HM	λ 36° 38° 40°	Sharp Corner		1.5xD1	Z=3	

DHD	Denture à pas irrégulier, angle d'hélice différent pour chaque dent Ungleiche Teilung, unterschiedlicher Drallwinkel Uneven tooth pitch, different helix angle per tooth

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	**DHD3371-1.5-0.30**	■	■	■	■	■
0.40	0.60	3.00	39	**DHD3371-1.5-0.40**	■	■	■	■	■
0.50	0.75	3.00	39	**DHD3371-1.5-0.50**	■	■	■	■	■
0.60	0.90	3.00	39	**DHD3371-1.5-0.60**	■	■	■	■	■
0.70	1.05	3.00	39	**DHD3371-1.5-0.70**	■	■	■	■	■
0.80	1.20	3.00	39	**DHD3371-1.5-0.80**	■	■	■	■	■
0.90	1.35	3.00	39	**DHD3371-1.5-0.90**	■	■	■	■	■
1.00	1.50	3.00	39	**DHD3371-1.5-1.00**	■	■	■	■	■
1.10	1.65	3.00	39	**DHD3371-1.5-1.10**	■	■	■	■	■
1.20	1.80	3.00	39	**DHD3371-1.5-1.20**	■	■	■	■	■
1.30	1.95	3.00	39	**DHD3371-1.5-1.30**	■	■	■	■	■
1.40	2.10	3.00	39	**DHD3371-1.5-1.40**	■	■	■	■	■
1.50	2.25	3.00	39	**DHD3371-1.5-1.50**	■	■	■	■	■
1.60	2.40	3.00	39	**DHD3371-1.5-1.60**	■	■	■	■	■
1.70	2.55	3.00	39	**DHD3371-1.5-1.70**	■	■	■	■	■
1.80	2.70	3.00	39	**DHD3371-1.5-1.80**	■	■	■	■	■
1.90	2.85	3.00	39	**DHD3371-1.5-1.90**	■	■	■	■	■
2.00	3.00	3.00	39	**DHD3371-1.5-2.00**	■	■	■	■	■
2.50	3.75	3.00	39	**DHD3371-1.5-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

DHD3371-3



MD VHM HM	λ 36° 38° 40°	Sharp Corner		3xD1	Z=3	

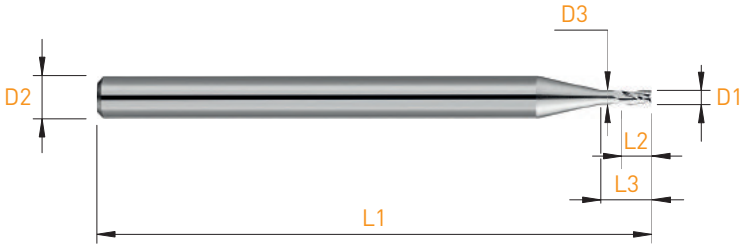
DHD	Denture à pas irrégulier, angle d'hélice différent pour chaque dent Ungleiche Teilung, unterschiedlicher Drallwinkel Uneven tooth pitch, different helix angle per tooth

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**DHD3371-3-0.30**	■	■	■	■	■
0.40	1.20	3.00	39	**DHD3371-3-0.40**	■	■	■	■	■
0.50	1.50	3.00	39	**DHD3371-3-0.50**	■	■	■	■	■
0.60	1.80	3.00	39	**DHD3371-3-0.60**	■	■	■	■	■
0.70	2.10	3.00	39	**DHD3371-3-0.70**	■	■	■	■	■
0.80	2.40	3.00	39	**DHD3371-3-0.80**	■	■	■	■	■
0.90	2.70	3.00	39	**DHD3371-3-0.90**	■	■	■	■	■
1.00	3.00	3.00	39	**DHD3371-3-1.00**	■	■	■	■	■
1.10	3.30	3.00	39	**DHD3371-3-1.10**	■	■	■	■	■
1.20	3.60	3.00	39	**DHD3371-3-1.20**	■	■	■	■	■
1.30	3.90	3.00	39	**DHD3371-3-1.30**	■	■	■	■	■
1.40	4.20	3.00	39	**DHD3371-3-1.40**	■	■	■	■	■
1.50	4.50	3.00	39	**DHD3371-3-1.50**	■	■	■	■	■
1.60	4.80	3.00	39	**DHD3371-3-1.60**	■	■	■	■	■
1.70	5.10	3.00	39	**DHD3371-3-1.70**	■	■	■	■	■
1.80	5.40	3.00	39	**DHD3371-3-1.80**	■	■	■	■	■
1.90	5.70	3.00	39	**DHD3371-3-1.90**	■	■	■	■	■
2.00	6.00	3.00	39	**DHD3371-3-2.00**	■	■	■	■	■
2.50	7.50	3.00	39	**DHD3371-3-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3370S-3X

new



MD VHM HM | λ 30° | Sharp Corner | L3 3xD1 | Z=3

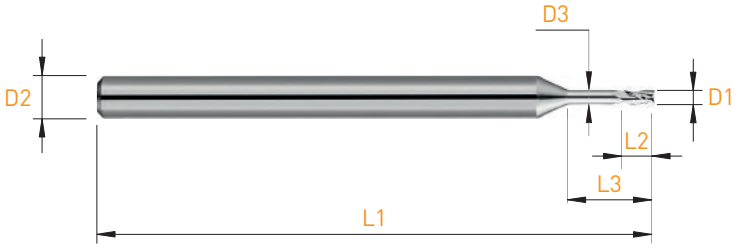
D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	0.90	0.27	3.00	39	**3370S-3X-0.30**	■	■	■	■	■
0.40	0.80	1.20	0.37	3.00	39	**3370S-3X-0.40**	■	■	■	■	■
0.50	1.00	1.50	0.45	3.00	39	**3370S-3X-0.50**	■	■	■	■	■
0.60	1.20	1.80	0.55	3.00	39	**3370S-3X-0.60**	■	■	■	■	■
0.70	1.40	2.10	0.65	3.00	39	**3370S-3X-0.70**	■	■	■	■	■
0.80	1.60	2.40	0.75	3.00	39	**3370S-3X-0.80**	■	■	■	■	■
0.90	1.80	2.70	0.85	3.00	39	**3370S-3X-0.90**	■	■	■	■	■
1.00	2.00	3.00	0.95	3.00	39	**3370S-3X-1.00**	■	■	■	■	■
1.10	2.20	3.30	1.05	3.00	39	**3370S-3X-1.10**	■	■	■	■	■
1.20	2.40	3.60	1.15	3.00	39	**3370S-3X-1.20**	■	■	■	■	■
1.30	2.60	3.90	1.25	3.00	39	**3370S-3X-1.30**	■	■	■	■	■
1.40	2.80	4.20	1.35	3.00	39	**3370S-3X-1.40**	■	■	■	■	■
1.50	3.00	4.50	1.45	3.00	39	**3370S-3X-1.50**	■	■	■	■	■
1.60	3.20	4.80	1.55	3.00	39	**3370S-3X-1.60**	■	■	■	■	■
1.70	3.40	5.10	1.65	3.00	39	**3370S-3X-1.70**	■	■	■	■	■
1.80	3.60	5.40	1.75	3.00	39	**3370S-3X-1.80**	■	■	■	■	■
1.90	3.80	5.70	1.85	3.00	39	**3370S-3X-1.90**	■	■	■	■	■
2.00	4.00	6.00	1.95	6.00	50	**3370S-3X-2.00**	■	■	■	■	■
2.10	4.20	6.30	2.05	6.00	50	**3370S-3X-2.10**	■	■	■	■	■
2.20	4.40	6.60	2.15	6.00	50	**3370S-3X-2.20**	■	■	■	■	■
2.30	4.60	6.90	2.25	6.00	50	**3370S-3X-2.30**	■	■	■	■	■
2.40	4.80	7.20	2.35	6.00	50	**3370S-3X-2.40**	■	■	■	■	■
2.50	5.00	7.50	2.45	6.00	50	**3370S-3X-2.50**	■	■	■	■	■
3.00	6.00	9.00	2.95	6.00	50	**3370S-3X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3370S-6X

new



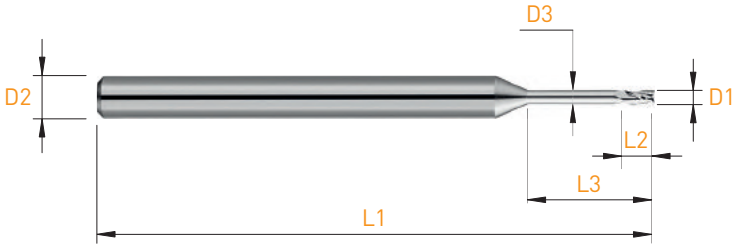
MD VHM HM | λ 30° | Sharp Corner | L3 6xD1 | Z=3

D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	**3370S-6X-0.30**	■	■	■	■	■
0.40	0.80	2.40	0.37	3.00	39	**3370S-6X-0.40**	■	■	■	■	■
0.50	1.00	3.00	0.45	3.00	39	**3370S-6X-0.50**	■	■	■	■	■
0.60	1.20	3.60	0.55	3.00	39	**3370S-6X-0.60**	■	■	■	■	■
0.70	1.40	4.20	0.65	3.00	39	**3370S-6X-0.70**	■	■	■	■	■
0.80	1.60	4.80	0.75	3.00	39	**3370S-6X-0.80**	■	■	■	■	■
0.90	1.80	5.40	0.85	3.00	39	**3370S-6X-0.90**	■	■	■	■	■
1.00	2.00	6.00	0.95	3.00	39	**3370S-6X-1.00**	■	■	■	■	■
1.10	2.20	6.60	1.05	3.00	39	**3370S-6X-1.10**	■	■	■	■	■
1.20	2.40	7.20	1.15	3.00	39	**3370S-6X-1.20**	■	■	■	■	■
1.30	2.60	7.80	1.25	3.00	39	**3370S-6X-1.30**	■	■	■	■	■
1.40	2.80	8.40	1.35	3.00	39	**3370S-6X-1.40**	■	■	■	■	■
1.50	3.00	9.00	1.45	3.00	39	**3370S-6X-1.50**	■	■	■	■	■
1.60	3.20	9.60	1.55	3.00	39	**3370S-6X-1.60**	■	■	■	■	■
1.70	3.40	10.20	1.65	3.00	39	**3370S-6X-1.70**	■	■	■	■	■
1.80	3.60	10.80	1.75	3.00	39	**3370S-6X-1.80**	■	■	■	■	■
1.90	3.80	11.40	1.85	3.00	39	**3370S-6X-1.90**	■	■	■	■	■
2.00	4.00	12.00	1.95	6.00	50	**3370S-6X-2.00**	■	■	■	■	■
2.10	4.20	12.60	2.05	6.00	50	**3370S-6X-2.10**	■	■	■	■	■
2.20	4.40	13.20	2.15	6.00	50	**3370S-6X-2.20**	■	■	■	■	■
2.30	4.60	13.80	2.25	6.00	50	**3370S-6X-2.30**	■	■	■	■	■
2.40	4.80	14.40	2.35	6.00	50	**3370S-6X-2.40**	■	■	■	■	■
2.50	5.00	15.00	2.45	6.00	50	**3370S-6X-2.50**	■	■	■	■	■
3.00	6.00	18.00	2.95	6.00	50	**3370S-6X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3370S-9X

new



MD VHM HM | λ 30° | Sharp Corner | L3 9xD1 | Z=3

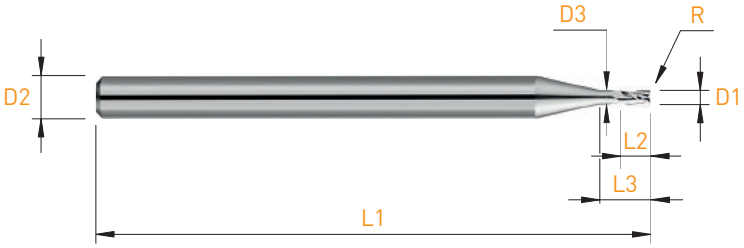
D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	**3370S-9X-0.40**	■	■	■	■	■
0.50	1.00	4.50	0.45	3.00	39	**3370S-9X-0.50**	■	■	■	■	■
0.60	1.20	5.40	0.55	3.00	39	**3370S-9X-0.60**	■	■	■	■	■
0.70	1.40	6.30	0.65	3.00	39	**3370S-9X-0.70**	■	■	■	■	■
0.80	1.60	7.20	0.75	3.00	39	**3370S-9X-0.80**	■	■	■	■	■
0.90	1.80	8.10	0.85	3.00	39	**3370S-9X-0.90**	■	■	■	■	■
1.00	2.00	9.00	0.95	3.00	39	**3370S-9X-1.00**	■	■	■	■	■
1.10	2.20	9.90	1.05	3.00	39	**3370S-9X-1.10**	■	■	■	■	■
1.20	2.40	10.80	1.15	3.00	39	**3370S-9X-1.20**	■	■	■	■	■
1.30	2.60	11.70	1.25	3.00	39	**3370S-9X-1.30**	■	■	■	■	■
1.40	2.80	12.60	1.35	3.00	39	**3370S-9X-1.40**	■	■	■	■	■
1.50	3.00	13.50	1.45	3.00	39	**3370S-9X-1.50**	■	■	■	■	■
1.60	3.20	14.40	1.55	3.00	39	**3370S-9X-1.60**	■	■	■	■	■
1.70	3.40	15.30	1.65	3.00	39	**3370S-9X-1.70**	■	■	■	■	■
1.80	3.60	16.20	1.75	3.00	39	**3370S-9X-1.80**	■	■	■	■	■
1.90	3.80	17.10	1.85	3.00	39	**3370S-9X-1.90**	■	■	■	■	■
2.00	4.00	18.00	1.95	6.00	50	**3370S-9X-2.00**	■	■	■	■	■
2.10	4.20	18.90	2.05	6.00	50	**3370S-9X-2.10**	■	■	■	■	■
2.20	4.40	19.80	2.15	6.00	50	**3370S-9X-2.20**	■	■	■	■	■
2.30	4.60	20.70	2.25	6.00	50	**3370S-9X-2.30**	■	■	■	■	■
2.40	4.80	21.60	2.35	6.00	50	**3370S-9X-2.40**	■	■	■	■	■
2.50	5.00	22.50	2.45	6.00	50	**3370S-9X-2.50**	■	■	■	■	■
3.00	6.00	27.00	2.95	6.00	50	**3370S-9X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3379T-3X

new



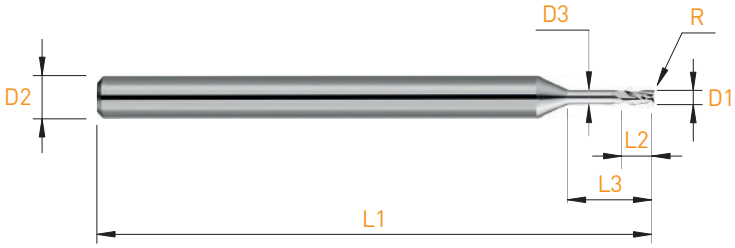
MD VHM HM | λ 30° | Radius Corner | L3 3xD1 | Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	**3379T-3X-0.30**	■	■	■	■	■
0.40	0.05	0.80	1.20	0.37	3.00	39	**3379T-3X-0.40**	■	■	■	■	■
0.50	0.05	1.00	1.50	0.45	3.00	39	**3379T-3X-0.50**	■	■	■	■	■
0.60	0.05	1.20	1.80	0.55	3.00	39	**3379T-3X-0.60**	■	■	■	■	■
0.70	0.05	1.40	2.10	0.65	3.00	39	**3379T-3X-0.70**	■	■	■	■	■
0.80	0.05	1.60	2.40	0.75	3.00	39	**3379T-3X-0.80**	■	■	■	■	■
0.90	0.05	1.80	2.70	0.85	3.00	39	**3379T-3X-0.90**	■	■	■	■	■
1.00	0.10	2.00	3.00	0.95	3.00	39	**3379T-3X-1.00**	■	■	■	■	■
1.10	0.10	2.20	3.30	1.05	3.00	39	**3379T-3X-1.10**	■	■	■	■	■
1.20	0.10	2.40	3.60	1.15	3.00	39	**3379T-3X-1.20**	■	■	■	■	■
1.30	0.10	2.60	3.90	1.25	3.00	39	**3379T-3X-1.30**	■	■	■	■	■
1.40	0.10	2.80	4.20	1.35	3.00	39	**3379T-3X-1.40**	■	■	■	■	■
1.50	0.20	3.00	4.50	1.45	3.00	39	**3379T-3X-1.50**	■	■	■	■	■
1.60	0.20	3.20	4.80	1.55	3.00	39	**3379T-3X-1.60**	■	■	■	■	■
1.70	0.20	3.40	5.10	1.65	3.00	39	**3379T-3X-1.70**	■	■	■	■	■
1.80	0.20	3.60	5.40	1.75	3.00	39	**3379T-3X-1.80**	■	■	■	■	■
1.90	0.20	3.80	5.70	1.85	3.00	39	**3379T-3X-1.90**	■	■	■	■	■
2.00	0.20	4.00	6.00	1.95	6.00	50	**3379T-3X-2.00**	■	■	■	■	■
2.10	0.20	4.20	6.30	2.05	6.00	50	**3379T-3X-2.10**	■	■	■	■	■
2.20	0.20	4.40	6.60	2.15	6.00	50	**3379T-3X-2.20**	■	■	■	■	■
2.30	0.20	4.60	6.90	2.25	6.00	50	**3379T-3X-2.30**	■	■	■	■	■
2.40	0.20	4.80	7.20	2.35	6.00	50	**3379T-3X-2.40**	■	■	■	■	■
2.50	0.20	5.00	7.50	2.45	6.00	50	**3379T-3X-2.50**	■	■	■	■	■
3.00	0.20	6.00	9.00	2.95	6.00	50	**3379T-3X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3379T-6X

new



MD VHM HM | λ 30° | Radius Corner | L3 6xD1 | Z=3

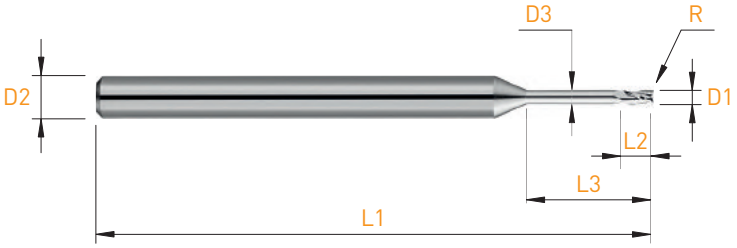
D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	**3379T-6X-0.30**	■	■	■	■	■
0.40	0.05	0.80	2.40	0.37	3.00	39	**3379T-6X-0.40**	■	■	■	■	■
0.50	0.05	1.00	3.00	0.45	3.00	39	**3379T-6X-0.50**	■	■	■	■	■
0.60	0.05	1.20	3.60	0.55	3.00	39	**3379T-6X-0.60**	■	■	■	■	■
0.70	0.05	1.40	4.20	0.65	3.00	39	**3379T-6X-0.70**	■	■	■	■	■
0.80	0.05	1.60	4.80	0.75	3.00	39	**3379T-6X-0.80**	■	■	■	■	■
0.90	0.05	1.80	5.40	0.85	3.00	39	**3379T-6X-0.90**	■	■	■	■	■
1.00	0.10	2.00	6.00	0.95	3.00	39	**3379T-6X-1.00**	■	■	■	■	■
1.10	0.10	2.20	6.60	1.05	3.00	39	**3379T-6X-1.10**	■	■	■	■	■
1.20	0.10	2.40	7.20	1.15	3.00	39	**3379T-6X-1.20**	■	■	■	■	■
1.30	0.10	2.60	7.80	1.25	3.00	39	**3379T-6X-1.30**	■	■	■	■	■
1.40	0.10	2.80	8.40	1.35	3.00	39	**3379T-6X-1.40**	■	■	■	■	■
1.50	0.20	3.00	9.00	1.45	3.00	39	**3379T-6X-1.50**	■	■	■	■	■
1.60	0.20	3.20	9.60	1.55	3.00	39	**3379T-6X-1.60**	■	■	■	■	■
1.70	0.20	3.40	10.20	1.65	3.00	39	**3379T-6X-1.70**	■	■	■	■	■
1.80	0.20	3.60	10.80	1.75	3.00	39	**3379T-6X-1.80**	■	■	■	■	■
1.90	0.20	3.80	11.40	1.85	3.00	39	**3379T-6X-1.90**	■	■	■	■	■
2.00	0.20	4.00	12.00	1.95	6.00	50	**3379T-6X-2.00**	■	■	■	■	■
2.10	0.20	4.20	12.60	2.05	6.00	50	**3379T-6X-2.10**	■	■	■	■	■
2.20	0.20	4.40	13.20	2.15	6.00	50	**3379T-6X-2.20**	■	■	■	■	■
2.30	0.20	4.60	13.80	2.25	6.00	50	**3379T-6X-2.30**	■	■	■	■	■
2.40	0.20	4.80	14.40	2.35	6.00	50	**3379T-6X-2.40**	■	■	■	■	■
2.50	0.20	5.00	15.00	2.45	6.00	50	**3379T-6X-2.50**	■	■	■	■	■
3.00	0.20	6.00	18.00	2.95	6.00	50	**3379T-6X-3.00**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3379T-9X

new

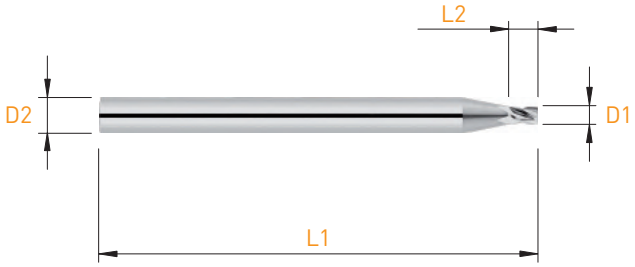


MD VHM HM | λ 30° | Radius Corner | L3 9xD1 | Z=3

D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	**3379T-9X-0.40**	■	■	■	■	■
0.50	0.05	1.00	4.50	0.45	3.00	39	**3379T-9X-0.50**	■	■	■	■	■
0.60	0.05	1.20	5.40	0.55	3.00	39	**3379T-9X-0.60**	■	■	■	■	■
0.70	0.05	1.40	6.30	0.65	3.00	39	**3379T-9X-0.70**	■	■	■	■	■
0.80	0.05	1.60	7.20	0.75	3.00	39	**3379T-9X-0.80**	■	■	■	■	■
0.90	0.05	1.80	8.10	0.85	3.00	39	**3379T-9X-0.90**	■	■	■	■	■
1.00	0.10	2.00	9.00	0.95	3.00	39	**3379T-9X-1.00**	■	■	■	■	■
1.10	0.10	2.20	9.90	1.05	3.00	39	**3379T-9X-1.10**	■	■	■	■	■
1.20	0.10	2.40	10.80	1.15	3.00	39	**3379T-9X-1.20**	■	■	■	■	■
1.30	0.10	2.60	11.70	1.25	3.00	39	**3379T-9X-1.30**	■	■	■	■	■
1.40	0.10	2.80	12.60	1.35	3.00	39	**3379T-9X-1.40**	■	■	■	■	■
1.50	0.20	3.00	13.50	1.45	3.00	39	**3379T-9X-1.50**	■	■	■	■	■
1.60	0.20	3.20	14.40	1.55	3.00	39	**3379T-9X-1.60**	■	■	■	■	■
1.70	0.20	3.40	15.30	1.65	3.00	39	**3379T-9X-1.70**	■	■	■	■	■
1.80	0.20	3.60	16.20	1.75	3.00	39	**3379T-9X-1.80**	■	■	■	■	■
1.90	0.20	3.80	17.10	1.85	3.00	39	**3379T-9X-1.90**	■	■	■	■	■
2.00	0.20	4.00	18.00	1.95	6.00	50	**3379T-9X-2.00**	■	■	■	■	■
2.10	0.20	4.20	18.90	2.05	6.00	50	**3379T-9X-2.10**	■	■	■	■	■
2.20	0.20	4.40	19.80	2.15	6.00	50	**3379T-9X-2.20**	■	■	■	■	■
2.30	0.20	4.60	20.70	2.25	6.00	50	**3379T-9X-2.30**	■	■	■	■	■
2.40	0.20	4.80	21.60	2.35	6.00	50	**3379T-9X-2.40**	■	■	■	■	■
2.50	0.20	5.00	22.50	2.45	6.00	50	**3379T-9X-2.50**	■	■	■	■	■
3.00	0.20	6.00	27.00	2.95	6.00	50	**3379T-9X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3471-1.5



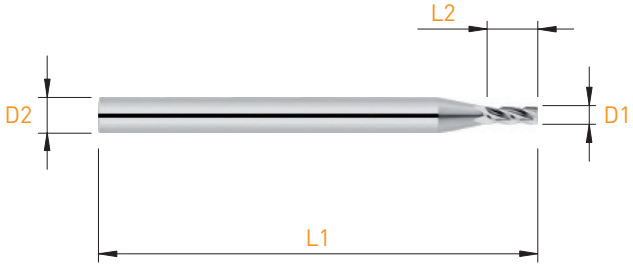
MD VHM HM | λ 30° | Sharp Corner | 1.5xD1 | Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	**3471-1.5-0.30**	■	■	■	■	■
0.40	0.60	3.00	39	**3471-1.5-0.40**	■	■	■	■	■
0.50	0.75	3.00	39	**3471-1.5-0.50**	■	■	■	■	■
0.60	0.90	3.00	39	**3471-1.5-0.60**	■	■	■	■	■
0.70	1.05	3.00	39	**3471-1.5-0.70**	■	■	■	■	■
0.80	1.20	3.00	39	**3471-1.5-0.80**	■	■	■	■	■
0.90	1.35	3.00	39	**3471-1.5-0.90**	■	■	■	■	■
1.00	1.50	3.00	39	**3471-1.5-1.00**	■	■	■	■	■
1.10	1.65	3.00	39	**3471-1.5-1.10**	■	■	■	■	■
1.20	1.80	3.00	39	**3471-1.5-1.20**	■	■	■	■	■
1.30	1.95	3.00	39	**3471-1.5-1.30**	■	■	■	■	■
1.40	2.10	3.00	39	**3471-1.5-1.40**	■	■	■	■	■
1.50	2.25	3.00	39	**3471-1.5-1.50**	■	■	■	■	■
1.60	2.40	3.00	39	**3471-1.5-1.60**	■	■	■	■	■
1.70	2.55	3.00	39	**3471-1.5-1.70**	■	■	■	■	■
1.80	2.70	3.00	39	**3471-1.5-1.80**	■	■	■	■	■
1.90	2.85	3.00	39	**3471-1.5-1.90**	■	■	■	■	■
2.00	3.00	3.00	39	**3471-1.5-2.00**	■	■	■	■	■
2.10	3.15	3.00	39	**3471-1.5-2.10**	■	■	■	■	■
2.20	3.30	3.00	39	**3471-1.5-2.20**	■	■	■	■	■
2.30	3.45	3.00	39	**3471-1.5-2.30**	■	■	■	■	■
2.40	3.60	3.00	39	**3471-1.5-2.40**	■	■	■	■	■
2.50	3.75	3.00	39	**3471-1.5-2.50**	■	■	■	■	■
2.60	3.90	3.00	39	**3471-1.5-2.60**	■	■	■	■	■
2.70	4.05	3.00	39	**3471-1.5-2.70**	■	■	■	■	■
2.80	4.20	3.00	39	**3471-1.5-2.80**	■	■	■	■	■
2.90	4.35	3.00	39	**3471-1.5-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3471-3

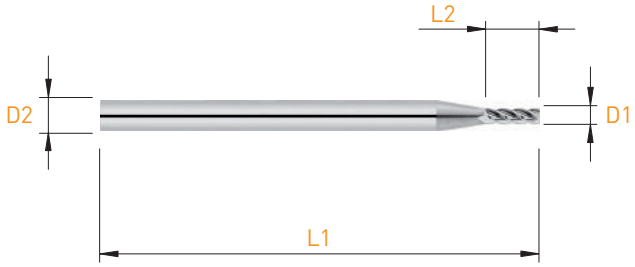


MD VHM HM | λ 30° | Sharp Corner | 3xD1 | Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	**3471-3-0.30**	■	■	■	■	■
0.40	1.20	3.00	39	**3471-3-0.40**	■	■	■	■	■
0.50	1.50	3.00	39	**3471-3-0.50**	■	■	■	■	■
0.55	1.70	3.00	39	**3471-3-0.55**	■	■	■	■	■
0.60	1.80	3.00	39	**3471-3-0.60**	■	■	■	■	■
0.70	2.10	3.00	39	**3471-3-0.70**	■	■	■	■	■
0.75	2.30	3.00	39	**3471-3-0.75**	■	■	■	■	■
0.80	2.40	3.00	39	**3471-3-0.80**	■	■	■	■	■
0.85	2.60	3.00	39	**3471-3-0.85**	■	■	■	■	■
0.90	2.70	3.00	39	**3471-3-0.90**	■	■	■	■	■
0.95	2.90	3.00	39	**3471-3-0.95**	■	■	■	■	■
1.00	3.00	3.00	39	**3471-3-1.00**	■	■	■	■	■
1.10	3.30	3.00	39	**3471-3-1.10**	■	■	■	■	■
1.20	3.60	3.00	39	**3471-3-1.20**	■	■	■	■	■
1.30	3.90	3.00	39	**3471-3-1.30**	■	■	■	■	■
1.40	4.20	3.00	39	**3471-3-1.40**	■	■	■	■	■
1.50	4.50	3.00	39	**3471-3-1.50**	■	■	■	■	■
1.60	4.80	3.00	39	**3471-3-1.60**	■	■	■	■	■
1.70	5.10	3.00	39	**3471-3-1.70**	■	■	■	■	■
1.80	5.40	3.00	39	**3471-3-1.80**	■	■	■	■	■
1.90	5.70	3.00	39	**3471-3-1.90**	■	■	■	■	■
2.00	6.00	3.00	39	**3471-3-2.00**	■	■	■	■	■
2.10	6.30	3.00	39	**3471-3-2.10**	■	■	■	■	■
2.20	6.60	3.00	39	**3471-3-2.20**	■	■	■	■	■
2.30	6.90	3.00	39	**3471-3-2.30**	■	■	■	■	■
2.40	7.20	3.00	39	**3471-3-2.40**	■	■	■	■	■
2.50	7.50	3.00	39	**3471-3-2.50**	■	■	■	■	■
2.60	7.80	3.00	39	**3471-3-2.60**	■	■	■	■	■
2.70	8.10	3.00	39	**3471-3-2.70**	■	■	■	■	■
2.80	8.40	3.00	39	**3471-3-2.80**	■	■	■	■	■
2.90	8.70	3.00	39	**3471-3-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

DHP3471-3



MD VHM HM	λ 35° ↓ 38°	Sharp Corner		3xD1	Z=4	

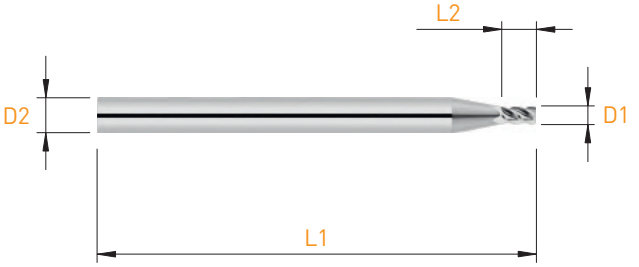
DHP	Denture à pas irrégulier, angle d'hélice progressive Ungleiche Teilung, progressive Drallwinkel Uneven tooth pitch, progressive helix angle

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.50	1.50	3.00	39	**DHP3471-3-0.50**	■	■	■	■	■
0.60	1.80	3.00	39	**DHP3471-3-0.60**	■	■	■	■	■
0.70	2.10	3.00	39	**DHP3471-3-0.70**	■	■	■	■	■
0.80	2.40	3.00	39	**DHP3471-3-0.80**	■	■	■	■	■
0.90	2.70	3.00	39	**DHP3471-3-0.90**	■	■	■	■	■
1.00	3.00	3.00	39	**DHP3471-3-1.00**	■	■	■	■	■
1.10	3.30	3.00	39	**DHP3471-3-1.10**	■	■	■	■	■
1.20	3.60	3.00	39	**DHP3471-3-1.20**	■	■	■	■	■
1.30	3.90	3.00	39	**DHP3471-3-1.30**	■	■	■	■	■
1.40	4.20	3.00	39	**DHP3471-3-1.40**	■	■	■	■	■
1.50	4.50	3.00	39	**DHP3471-3-1.50**	■	■	■	■	■
1.60	4.80	3.00	39	**DHP3471-3-1.60**	■	■	■	■	■
1.70	5.10	3.00	39	**DHP3471-3-1.70**	■	■	■	■	■
1.80	5.40	3.00	39	**DHP3471-3-1.80**	■	■	■	■	■
1.90	5.70	3.00	39	**DHP3471-3-1.90**	■	■	■	■	■
2.00	6.00	3.00	39	**DHP3471-3-2.00**	■	■	■	■	■
2.50	7.50	3.00	39	**DHP3471-3-2.50**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3472-2

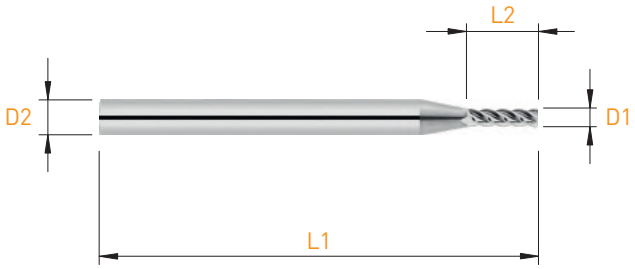


MD VHM HM | λ 40° | Sharp Corner | 2xD1 | Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	**3472-2-0.30**	■	■	■	■	■
0.40	0.80	3.00	39	**3472-2-0.40**	■	■	■	■	■
0.50	1.00	3.00	39	**3472-2-0.50**	■	■	■	■	■
0.60	1.20	3.00	39	**3472-2-0.60**	■	■	■	■	■
0.70	1.40	3.00	39	**3472-2-0.70**	■	■	■	■	■
0.80	1.60	3.00	39	**3472-2-0.80**	■	■	■	■	■
0.90	1.80	3.00	39	**3472-2-0.90**	■	■	■	■	■
1.00	2.00	3.00	39	**3472-2-1.00**	■	■	■	■	■
1.10	2.20	3.00	39	**3472-2-1.10**	■	■	■	■	■
1.20	2.40	3.00	39	**3472-2-1.20**	■	■	■	■	■
1.30	2.60	3.00	39	**3472-2-1.30**	■	■	■	■	■
1.40	2.80	3.00	39	**3472-2-1.40**	■	■	■	■	■
1.50	3.00	3.00	39	**3472-2-1.50**	■	■	■	■	■
1.60	3.20	3.00	39	**3472-2-1.60**	■	■	■	■	■
1.70	3.40	3.00	39	**3472-2-1.70**	■	■	■	■	■
1.80	3.60	3.00	39	**3472-2-1.80**	■	■	■	■	■
1.90	3.80	3.00	39	**3472-2-1.90**	■	■	■	■	■
2.00	4.00	3.00	39	**3472-2-2.00**	■	■	■	■	■
2.10	4.20	3.00	39	**3472-2-2.10**	■	■	■	■	■
2.20	4.40	3.00	39	**3472-2-2.20**	■	■	■	■	■
2.30	4.60	3.00	39	**3472-2-2.30**	■	■	■	■	■
2.40	4.80	3.00	39	**3472-2-2.40**	■	■	■	■	■
2.50	5.00	3.00	39	**3472-2-2.50**	■	■	■	■	■
2.60	5.20	3.00	39	**3472-2-2.60**	■	■	■	■	■
2.70	5.40	3.00	39	**3472-2-2.70**	■	■	■	■	■
2.80	5.60	3.00	39	**3472-2-2.80**	■	■	■	■	■
2.90	5.80	3.00	39	**3472-2-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3472-4



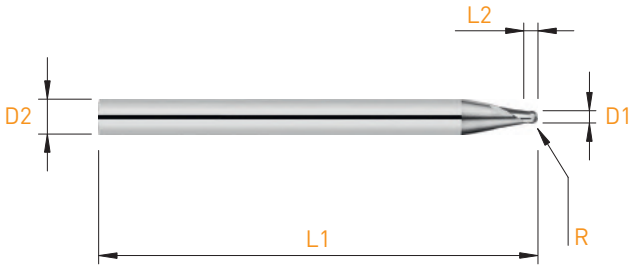
MD VHM HM | λ 40° | Sharp Corner | 4xD1 | Z=4

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	1.60	3.00	39	**3472-4-0.40**	■	■	■	■	■
0.50	2.00	3.00	39	**3472-4-0.50**	■	■	■	■	■
0.60	2.40	3.00	39	**3472-4-0.60**	■	■	■	■	■
0.70	2.80	3.00	39	**3472-4-0.70**	■	■	■	■	■
0.80	3.20	3.00	39	**3472-4-0.80**	■	■	■	■	■
0.90	3.60	3.00	39	**3472-4-0.90**	■	■	■	■	■
1.00	4.00	3.00	39	**3472-4-1.00**	■	■	■	■	■
1.10	4.40	3.00	39	**3472-4-1.10**	■	■	■	■	■
1.20	4.80	3.00	39	**3472-4-1.20**	■	■	■	■	■
1.30	5.20	3.00	39	**3472-4-1.30**	■	■	■	■	■
1.40	5.60	3.00	39	**3472-4-1.40**	■	■	■	■	■
1.50	6.00	3.00	39	**3472-4-1.50**	■	■	■	■	■
1.60	6.40	3.00	39	**3472-4-1.60**	■	■	■	■	■
1.70	6.80	3.00	39	**3472-4-1.70**	■	■	■	■	■
1.80	7.20	3.00	39	**3472-4-1.80**	■	■	■	■	■
1.90	7.60	3.00	39	**3472-4-1.90**	■	■	■	■	■
2.00	8.00	3.00	39	**3472-4-2.00**	■	■	■	■	■
2.10	8.40	3.00	39	**3472-4-2.10**	■	■	■	■	■
2.20	8.80	3.00	39	**3472-4-2.20**	■	■	■	■	■
2.30	9.20	3.00	39	**3472-4-2.30**	■	■	■	■	■
2.40	9.60	3.00	39	**3472-4-2.40**	■	■	■	■	■
2.50	10.00	3.00	39	**3472-4-2.50**	■	■	■	■	■
2.60	10.40	3.00	39	**3472-4-2.60**	■	■	■	■	■
2.70	10.80	3.00	39	**3472-4-2.70**	■	■	■	■	■
2.80	11.20	3.00	39	**3472-4-2.80**	■	■	■	■	■
2.90	11.60	3.00	39	**3472-4-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278-0.75

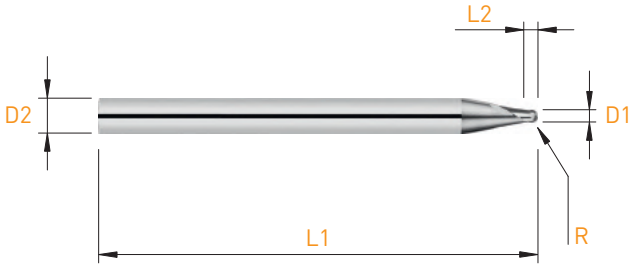


MD VHM HM | λ 30° | 0.75xD1 | Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.15	3.00	39	**3278-0.75-0.20**	■				
0.30	0.15	0.20	3.00	39	**3278-0.75-0.30**	■	■	■	■	■
0.40	0.20	0.30	3.00	39	**3278-0.75-0.40**	■	■	■	■	■
0.50	0.25	0.35	3.00	39	**3278-0.75-0.50**	■	■	■	■	■
0.60	0.30	0.45	3.00	39	**3278-0.75-0.60**	■	■	■	■	■
0.70	0.35	0.55	3.00	39	**3278-0.75-0.70**	■	■	■	■	■
0.80	0.40	0.60	3.00	39	**3278-0.75-0.80**	■	■	■	■	■
0.90	0.45	0.70	3.00	39	**3278-0.75-0.90**	■	■	■	■	■
1.00	0.50	0.75	3.00	39	**3278-0.75-1.00**	■	■	■	■	■
1.50	0.75	1.15	3.00	39	**3278-0.75-1.50**	■	■	■	■	■
2.00	1.00	1.50	3.00	39	**3278-0.75-2.00**	■	■	■	■	■
2.50	1.25	1.90	3.00	39	**3278-0.75-2.50**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278-1



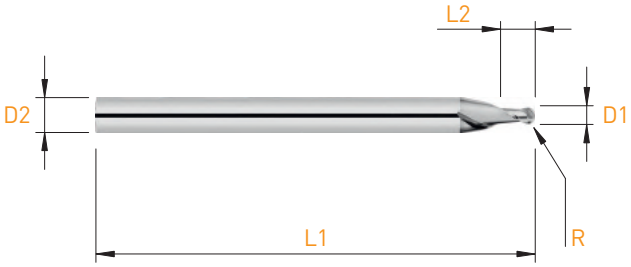
MD VHM HM | λ 30° | 1xD1 | Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.20	3.00	39	**3278-1-0.20**	■				
0.30	0.15	0.30	3.00	39	**3278-1-0.30**	■	■	■	■	■
0.40	0.20	0.40	3.00	39	**3278-1-0.40**	■	■	■	■	■
0.50	0.25	0.50	3.00	39	**3278-1-0.50**	■	■	■	■	■
0.60	0.30	0.60	3.00	39	**3278-1-0.60**	■	■	■	■	■
0.70	0.35	0.70	3.00	39	**3278-1-0.70**	■	■	■	■	■
0.80	0.40	0.80	3.00	39	**3278-1-0.80**	■	■	■	■	■
0.90	0.45	0.90	3.00	39	**3278-1-0.90**	■	■	■	■	■
1.00	0.50	1.00	3.00	39	**3278-1-1.00**	■	■	■	■	■
1.10	0.55	1.10	3.00	39	**3278-1-1.10**	■	■	■	■	■
1.20	0.60	1.20	3.00	39	**3278-1-1.20**	■	■	■	■	■
1.30	0.35	1.30	3.00	39	**3278-1-1.30**	■	■	■	■	■
1.40	0.70	1.40	3.00	39	**3278-1-1.40**	■	■	■	■	■
1.50	0.75	1.50	3.00	39	**3278-1-1.50**	■	■	■	■	■
1.60	0.80	1.60	3.00	39	**3278-1-1.60**	■	■	■	■	■
1.70	0.85	1.70	3.00	39	**3278-1-1.70**	■	■	■	■	■
1.80	0.90	1.80	3.00	39	**3278-1-1.80**	■	■	■	■	■
1.90	0.95	1.90	3.00	39	**3278-1-1.90**	■	■	■	■	■
2.00	1.00	2.00	3.00	39	**3278-1-2.00**	■	■	■	■	■
2.10	1.05	2.10	3.00	39	**3278-1-2.10**	■	■	■	■	■
2.20	1.10	2.20	3.00	39	**3278-1-2.20**	■	■	■	■	■
2.30	1.15	2.30	3.00	39	**3278-1-2.30**	■	■	■	■	■
2.40	1.20	2.40	3.00	39	**3278-1-2.40**	■	■	■	■	■
2.50	1.25	2.50	3.00	39	**3278-1-2.50**	■	■	■	■	■
2.60	1.30	2.60	3.00	39	**3278-1-2.60**	■	■	■	■	■
2.70	1.35	2.70	3.00	39	**3278-1-2.70**	■	■	■	■	■
2.80	1.40	2.80	3.00	39	**3278-1-2.80**	■	■	■	■	■
2.90	1.45	2.90	3.00	39	**3278-1-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278-1.5

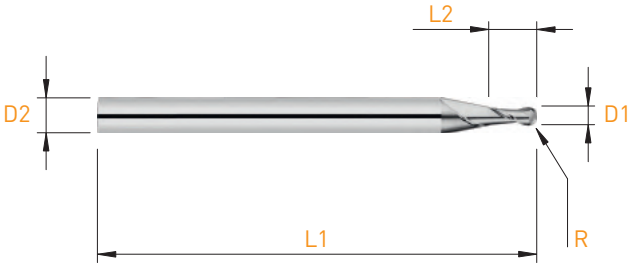


MD VHM HM | λ 30° | 1.5xD1 | Z=2

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	3.00	39	**3278-1.5-0.20**	■				
0.25	0.125	0.35	3.00	39	**3278-1.5-0.25**	■				
0.30	0.15	0.45	3.00	39	**3278-1.5-0.30**	■	■	■	■	■
0.40	0.20	0.60	3.00	39	**3278-1.5-0.40**	■	■	■	■	■
0.50	0.25	0.75	3.00	39	**3278-1.5-0.50**	■	■	■	■	■
0.60	0.30	0.90	3.00	39	**3278-1.5-0.60**	■	■	■	■	■
0.70	0.35	1.05	3.00	39	**3278-1.5-0.70**	■	■	■	■	■
0.80	0.40	1.20	3.00	39	**3278-1.5-0.80**	■	■	■	■	■
0.85	0.40	1.30	3.00	39	**3278-1.5-0.85**	■	■	■	■	■
0.90	0.45	1.35	3.00	39	**3278-1.5-0.90**	■	■	■	■	■
1.00	0.50	1.50	3.00	39	**3278-1.5-1.00**	■	■	■	■	■
1.10	0.55	1.65	3.00	39	**3278-1.5-1.10**	■	■	■	■	■
1.15	0.55	1.75	3.00	39	**3278-1.5-1.15**	■	■	■	■	■
1.20	0.60	1.80	3.00	39	**3278-1.5-1.20**	■	■	■	■	■
1.30	0.65	1.95	3.00	39	**3278-1.5-1.30**	■	■	■	■	■
1.40	0.70	2.10	3.00	39	**3278-1.5-1.40**	■	■	■	■	■
1.50	0.75	2.25	3.00	39	**3278-1.5-1.50**	■	■	■	■	■
1.60	0.80	2.40	3.00	39	**3278-1.5-1.60**	■	■	■	■	■
1.70	0.85	2.60	3.00	39	**3278-1.5-1.70**	■	■	■	■	■
1.80	0.90	2.70	3.00	39	**3278-1.5-1.80**	■	■	■	■	■
1.90	0.95	2.90	3.00	39	**3278-1.5-1.90**	■	■	■	■	■
2.00	1.00	3.00	3.00	39	**3278-1.5-2.00**	■	■	■	■	■
2.10	1.05	3.20	3.00	39	**3278-1.5-2.10**	■	■	■	■	■
2.20	1.10	3.30	3.00	39	**3278-1.5-2.20**	■	■	■	■	■
2.30	1.15	3.50	3.00	39	**3278-1.5-2.30**	■	■	■	■	■
2.40	1.20	3.60	3.00	39	**3278-1.5-2.40**	■	■	■	■	■
2.50	1.25	3.75	3.00	39	**3278-1.5-2.50**	■	■	■	■	■
2.60	1.30	3.90	3.00	39	**3278-1.5-2.60**	■	■	■	■	■
2.70	1.35	4.00	3.00	39	**3278-1.5-2.70**	■	■	■	■	■
2.80	1.40	4.20	3.00	39	**3278-1.5-2.80**	■	■	■	■	■
2.90	1.45	4.40	3.00	39	**3278-1.5-2.90**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278-3



MD
VHM
HM

λ 30°

3xD1

Z=2

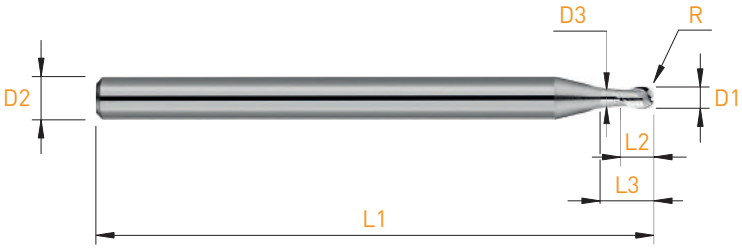
D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.60	3.00	39	**3278-3-0.20**	■				
0.30	0.15	1.00	3.00	39	**3278-3-0.30**	■	■	■	■	■
0.40	0.20	1.00	3.00	39	**3278-3-0.40**	■	■	■	■	■
0.50	0.25	1.50	3.00	39	**3278-3-0.50**	■	■	■	■	■
0.60	0.30	1.50	3.00	39	**3278-3-0.60**	■	■	■	■	■
0.70	0.35	2.00	3.00	39	**3278-3-0.70**	■	■	■	■	■
0.80	0.40	2.00	3.00	39	**3278-3-0.80**	■	■	■	■	■
0.90	0.45	2.50	3.00	39	**3278-3-0.90**	■	■	■	■	■
1.00	0.50	3.00	3.00	39	**3278-3-1.00**	■	■	■	■	■
1.20	0.60	4.00	3.00	39	**3278-3-1.20**	■	■	■	■	■
1.30	0.65	4.00	3.00	39	**3278-3-1.30**	■	■	■	■	■
1.40	0.70	4.00	3.00	39	**3278-3-1.40**	■	■	■	■	■
1.50	0.75	4.50	3.00	39	**3278-3-1.50**	■	■	■	■	■
1.55	0.775	5.00	3.00	39	**3278-3-1.55**	■	■	■	■	■
1.60	0.80	5.00	3.00	39	**3278-3-1.60**	■	■	■	■	■
1.80	0.90	5.50	3.00	39	**3278-3-1.80**	■	■	■	■	■
2.00	1.00	6.00	3.00	39	**3278-3-2.00**	■	■	■	■	■
2.10	1.05	6.50	3.00	39	**3278-3-2.10**	■	■	■	■	■
2.20	1.10	7.00	3.00	39	**3278-3-2.20**	■	■	■	■	■
2.50	1.25	7.50	3.00	39	**3278-3-2.50**	■	■	■	■	■
2.60	1.30	7.80	3.00	39	**3278-3-2.60**	■	■	■	■	■
2.70	1.35	8.10	3.00	39	**3278-3-2.70**	■	■	■	■	■
2.80	1.40	8.40	3.00	39	**3278-3-2.80**	■	■	■	■	■
2.90	1.45	8.70	3.00	39	**3278-3-2.90**	■	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278H-3X

new



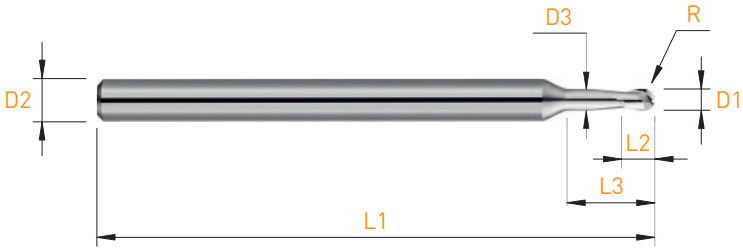
MD VHM HM | λ 30° | L3 3xD1 | Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	0.60	0.19	3.00	39	**3278H-3X-0.20**	■				
0.30	0.15	0.45	0.90	0.27	3.00	39	**3278H-3X-0.30**	■	■	■	■	■
0.40	0.20	0.60	1.20	0.37	3.00	39	**3278H-3X-0.40**	■	■	■	■	■
0.50	0.25	0.75	1.50	0.45	3.00	39	**3278H-3X-0.50**	■	■	■	■	■
0.60	0.30	0.90	1.80	0.55	3.00	39	**3278H-3X-0.60**	■	■	■	■	■
0.70	0.35	1.05	2.10	0.65	3.00	39	**3278H-3X-0.70**	■	■	■	■	■
0.80	0.40	1.20	2.40	0.75	3.00	39	**3278H-3X-0.80**	■	■	■	■	■
0.90	0.45	1.35	2.70	0.85	3.00	39	**3278H-3X-0.90**	■	■	■	■	■
1.00	0.50	1.50	3.00	0.95	3.00	39	**3278H-3X-1.00**	■	■	■	■	■
1.10	0.55	1.65	3.30	1.05	3.00	39	**3278H-3X-1.10**	■	■	■	■	■
1.20	0.60	1.80	3.60	1.15	3.00	39	**3278H-3X-1.20**	■	■	■	■	■
1.30	0.65	1.95	3.90	1.25	3.00	39	**3278H-3X-1.30**	■	■	■	■	■
1.40	0.70	2.10	4.20	1.35	3.00	39	**3278H-3X-1.40**	■	■	■	■	■
1.50	0.75	2.25	4.50	1.45	3.00	39	**3278H-3X-1.50**	■	■	■	■	■
1.60	0.80	2.40	4.80	1.55	3.00	39	**3278H-3X-1.60**	■	■	■	■	■
1.70	0.85	2.55	5.10	1.65	3.00	39	**3278H-3X-1.70**	■	■	■	■	■
1.80	0.90	2.70	5.40	1.75	3.00	39	**3278H-3X-1.80**	■	■	■	■	■
1.90	0.95	2.85	5.70	1.85	3.00	39	**3278H-3X-1.90**	■	■	■	■	■
2.00	1.00	3.00	6.00	1.95	6.00	50	**3278H-3X-2.00**	■	■	■	■	■
2.10	1.05	3.15	6.30	2.05	6.00	50	**3278H-3X-2.10**	■	■	■	■	■
2.20	1.10	3.30	6.60	2.15	6.00	50	**3278H-3X-2.20**	■	■	■	■	■
2.30	1.15	3.45	6.90	2.25	6.00	50	**3278H-3X-2.30**	■	■	■	■	■
2.40	1.20	3.60	7.20	2.35	6.00	50	**3278H-3X-2.40**	■	■	■	■	■
2.50	1.25	3.75	7.50	2.45	6.00	50	**3278H-3X-2.50**	■	■	■	■	■
3.00	1.50	4.50	9.00	2.95	6.00	50	**3278H-3X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278H-6X

new



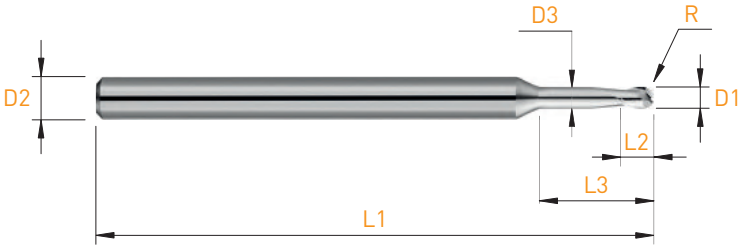
MD VHM HM | λ 30° | L3 6xD1 | Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.15	0.45	1.80	0.27	3.00	39	**3278H-6X-0.30**	■	■	■	■	■
0.40	0.20	0.60	2.40	0.37	3.00	39	**3278H-6X-0.40**	■	■	■	■	■
0.50	0.25	0.75	3.00	0.45	3.00	39	**3278H-6X-0.50**	■	■	■	■	■
0.60	0.30	0.90	3.60	0.55	3.00	39	**3278H-6X-0.60**	■	■	■	■	■
0.70	0.35	1.05	4.20	0.65	3.00	39	**3278H-6X-0.70**	■	■	■	■	■
0.80	0.40	1.20	4.80	0.75	3.00	39	**3278H-6X-0.80**	■	■	■	■	■
0.90	0.45	1.35	5.40	0.85	3.00	39	**3278H-6X-0.90**	■	■	■	■	■
1.00	0.50	1.50	6.00	0.95	3.00	39	**3278H-6X-1.00**	■	■	■	■	■
1.10	0.55	1.65	6.60	1.05	3.00	39	**3278H-6X-1.10**	■	■	■	■	■
1.20	0.60	1.80	7.20	1.15	3.00	39	**3278H-6X-1.20**	■	■	■	■	■
1.30	0.65	1.95	7.80	1.25	3.00	39	**3278H-6X-1.30**	■	■	■	■	■
1.40	0.70	2.10	8.40	1.35	3.00	39	**3278H-6X-1.40**	■	■	■	■	■
1.50	0.75	2.25	9.00	1.45	3.00	39	**3278H-6X-1.50**	■	■	■	■	■
1.60	0.80	2.40	9.60	1.55	3.00	39	**3278H-6X-1.60**	■	■	■	■	■
1.70	0.85	2.55	10.20	1.65	3.00	39	**3278H-6X-1.70**	■	■	■	■	■
1.80	0.90	2.70	10.80	1.75	3.00	39	**3278H-6X-1.80**	■	■	■	■	■
1.90	0.95	2.85	11.40	1.85	3.00	39	**3278H-6X-1.90**	■	■	■	■	■
2.00	1.00	3.00	12.00	1.95	6.00	50	**3278H-6X-2.00**	■	■	■	■	■
2.10	1.05	3.15	12.60	2.05	6.00	50	**3278H-6X-2.10**	■	■	■	■	■
2.20	1.10	3.30	13.20	2.15	6.00	50	**3278H-6X-2.20**	■	■	■	■	■
2.30	1.15	3.45	13.80	2.25	6.00	50	**3278H-6X-2.30**	■	■	■	■	■
2.40	1.20	3.60	14.40	2.35	6.00	50	**3278H-6X-2.40**	■	■	■	■	■
2.50	1.25	3.75	15.00	2.45	6.00	50	**3278H-6X-2.50**	■	■	■	■	■
3.00	1.50	4.50	18.00	2.95	6.00	50	**3278H-6X-3.00**	■	■	■	■	■

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills

3278H-9X

new



MD VHM HM | λ 30° | L3 9xD1 | Z=2

D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.40	0.20	0.60	3.60	0.37	3.00	39	**3278H-9X-0.40**	■	■	■	■	■
0.50	0.25	0.75	4.50	0.45	3.00	39	**3278H-9X-0.50**	■	■	■	■	■
0.60	0.30	0.90	5.40	0.55	3.00	39	**3278H-9X-0.60**	■	■	■	■	■
0.70	0.35	1.05	6.30	0.65	3.00	39	**3278H-9X-0.70**	■	■	■	■	■
0.80	0.40	1.20	7.20	0.75	3.00	39	**3278H-9X-0.80**	■	■	■	■	■
0.90	0.45	1.35	8.10	0.85	3.00	39	**3278H-9X-0.90**	■	■	■	■	■
1.00	0.50	1.50	9.00	0.95	3.00	39	**3278H-9X-1.00**	■	■	■	■	■
1.10	0.55	1.65	9.90	1.05	3.00	39	**3278H-9X-1.10**	■	■	■	■	■
1.20	0.60	1.80	10.80	1.15	3.00	39	**3278H-9X-1.20**	■	■	■	■	■
1.30	0.65	1.95	11.70	1.25	3.00	39	**3278H-9X-1.30**	■	■	■	■	■
1.40	0.70	2.10	12.60	1.35	3.00	39	**3278H-9X-1.40**	■	■	■	■	■
1.50	0.75	2.25	13.50	1.45	3.00	39	**3278H-9X-1.50**	■	■	■	■	■
1.60	0.80	2.40	14.40	1.55	3.00	39	**3278H-9X-1.60**	■	■	■	■	■
1.70	0.85	2.55	15.30	1.65	3.00	39	**3278H-9X-1.70**	■	■	■	■	■
1.80	0.90	2.70	16.20	1.75	3.00	39	**3278H-9X-1.80**	■	■	■	■	■
1.90	0.95	2.85	17.10	1.85	3.00	39	**3278H-9X-1.90**	■	■	■	■	■
2.00	1.00	3.00	18.00	1.95	6.00	50	**3278H-9X-2.00**	■	■	■	■	■
2.10	1.05	3.15	18.90	2.05	6.00	50	**3278H-9X-2.10**	■	■	■	■	■
2.20	1.10	3.30	19.80	2.15	6.00	50	**3278H-9X-2.20**	■	■	■	■	■
2.30	1.15	3.45	20.70	2.25	6.00	50	**3278H-9X-2.30**	■	■	■	■	■
2.40	1.20	3.60	21.60	2.35	6.00	50	**3278H-9X-2.40**	■	■	■	■	■
2.50	1.25	3.75	22.50	2.45	6.00	50	**3278H-9X-2.50**	■	■	■	■	■
3.00	1.50	4.50	27.00	2.95	6.00	50	**3278H-9X-3.00**	■	■	■	■	■

Fraises en bout
Schaftfräser
End mills

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Paramètres de coupe indicatif Empfohlene Schnittwerte Standard machining data	14.53

Sharp Corner

Fraises en bout avec angle vif
Schaftfräser mit scharfkantigen Ecken
End mills with sharp corners

Z	λ	D1	D2	Type	page	
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	E-DHP4300-1.5	14.57	
Z=4	26° / 33°	Ø10.00	Ø10 h6	E-DHP4400-1.5		
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	E-DHP4300-2.5		
Z=4	26° / 33°	Ø10.00	Ø10h6	E-DHP4400-2.5		
Z=1	23°	Ø1.00 - 6.00	Ø6h5	3123-2	14.58	new
		Ø1.00 - 6.00	Ø6h5	3123-4	14.59	new
Z=2	60°	Ø0.50 - 6.00	Ø3/6/8	3260MV	14.60	new
	90°	Ø0.30 - 6.00	Ø3/6/8	3290MV	14.61	new
	120°	Ø0.50 - 6.00	Ø3/6/8	32120MV	14.62	new
Z=2	30°	Ø1.00 - 6.00	Ø6 h5	3230	14.63	
		Ø3.00 - 6.00	Ø6 h5	3230-1.5	14.64	new
		Ø3.00 - 6.00	Ø6 h5	3230-3	14.65	new
		Ø2.00 - 6.00	D1 = D2	3231	14.66	
		Ø3.00 - 6.00	Ø6 h5	3239T-2.5X	14.67	new
		Ø3.00 - 6.00	Ø6 h5	3239T-4X	14.68	new
Z=3	30°	Ø1.00 - 6.00	Ø6 h6	3330-S	14.69	
		Ø3.00-12.00	D1 = D2	3330	14.70	
		Ø3.00 - 6.00	Ø6 h5	3330-4	14.71	new
		Ø2.00 - 6.00	D1 = D2	3331	14.72	
		Ø1.50 - 6.00	Ø6 h5	3336-HA	14.73	
		Ø1.50 - 6.00	Ø6 h5	3337-HA	14.73	
	45°	Ø2.00 - 6.00	D1 = D2	3341	14.74	
		Ø0.50 - 6.00	Ø6 h6	3345-S	14.75	new
	60°	Ø2.00 - 6.00	D1 = D2	3361	14.76	
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	DHP3336	14.77	
Z=4	30°	Ø3.00 - 6.00	D1 = D2	3430	14.78	
		Ø2.00 - 6.00	D1 = D2	3431	14.79	
	45°	Ø2.00 - 6.00	D1 = D2	3441	14.80	
		Ø0.50 - 6.00	Ø6 h6	3445-S	14.81	
	50°	Ø1.00 - 6.00	Ø6 h5	3450	14.82	new
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	DHP3436	14.83	
	30°	Ø3.00 - 6.00	Ø6 h5	3439T-2.5X	14.84	new
		Ø3.00 - 6.00	Ø6 h5	3439T-4X	14.85	new
Z=5	45°	Ø1.00 - 6.00	Ø6 h5	3545	14.86	new
Z=4/5/6		Ø1.00 - 6.00	Ø6 h5	35645	14.87	new
Z=8	10°	Ø6.00	Ø6 h5	3810	14.88	new

Fraises en bout
Schaftfräser
End mills

Index

Sharp Corner	Z	λ	D1	D2	Type	page
	Z=2	30°	Ø2.00 - 6.00	D1 = D2	3238	14.89
	Z=3	30°	Ø2.00 - 6.00	D1 = D2	3338	14.90
	Z=3		Ø0.30 - 3.50	Ø6 h5	701S3371-1	14.91
			Ø0.30 - 3.50	Ø6 h5	701S3371-2	
			Ø0.30 - 3.00	Ø6 h5	701S3371-3	
	Z=3	30°	Ø8.00-12.00	Ø6h6	3383	14.93
	Z=10	30°	Ø16.3 / 20.30	Ø10h6	3831 / 3833	14.94
	Z=3	0°	Ø0.50 -3.00	Ø3h4	3611	14.95 new
	Z=3	0°	Ø0.50 -3.00	Ø3h4	3911	14.96
	Z=4	0°	Ø3.00-8.00	Ø3 h4 Ø6 h5 Ø8 h6	3901	14.97

Fraises ébauches
Schruppfräser
Roughing mills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		VC (m/min)	1.0 - 2.0 fz (mm)	2.0 - 4.0 fz (mm)	4.0 - 6.0 fz (mm)	6.0 - 10.0 fz (mm)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel	P	100 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl < 600 N/mm² Steel	P	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl < 800 N/mm² Steel	P	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier Stahl > 800 N/mm² Steel	P	80 - 120	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	120 - 170	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	★★★	★★★
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	110 - 150	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	★★★	★★★
Inox Rostfreistahl Stainless steel	M	50 - 90	0.004 - 0.008	0.008 - 0.012	0.012 - 0.020	0.020 - 0.040	-	★★★	★★★
Aluminium	N	250 - 350	0.008 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.065	-	★★★	★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	130 - 240	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★
Matière synthétique Synthetisches Material Synthetic material	N	150 - 300	0.020 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.150	-	★★★	★★
Métaux précieux Edelmetalle Precious metals	N	120 - 150	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★
Titane Titan Titanium	S	50 - 100	0.010 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy	S	40 - 60	0.005 - 0.007	0.007-0.012	0.012 - 0.020	0.020 - 0.030	-	★★★	★★★
Matière exotique Exotisches material Exotic material	O	15 - 25	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Fraises en bout
Schaftfräser
End mills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		VC (m/min)	0.50 - 2.0 fz (mm)	2.0 - 4.0 fz (mm)	4.0 - 6.0 fz (mm)	6.0 - 8.0 fz (mm)	8.0 - 12.0 fz (mm)	N	TiAlN	STF	DLC
Acier de décolletage Automatenstahl Free-cutting steel	P	80 - 130	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl < 600 N/mm² Steel	P	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl < 800 N/mm² Steel	P	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier Stahl > 800 N/mm² Steel	P	50 - 80	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	★★★	★★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	60 - 90	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.025 - 0.030	-	★★★	★★★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	40 - 70	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.020 - 0.030	-	★★★	★★★	-
Inox Rostfreistahl Stainless steel	M	40 - 80	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	★★★	★★★	-
Aluminium	N	230 - 320	0.003 - 0.010	0.010 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	★★	★	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 190	0.003 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.070	★★	★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material	N	250 - 500	0.005 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.100	0.100 - 0.200	★★★	-	★★	★★★
Métaux précieux Edelmetalle Precious metals	N	90 - 150	0.003 - 0.015	0.015 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	★★★	★	★★	★★★
Titane Titan Titanium	S	30 - 70	0.004 - 0.010	0.010 - 0.017	0.017-0.025	0.025 - 0.035	0.035 - 0.050	-	★★	★★★	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	30 - 60	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.025	0.025 - 0.040	-	★★★	★★★	-
Matière exotique Exotisches material Exotic material	O	15 - 25	0.002 - 0.008	0.008 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.050	-	★★★	★★★	★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Outils WM 701S
Werkzeuge WM 701S
Tools WM 701S

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		VC (m/min)	N	TiAlN	STF	DLC
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 180	-	★★★	★★★	-
Acier Stahl < 600 N/mm² Steel	P	100 - 150	-	★★★	★★★	-
Acier Stahl < 800 N/mm² Steel	P	100 - 130	-	★★★	★★★	-
Acier Stahl > 800 N/mm² Steel	P	80 - 100	-	★★★	★★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	-	-	★★★	★★★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	-	-	★★★	★★★	-
Inox Rostfreistahl Stainless steel	M	60 - 90	-	★★★	★★★	-
Aluminium	N	250 - 400	★★	★★★	★★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	150 - 200	★★★	★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material	N	100 - 150	★★★	★★	★★	★★★
Métaux précieux Edelmetalle Precious metals	N	140 - 200	★★★	★★	★★	★★★
Titane Titan Titanium	S	40 - 70	-	★★★	★★★	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	30 - 60	-	★★★	★★★	-
Matière exotique Exotisches material Exotic material	O	30 - 60	-	★★★	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Fraises à angler
Kegelsenker
Chamfering tools

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

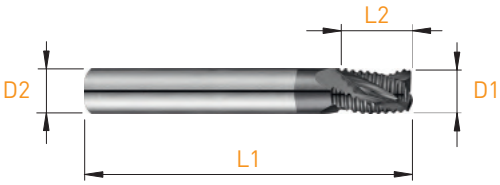
Matière Werkstoff Material		VC (m/min)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel	P	80 - 130	★	★★★	★★★
Acier Stahl < 600 N/mm² Steel	P	70 - 100	★	★★★	★★★
Acier Stahl < 800 N/mm² Steel	P	70 - 100	★	★★★	★★★
Acier Stahl > 800 N/mm² Steel	P	50 - 80	★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	60 - 90	-	★★	★★★
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	40 - 70	-	★★	★★★
Inox Rostfreistahl Stainless steel	M	50 - 100	★	★★★	★★★
Aluminium	N	200 - 300	★★★	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 200	★★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material	N	200 - 500	★★★	★★	★★
Métaux précieux Edelmetalle Precious metals	N	90 - 140	★★★	★★	★★★
Titane Titan Titanium	S	30 - 80	-	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy	S	30 - 60	-	★★★	★★★
Matière exotique Exotisches material Exotic material	O	20 - 30	-	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

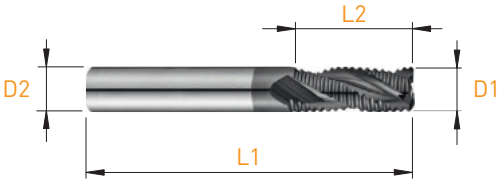
Fraises ébauches
Schruppfräser
Roughing mills

E-DHP3300 / 3400



MD
VHM
HM

	Z	E	λ	D1 h10	L2	D2 h6	L1	Art. N°	N	TiAlN	STF
	3	0.05	26°/30°	1.00	1.50	3.00	39	**E-DHP3300-1.5-1.00**	■	■	■
	3	0.10	26°/30°	1.50	2.25	3.00	39	**E-DHP3300-1.5-1.50**	■	■	■
	3	0.20	26°/30°	2.00	3.00	3.00	39	**E-DHP3300-1.5-2.00**	■	■	■
	3	0.20	26°/33°	2.50	3.75	6.00	50	**E-DHP3300-1.5-2.50**	■	■	■
	3	0.20	26°/33°	3.00	4.25	6.00	50	**E-DHP3300-1.5-3.00**	■	■	■
	3	0.30	26°/33°	4.00	6.00	6.00	50	**E-DHP3300-1.5-4.00**	■	■	■
	3	0.30	26°/33°	5.00	7.50	6.00	50	**E-DHP3300-1.5-5.00**	■	■	■
	3	0.40	26°/33°	6.00	9.00	6.00	50	**E-DHP3300-1.5-6.00**	■	■	■
	3	0.50	26°/33°	8.00	12.00	8.00	64	**E-DHP3300-1.5-8.00**	■	■	■
	4	0.50	26°/33°	10.00	15.00	10.00	73	**E-DHP3400-1.5-10.00**	■	■	■



MD
VHM
HM

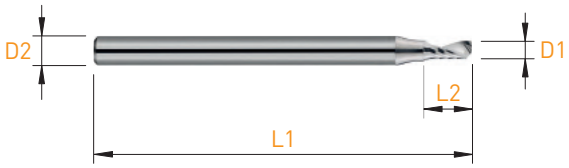
	Z	E	λ	D1 h10	L2	D2 h6	L1	Art. N°	N	TiAlN	STF
	3	0.05	26°/30°	1.00	2.50	3.00	39	**E-DHP3300-2.5-1.00**	■	■	■
	3	0.10	26°/30°	1.50	3.75	3.00	39	**E-DHP3300-2.5-1.50**	■	■	■
	3	0.20	26°/30°	2.00	5.00	3.00	39	**E-DHP3300-2.5-2.00**	■	■	■
	3	0.20	26°/33°	2.50	6.25	6.00	58	**E-DHP3300-2.5-2.50**	■	■	■
	3	0.20	26°/33°	3.00	7.50	6.00	58	**E-DHP3300-2.5-3.00**	■	■	■
	3	0.30	26°/33°	4.00	10.00	6.00	58	**E-DHP3300-2.5-4.00**	■	■	■
	3	0.30	26°/33°	5.00	12.50	6.00	58	**E-DHP3300-2.5-5.00**	■	■	■
	3	0.40	26°/33°	6.00	15.00	6.00	58	**E-DHP3300-2.5-6.00**	■	■	■
	3	0.50	26°/33°	8.00	20.00	8.00	64	**E-DHP3300-2.5-8.00**	■	■	■
	4	0.50	26°/33°	10.00	25.00	10.00	73	**E-DHP3400-2.5-10.00**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3123-2

new



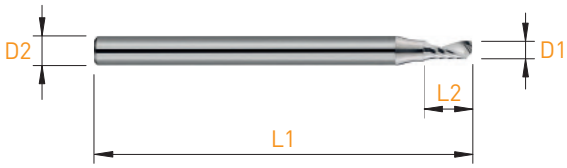
MD VHM HM | λ 23° | Sharp Corner | 2xD1 | Z=1

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	DLC
1.00	2.00	6.00	50	**3123-2-1.0**	■	■	■	■
2.00	4.00	6.00	50	**3123-2-2.0**	■	■	■	■
3.00	6.00	6.00	50	**3123-2-3.0**	■	■	■	■
4.00	8.00	6.00	50	**3123-2-4.0**	■	■	■	■
5.00	10.00	6.00	50	**3123-2-5.0**	■	■	■	■
6.00	12.00	6.00	50	**3123-2-6.0**	■	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3123-4

new



MD VHM HM | λ 23° | Sharp Corner | 4xD1 | Z=1

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	DLC
1.00	4.00	6.00	50	**3123-4-1.0**	■	■	■	■
2.00	8.00	6.00	50	**3123-4-2.0**	■	■	■	■
3.00	12.00	6.00	50	**3123-4-3.0**	■	■	■	■
4.00	16.00	6.00	50	**3123-4-4.0**	■	■	■	■
5.00	20.00	6.00	50	**3123-4-5.0**	■	■	■	■
6.00	24.00	6.00	50	**3123-4-6.0**	■	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout
Schaftfräser
End mills

3260MV

new

MD VHM HM	60°		Z=2	

D1 h10	d	L2	D2 Ø3h4 Ø6h5 Ø8h6	L1	Art. N°	N	TiAlN	STF
0.50	0.05	1.00	3.00	39	**3260MV-0.5**	■	■	■
1.00	0.10	2.00	3.00	39	**3260MV-1.0**	■	■	■
1.50	0.15	3.00	3.00	39	**3260MV-1.5**	■	■	■
2.00	0.20	4.00	3.00	39	**3260MV-2.0**	■	■	■
2.50	0.25	5.00	3.00	39	**3260MV-2.5**	■	■	■
3.00	0.30	6.00	6.00	50	**3260MV-3.0**	■	■	■
4.00	0.40	8.00	6.00	50	**3260MV-4.0**	■	■	■
6.00	0.60	12.00	8.00	64	**3260MV-6.0**	■	■	■

Fraises en bout
Schaftfräser
End mills

3290MV

new

MD VHM HM | 90° | Z=2

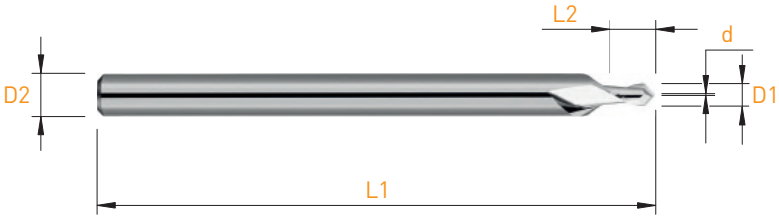
D1 h10	d	L2	D2 Ø3h4 Ø6h5 Ø8h6	L1	Art. N°	N	TiAlN	STF
0.30	0.03	0.60	3.00	39	**3290MV-0.3**	■	■	■
0.40	0.04	0.80	3.00	39	**3290MV-0.4**	■	■	■
0.50	0.05	1.00	3.00	39	**3290MV-0.5**	■	■	■
0.60	0.06	1.20	3.00	39	**3290MV-0.6**	■	■	■
0.70	0.07	1.40	3.00	39	**3290MV-0.7**	■	■	■
0.80	0.08	1.60	3.00	39	**3290MV-0.8**	■	■	■
0.90	0.09	1.80	3.00	39	**3290MV-0.9**	■	■	■
1.00	0.10	2.00	3.00	39	**3290MV-1.0**	■	■	■
1.10	0.11	2.20	3.00	39	**3290MV-1.1**	■	■	■
1.20	0.12	2.40	3.00	39	**3290MV-1.2**	■	■	■
1.30	0.13	2.60	3.00	39	**3290MV-1.3**	■	■	■
1.40	0.14	2.80	3.00	39	**3290MV-1.4**	■	■	■
1.50	0.15	3.00	3.00	39	**3290MV-1.5**	■	■	■
1.60	0.16	3.20	3.00	39	**3290MV-1.6**	■	■	■
1.70	0.17	3.40	3.00	39	**3290MV-1.7**	■	■	■
1.80	0.18	3.60	3.00	39	**3290MV-1.8**	■	■	■
1.90	0.19	3.80	3.00	39	**3290MV-1.9**	■	■	■
2.00	0.20	4.00	3.00	39	**3290MV-2.0**	■	■	■
2.50	0.25	5.00	3.00	39	**3290MV-2.5**	■	■	■
3.00	0.30	6.00	6.00	50	**3290MV-3.0**	■	■	■
4.00	0.40	8.00	6.00	50	**3290MV-4.0**	■	■	■
6.00	0.60	12.00	8.00	64	**3290MV-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout
Schaftfräser
End mills

32120MV

new

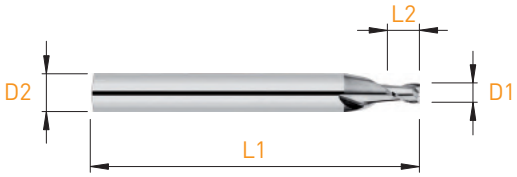


MD VHM HM | 120° | Z=2

D1 h10	d	L2	D2 Ø3h4 Ø6h5 Ø8h6	L1	Art. N°	N	TiAlN	STF
0.50	0.05	1.00	3.00	39	**32120MV-0.5**	■	■	■
1.00	0.10	2.00	3.00	39	**32120MV-1.0**	■	■	■
1.50	0.15	3.00	3.00	39	**32120MV-1.5**	■	■	■
2.00	0.20	4.00	3.00	39	**32120MV-2.0**	■	■	■
2.50	0.25	5.00	3.00	39	**32120MV-2.5**	■	■	■
3.00	0.30	6.00	6.00	50	**32120MV-3.0**	■	■	■
4.00	0.40	8.00	6.00	50	**32120MV-4.0**	■	■	■
6.00	0.60	12.00	8.00	64	**32120MV-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3230



MD VHM HM | λ 30° | Sharp Corner | Z=2

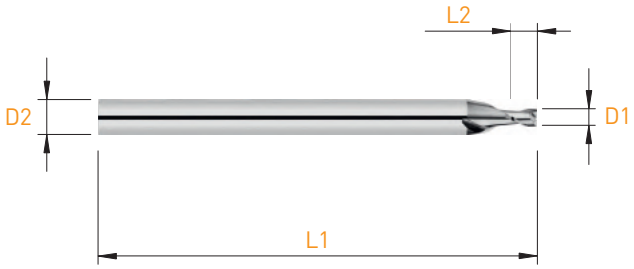
D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.00	6.00	50	**3230-1.0**	■	■	■
1.50	1.50	6.00	50	**3230-1.5**	■	■	■
2.00	2.00	6.00	50	**3230-2.0**	■	■	■
2.50	2.50	6.00	50	**3230-2.5**	■	■	■
3.00	3.00	6.00	50	**3230-3.0**	■	■	■
4.00	4.00	6.00	50	**3230-4.0**	■	■	■
5.00	5.00	6.00	50	**3230-5.0**	■	■	■
6.00	6.00	6.00	50	**3230-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3230-1.5

new



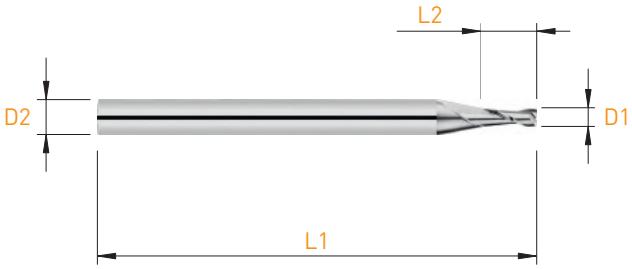
MD VHM HM | λ 30° | Sharp Corner | 1.5xD1 | Z=2

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	4.50	6.00	50	**3230-1.5-3.0**	■	■	■
3.50	5.00	6.00	50	**3230-1.5-3.5**	■	■	■
4.00	6.00	6.00	50	**3230-1.5-4.0**	■	■	■
4.50	7.00	6.00	50	**3230-1.5-4.5**	■	■	■
5.00	8.00	6.00	50	**3230-1.5-5.0**	■	■	■
6.00	9.00	6.00	50	**3230-1.5-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3230-3

new



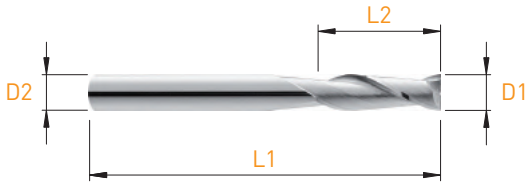
MD VHM HM	λ 30°	Sharp Corner		3xD1	Z=2	

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	9.00	6.00	50	**3230-3-3.0**	■	■	■
3.50	10.00	6.00	50	**3230-3-3.5**	■	■	■
4.00	12.00	6.00	50	**3230-3-4.0**	■	■	■
4.50	13.00	6.00	50	**3230-3-4.5**	■	■	■
5.00	15.00	6.00	50	**3230-3-5.0**	■	■	■
6.00	18.00	6.00	50	**3230-3-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3231



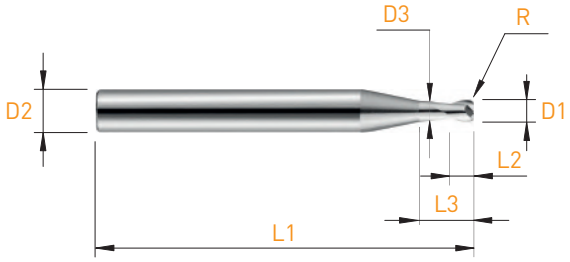
MD VHM HM | λ 30° | Sharp Corner | Z=2

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3231-2.0**	■	■	■
2.50	8.00	2.50	32	**3231-2.5**	■	■	■
3.00	12.00	3.00	32	**3231-3.0**	■	■	■
3.50	12.00	3.50	32	**3231-3.5**	■	■	■
4.00	12.00	4.00	40	**3231-4.0**	■	■	■
4.50	14.00	4.50	50	**3231-4.5**	■	■	■
5.00	14.00	5.00	50	**3231-5.0**	■	■	■
6.00	16.00	6.00	50	**3231-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3239T-2.5X

new



MD VHM HM | λ 30° | Radius Corner | L3 2.5xD1 | Z=2

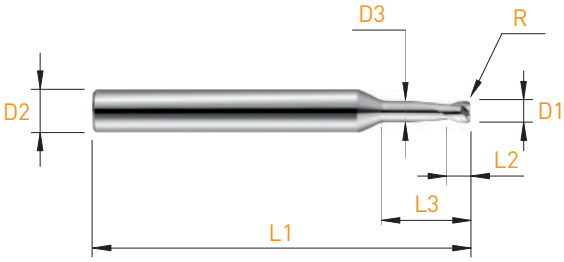
D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	**3239T-2.5X-3.0**	■	■	■
3.50	0.50	3.50	8.75	3.45	6.00	57	**3239T-2.5X-3.5**	■	■	■
4.00	0.50	4.00	10.00	3.95	6.00	57	**3239T-2.5X-4.0**	■	■	■
4.50	0.50	4.50	11.25	4.45	6.00	57	**3239T-2.5X-4.5**	■	■	■
5.00	0.50	5.00	12.50	4.95	6.00	57	**3239T-2.5X-5.0**	■	■	■
5.50	0.50	5.50	13.75	5.45	6.00	57	**3239T-2.5X-5.5**	■	■	■
6.00	0.50	6.00	15.00	5.95	6.00	57	**3239T-2.5X-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3239T-4X

new

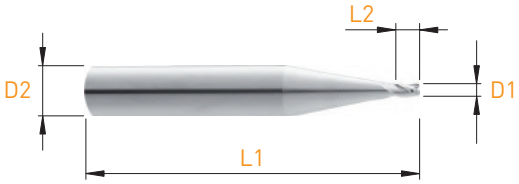


MD VHM HM | λ 30° | Radius Corner | L3 4xD1 | Z=2

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	**3239T-4X-3.0**	■	■	■
3.50	0.50	3.50	14.00	3.45	6.00	57	**3239T-4X-3.5**	■	■	■
4.00	0.50	4.00	16.00	3.95	6.00	57	**3239T-4X-4.0**	■	■	■
4.50	0.50	4.50	18.00	4.45	6.00	57	**3239T-4X-4.5**	■	■	■
5.00	0.50	5.00	20.00	4.95	6.00	57	**3239T-4X-5.0**	■	■	■
5.50	0.50	5.50	22.00	5.45	6.00	57	**3239T-4X-5.5**	■	■	■
6.00	0.50	6.00	24.00	5.95	6.00	57	**3239T-4X-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3330-S



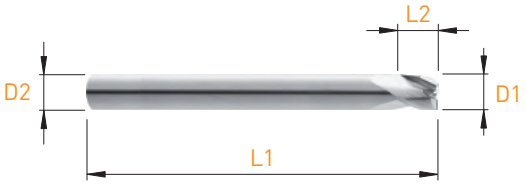
MD VHM HM | λ 30° | Sharp Corner | Z=3

D1 h10	L2	D2 h6	L1	Art. N°	N	TiAlN	STF
1.00	3.00	6.00	40	**3330-S-1.0**	■	■	■
1.50	3.00	6.00	40	**3330-S-1.5**	■	■	■
2.00	3.00	6.00	40	**3330-S-2.0**	■	■	■
2.50	3.00	6.00	40	**3330-S-2.5**	■	■	■
3.00	4.00	6.00	40	**3330-S-3.0**	■	■	■
3.50	4.00	6.00	40	**3330-S-3.5**	■	■	■
4.00	5.00	6.00	40	**3330-S-4.0**	■	■	■
4.50	5.00	6.00	40	**3330-S-4.5**	■	■	■
5.00	6.00	6.00	40	**3330-S-5.0**	■	■	■
6.00	7.00	6.00	40	**3330-S-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3330



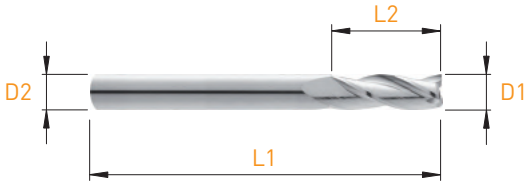
MD VHM HM | λ 30° | Sharp Corner | Z=3

D1 e9	L2	D2 h6	L1	Art. N°	N	TiAlN	STF
3.00	3.00	3.00	39	**3330-3.0**	■	■	■
4.00	4.00	4.00	50	**3330-4.0**	■	■	■
5.00	5.00	5.00	50	**3330-5.0**	■	■	■
6.00	6.00	6.00	50	**3330-6.0**	■	■	■
8.00	8.00	8.00	58	**3330-8.0**	■		
10.00	10.00	10.00	66	**3330-10.0**	■		
12.00	12.00	12.00	73	**3330-12.0**	■		

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3330-4

new



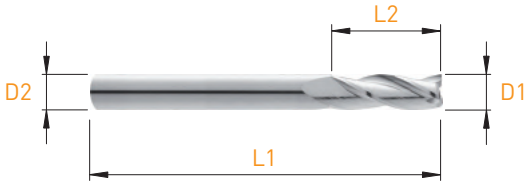
MD VHM HM | λ 30° | Sharp Corner | 4xD1 | Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	12.00	6.00	50	**3330-4-3.0**	■	■	■
4.00	16.00	6.00	50	**3330-4-4.0**	■	■	■
5.00	20.00	6.00	50	**3330-4-5.0**	■	■	■
6.00	24.00	6.00	57	**3330-4-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3331

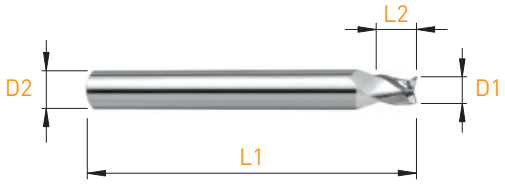


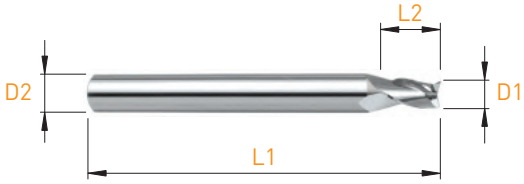
MD VHM HM | λ 30° | Sharp Corner | Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3331-2.0**	■	■	■
2.50	8.00	2.50	32	**3331-2.5**	■	■	■
3.00	12.00	3.00	32	**3331-3.0**	■	■	■
3.50	12.00	3.50	32	**3331-3.5**	■	■	■
4.00	12.00	4.00	40	**3331-4.0**	■	■	■
4.50	14.00	4.50	50	**3331-4.5**	■	■	■
5.00	14.00	5.00	50	**3331-5.0**	■	■	■
6.00	16.00	6.00	50	**3331-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3336-HA / 3337-HA





MD VHM HM | λ 30° | Sharp Corner | DIN 6527K | Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.50	3.00	6.00	50	**3336-HA-1.5**	■	■	■
1.80	3.00	6.00	50	**3336-HA-1.8**	■	■	■
2.00	3.00	6.00	50	**3336-HA-2.0**	■	■	■
2.50	3.00	6.00	50	**3336-HA-2.5**	■	■	■
2.80	4.00	6.00	50	**3336-HA-2.8**	■	■	■
3.00	4.00	6.00	50	**3336-HA-3.0**	■	■	■
3.50	4.00	6.00	50	**3336-HA-3.5**	■	■	■
3.80	5.00	6.00	54	**3336-HA-3.8**	■	■	■
4.00	5.00	6.00	54	**3336-HA-4.0**	■	■	■
4.50	5.00	6.00	54	**3336-HA-4.5**	■	■	■
4.80	6.00	6.00	54	**3336-HA-4.8**	■	■	■
5.00	6.00	6.00	54	**3336-HA-5.0**	■	■	■
5.50	7.00	6.00	54	**3336-HA-5.5**	■	■	■
5.80	7.00	6.00	54	**3336-HA-5.8**	■	■	■
6.00	7.00	6.00	54	**3336-HA-6.0**	■	■	■

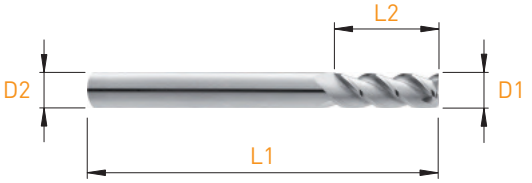
MD VHM HM | λ 30° | Sharp Corner | DIN 6527L | Z=3

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.50	6.00	6.00	57	**3337-HA-1.5**	■	■	■
1.80	6.00	6.00	57	**3337-HA-1.8**	■	■	■
2.00	6.00	6.00	57	**3337-HA-2.0**	■	■	■
2.50	6.00	6.00	57	**3337-HA-2.5**	■	■	■
2.80	7.00	6.00	57	**3337-HA-2.8**	■	■	■
3.00	7.00	6.00	57	**3337-HA-3.0**	■	■	■
3.50	7.00	6.00	57	**3337-HA-3.5**	■	■	■
3.80	8.00	6.00	57	**3337-HA-3.8**	■	■	■
4.00	8.00	6.00	57	**3337-HA-4.0**	■	■	■
4.50	8.00	6.00	57	**3337-HA-4.5**	■	■	■
4.80	10.00	6.00	57	**3337-HA-4.8**	■	■	■
5.00	10.00	6.00	57	**3337-HA-5.0**	■	■	■
5.50	10.00	6.00	57	**3337-HA-5.5**	■	■	■
5.80	10.00	6.00	57	**3337-HA-5.8**	■	■	■
6.00	10.00	6.00	57	**3337-HA-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3341



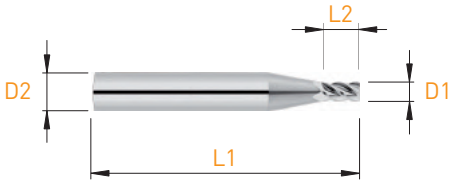
MD VHM HM | λ 45° | Sharp Corner | Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3341-2.0**	■	■	■
2.50	8.00	2.50	32	**3341-2.5**	■	■	■
3.00	12.00	3.00	32	**3341-3.0**	■	■	■
3.50	12.00	3.50	32	**3341-3.5**	■	■	■
4.00	12.00	4.00	40	**3341-4.0**	■	■	■
4.50	14.00	4.50	50	**3341-4.5**	■	■	■
5.00	14.00	5.00	50	**3341-5.0**	■	■	■
6.00	16.00	6.00	50	**3341-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3345-S

new



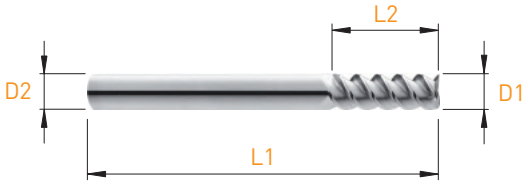
MD VHM HM | λ 45° | Sharp Corner | Z=3

D1 h10	L2	D2 h6	L1	Art. N°	N	TiAlN	STF
0.50	1.00	6.00	40	**3345-S-0.5**	■	■	■
0.60	1.20	6.00	40	**3345-S-0.6**	■	■	■
0.70	1.40	6.00	40	**3345-S-0.7**	■	■	■
0.80	1.60	6.00	40	**3345-S-0.8**	■	■	■
0.90	1.80	6.00	40	**3345-S-0.9**	■	■	■
1.00	2.00	6.00	40	**3345-S-1.0**	■	■	■
1.10	2.20	6.00	40	**3345-S-1.1**	■	■	■
1.20	2.40	6.00	40	**3345-S-1.2**	■	■	■
1.30	2.60	6.00	40	**3345-S-1.3**	■	■	■
1.40	2.80	6.00	40	**3345-S-1.4**	■	■	■
1.50	3.00	6.00	40	**3345-S-1.5**	■	■	■
1.60	3.20	6.00	40	**3345-S-1.6**	■	■	■
1.70	3.40	6.00	40	**3345-S-1.7**	■	■	■
1.80	3.60	6.00	40	**3345-S-1.8**	■	■	■
1.90	3.80	6.00	40	**3345-S-1.9**	■	■	■
2.00	4.00	6.00	40	**3345-S-2.0**	■	■	■
2.10	4.20	6.00	40	**3345-S-2.1**	■	■	■
2.20	4.40	6.00	40	**3345-S-2.2**	■	■	■
2.30	4.60	6.00	40	**3345-S-2.3**	■	■	■
2.40	4.80	6.00	40	**3345-S-2.4**	■	■	■
2.50	5.00	6.00	40	**3345-S-2.5**	■	■	■
2.60	5.20	6.00	40	**3345-S-2.6**	■	■	■
2.70	5.40	6.00	40	**3345-S-2.7**	■	■	■
2.80	5.60	6.00	40	**3345-S-2.8**	■	■	■
2.90	5.80	6.00	40	**3345-S-2.9**	■	■	■
3.00	6.00	6.00	40	**3345-S-3.0**	■	■	■
3.50	7.00	6.00	40	**3345-S-3.5**	■	■	■
4.00	8.00	6.00	40	**3345-S-4.0**	■	■	■
4.50	9.00	6.00	40	**3345-S-4.5**	■	■	■
5.00	10.00	6.00	40	**3345-S-5.0**	■	■	■
6.00	12.00	6.00	40	**3345-S-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3361

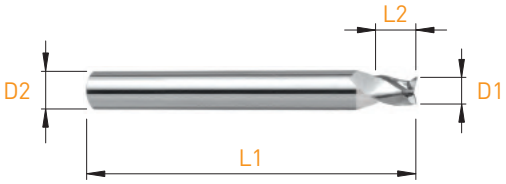


MD VHM HM | λ 60° | Sharp Corner | Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3361-2.0**	■	■	■
2.50	8.00	2.50	32	**3361-2.5**	■	■	■
3.00	12.00	3.00	32	**3361-3.0**	■	■	■
3.50	12.00	3.50	32	**3361-3.5**	■	■	■
4.00	12.00	4.00	40	**3361-4.0**	■	■	■
4.50	14.00	4.50	50	**3361-4.5**	■	■	■
5.00	14.00	5.00	50	**3361-5.0**	■	■	■
6.00	16.00	6.00	50	**3361-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

DHP3336



MD
VHM
HM

λ 35° ↓ 38°

Sharp Corner

Z=3

DHP

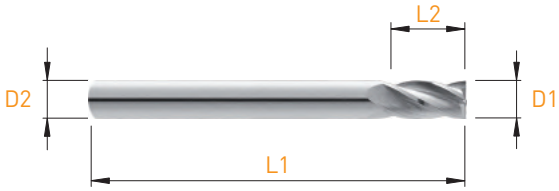
Denture à pas irrégulier, angle d'hélice progressif
Ungleiche Teilung, progressive Drallwinkel
Uneven tooth pitch, progressive helix angle

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	4.00	6.00	40	**DHP3336-1.0**	■	■	■
1.50	4.00	6.00	40	**DHP3336-1.5**	■	■	■
2.00	4.00	6.00	40	**DHP3336-2.0**	■	■	■
2.50	4.00	6.00	40	**DHP3336-2.5**	■	■	■
3.00	5.00	6.00	40	**DHP3336-3.0**	■	■	■
3.50	5.00	6.00	40	**DHP3336-3.5**	■	■	■
4.00	6.00	6.00	40	**DHP3336-4.0**	■	■	■
5.00	7.00	6.00	40	**DHP3336-5.0**	■	■	■
6.00	8.00	6.00	40	**DHP3336-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3430

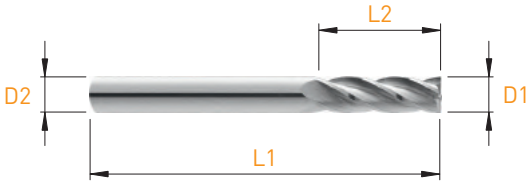


MD VHM HM | λ 30° | Sharp Corner | Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	3.00	3.00	39	**3430-3.0**	■	■	■
4.00	4.00	4.00	50	**3430-4.0**	■	■	■
5.00	5.00	5.00	50	**3430-5.0**	■	■	■
6.00	6.00	6.00	50	**3430-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3431



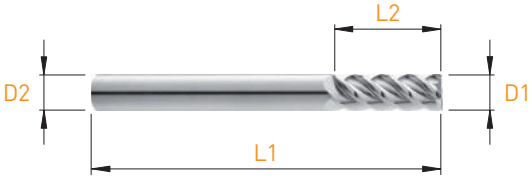
MD VHM HM | λ 30° | Sharp Corner | Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3431-2.0**	■	■	■
2.50	8.00	2.50	32	**3431-2.5**	■	■	■
3.00	12.00	3.00	32	**3431-3.0**	■	■	■
3.50	12.00	3.50	32	**3431-3.5**	■	■	■
4.00	12.00	4.00	40	**3431-4.0**	■	■	■
4.50	14.00	4.50	50	**3431-4.5**	■	■	■
5.00	14.00	5.00	50	**3431-5.0**	■	■	■
6.00	16.00	6.00	50	**3431-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3441

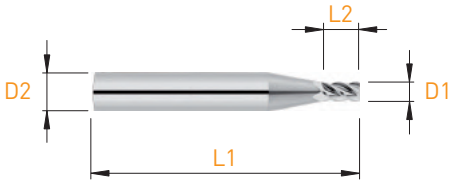


MD VHM HM | λ 45° | Sharp Corner | Z=4

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3441-2.0**	■	■	■
2.50	8.00	2.50	32	**3441-2.5**	■	■	■
3.00	12.00	3.00	32	**3441-3.0**	■	■	■
3.50	12.00	3.50	32	**3441-3.5**	■	■	■
4.00	12.00	4.00	40	**3441-4.0**	■	■	■
4.50	14.00	4.50	50	**3441-4.5**	■	■	■
5.00	14.00	5.00	50	**3441-5.0**	■	■	■
6.00	16.00	6.00	50	**3441-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3445-S



MD VHM HM | λ 45° | Sharp Corner | Z=4

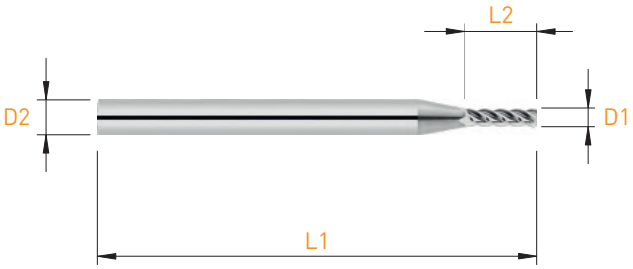
D1 h10	L2	D2 h6	L1	Art. N°	N	TiAlN	STF	
0.50	1.00	6.00	40	3445-S-0.5	■	■	■	new
0.60	1.20	6.00	40	3445-S-0.6	■	■	■	new
0.70	1.40	6.00	40	3445-S-0.7	■	■	■	new
0.80	1.60	6.00	40	3445-S-0.8	■	■	■	new
0.90	1.80	6.00	40	3445-S-0.9	■	■	■	new
1.00	2.00	6.00	40	3445-S-1.0	■	■	■	
1.10	2.20	6.00	40	3445-S-1.1	■	■	■	new
1.20	2.40	6.00	40	3445-S-1.2	■	■	■	new
1.30	2.60	6.00	40	3445-S-1.3	■	■	■	new
1.40	2.80	6.00	40	3445-S-1.4	■	■	■	new
1.50	3.00	6.00	40	3445-S-1.5	■	■	■	
1.60	3.20	6.00	40	3445-S-1.6	■	■	■	new
1.70	3.40	6.00	40	3445-S-1.7	■	■	■	new
1.80	3.60	6.00	40	3445-S-1.8	■	■	■	new
1.90	3.80	6.00	40	3445-S-1.9	■	■	■	new
2.00	4.00	6.00	40	3445-S-2.0	■	■	■	
2.10	4.20	6.00	40	3445-S-2.1	■	■	■	new
2.20	4.40	6.00	40	3445-S-2.2	■	■	■	new
2.30	4.60	6.00	40	3445-S-2.3	■	■	■	new
2.40	4.80	6.00	40	3445-S-2.4	■	■	■	new
2.50	5.00	6.00	40	3445-S-2.5	■	■	■	
2.60	5.20	6.00	40	3445-S-2.6	■	■	■	new
2.70	5.40	6.00	40	3445-S-2.7	■	■	■	new
2.80	5.60	6.00	40	3445-S-2.8	■	■	■	new
2.90	5.80	6.00	40	3445-S-2.9	■	■	■	new
3.00	6.00	6.00	40	3445-S-3.0	■	■	■	
3.50	7.00	6.00	40	3445-S-3.5	■	■	■	
4.00	8.00	6.00	40	3445-S-4.0	■	■	■	
4.50	9.00	6.00	40	3445-S-4.5	■	■	■	
5.00	10.00	6.00	40	3445-S-5.0	■	■	■	
6.00	12.00	6.00	40	3445-S-6.0	■	■	■	

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3450

new

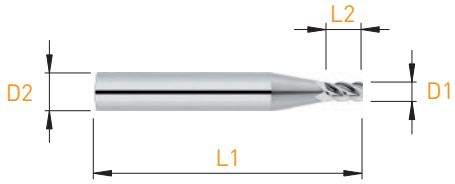


MD VHM HM | λ 50° | Sharp Corner | 1.5xD1 | Z=4

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.50	6.00	50	**3450-1.0**	■	■	■
1.50	2.25	6.00	50	**3450-1.5**	■	■	■
2.00	3.00	6.00	50	**3450-2.0**	■	■	■
2.50	3.75	6.00	50	**3450-2.5**	■	■	■
3.00	4.50	6.00	50	**3450-3.0**	■	■	■
3.50	5.25	6.00	50	**3450-3.5**	■	■	■
4.00	6.00	6.00	50	**3450-4.0**	■	■	■
5.00	7.50	6.00	50	**3450-5.0**	■	■	■
6.00	9.00	6.00	50	**3450-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

DHP3436



MD
VHM
HM

λ 35° ↓ 38°

Sharp Corner

Z=4

DHP

Denture à pas irrégulier, angle d'hélice progressive
Ungleiche Teilung, progressive Drallwinkel
Uneven tooth pitch, progressive helix angle

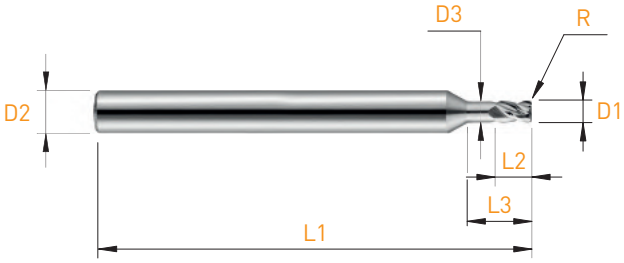
D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	4.00	6.00	40	**DHP3436-1.0**	■	■	■
1.50	4.00	6.00	40	**DHP3436-1.5**	■	■	■
2.00	4.00	6.00	40	**DHP3436-2.0**	■	■	■
2.50	4.00	6.00	40	**DHP3436-2.5**	■	■	■
3.00	5.00	6.00	40	**DHP3436-3.0**	■	■	■
3.50	5.00	6.00	40	**DHP3436-3.5**	■	■	■
4.00	6.00	6.00	40	**DHP3436-4.0**	■	■	■
5.00	7.00	6.00	40	**DHP3436-5.0**	■	■	■
6.00	8.00	6.00	40	**DHP3436-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout toriques
Torische Schaftfräser
Toric end mills

3439T-2.5X

new



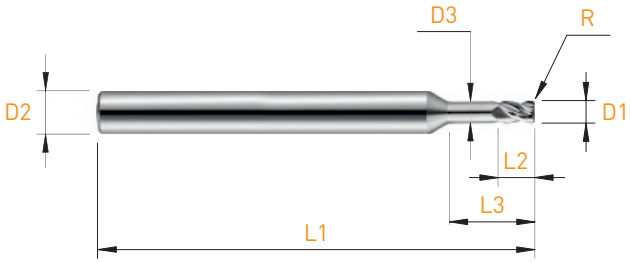
MD VHM HM | λ 30° | Radius Corner | L3 2.5xD1 | Z=4

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	**3439T-2.5X-3.0**	■	■	■
3.50	0.50	3.50	8.75	3.45	6.00	57	**3439T-2.5X-3.5**	■	■	■
4.00	0.50	4.00	10.00	3.95	6.00	57	**3439T-2.5X-4.0**	■	■	■
4.50	0.50	4.50	11.25	4.45	6.00	57	**3439T-2.5X-4.5**	■	■	■
5.00	0.50	5.00	12.50	4.95	6.00	57	**3439T-2.5X-5.0**	■	■	■
5.50	0.50	5.50	13.75	5.45	6.00	57	**3439T-2.5X-5.5**	■	■	■
6.00	0.50	6.00	15.00	5.95	6.00	57	**3439T-2.5X-6.0**	■	■	■

Fraises en bout toriques
Torische Schaftfräser
Toric end mills

3439T-4X

new



MD VHM HM | λ 30° | Radius Corner | L3 4xD1 | Z=4

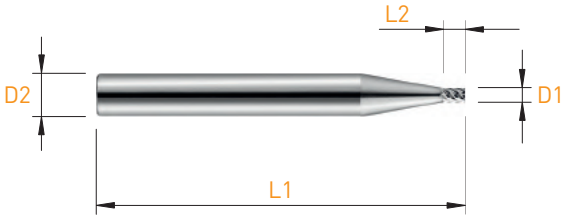
D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	N	TiAlN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	**3439T-4X-3.0**	■	■	■
3.50	0.50	3.50	14.00	3.45	6.00	57	**3439T-4X-3.5**	■	■	■
4.00	0.50	4.00	16.00	3.95	6.00	57	**3439T-4X-4.0**	■	■	■
4.50	0.50	4.50	18.00	4.45	6.00	57	**3439T-4X-4.5**	■	■	■
5.00	0.50	5.00	20.00	4.95	6.00	57	**3439T-4X-5.0**	■	■	■
5.50	0.50	5.50	22.00	5.45	6.00	57	**3439T-4X-5.5**	■	■	■
6.00	0.50	6.00	24.00	5.95	6.00	57	**3439T-4X-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3545

new



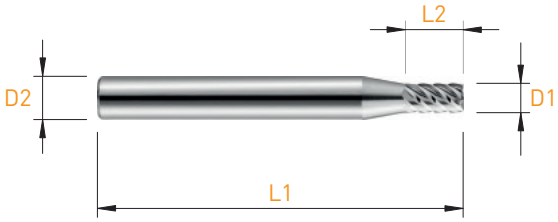
MD VHM HM | λ 45° | Sharp Corner | 1.5xD1 | Z=5

D1 h10	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	1.50	6.00	50	**3545-1.0**	■	■	■
2.00	3.00	6.00	50	**3545-2.0**	■	■	■
3.00	4.50	6.00	50	**3545-3.0**	■	■	■
4.00	6.00	6.00	50	**3545-4.0**	■	■	■
5.00	7.50	6.00	50	**3545-5.0**	■	■	■
6.00	9.00	6.00	50	**3545-6.0**	■	■	■

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

35645

new



MD
VHM
HM

λ 45°

Sharp Corner

Z=4
Z=5
Z=6

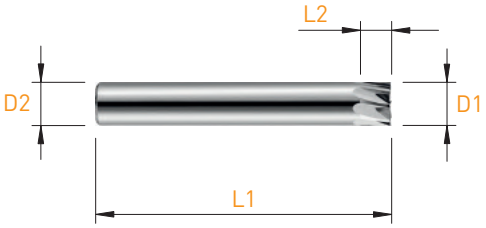
D1 h10	L2	Z	D2 h5	L1	Art. N°	N	TiAlN	STF
1.00	2.00	4	6.00	50	**35645-1.0**	■	■	■
1.50	3.00	5	6.00	50	**35645-1.5**	■	■	■
2.00	4.00	5	6.00	50	**35645-2.0**	■	■	■
2.50	5.00	5	6.00	50	**35645-2.5**	■	■	■
3.00	6.00	5	6.00	50	**35645-3.0**	■	■	■
3.50	7.00	5	6.00	50	**35645-3.5**	■	■	■
4.00	8.00	6	6.00	50	**35645-4.0**	■	■	■
4.50	9.00	6	6.00	50	**35645-4.5**	■	■	■
5.00	10.00	6	6.00	50	**35645-5.0**	■	■	■
6.00	12.00	6	6.00	50	**35645-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills

3810

new

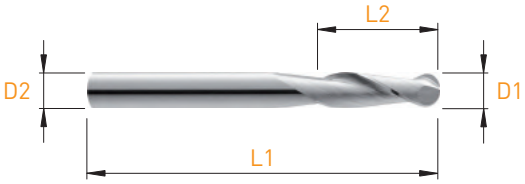


MD VHM HM | λ 10° | Sharp Corner | Z=8

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
6.00	4.00	6.00	50	**3810-0.65-6.0**	■	■	■
6.00	6.00	6.00	57	**3810-1.0-6.0**	■	■	■
6.00	9.00	6.00	57	**3810-1.5-6.0**	■	■	■

Fraises en bout hémisphériques
Vollradius Schaftfräser
Ball nose end mills

3238



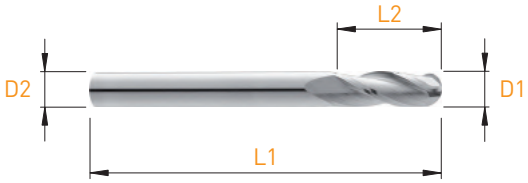
MD VHM HM | λ 30° | Z=2

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3238-2.0**	■	■	■
2.50	8.00	2.50	32	**3238-2.5**	■	■	■
3.00	12.00	3.00	32	**3238-3.0**	■	■	■
3.50	12.00	3.50	32	**3238-3.5**	■	■	■
4.00	12.00	4.00	40	**3238-4.0**	■	■	■
4.50	14.00	4.50	50	**3238-4.5**	■	■	■
5.00	14.00	5.00	50	**3238-5.0**	■	■	■
6.00	16.00	6.00	50	**3238-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises en bout hémisphériques
Vollradius Schaftfräser
Ball nose end mills

3338



MD VHM HM | λ 30° | Z=3

D1 e9	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	32	**3338-2.0**	■	■	■
2.50	8.00	2.50	32	**3338-2.5**	■	■	■
3.00	12.00	3.00	32	**3338-3.0**	■	■	■
3.50	12.00	3.50	32	**3338-3.5**	■	■	■
4.00	12.00	4.00	40	**3338-4.0**	■	■	■
4.50	14.00	4.50	50	**3338-4.5**	■	■	■
5.00	14.00	5.00	50	**3338-5.0**	■	■	■
6.00	16.00	6.00	50	**3338-6.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Outils pour machine WM 701S
Werkzeuge für Maschine WM 701S
Executions for machine WM 701S

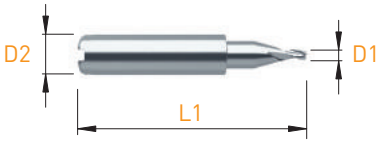
Tous les outils de la gamme MICRO-Line sont réalisables pour la machine WM 701S sur demande.

Alle Werkzeuge aus der MICRO-Line sind machbar für die Maschine WM 701S auf Anfrage.

All tools of MICRO-Line can be produced for the machine WM 701S on request.

Fraises en bout de finition pour machine WM 701S
Schaftfräser für Maschine WM 701S
End mills for machine WM 701S

701S3371



Sharp Corner | 1xD1 | Z=3

Disponible tous les 0.1 mm
Verfügbar jede 0.1 mm
Available each 0.1 mm

D1 +0.005 / -0.010	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.30	6.00	33	**701S3371-1-0.30**	■	■	■	■	■
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
3.50	3.50	6.00	33	**701S3371-1-3.50**	■	■	■	■	■

Sharp Corner | 2xD1 | Z=3

Disponible tous les 0.1 mm
Verfügbar jede 0.1 mm
Available each 0.1 mm

D1 +0.005 / -0.010	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.60	6.00	33	**701S3371-2-0.30**	■	■	■	■	■
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
3.50	7.00	6.00	33	**701S3371-2-3.50**	■	■	■	■	■

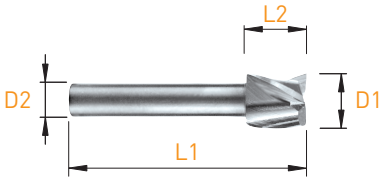
Sharp Corner | 3xD1 | Z=3

Disponible tous les 0.1 mm
Verfügbar jede 0.1 mm
Available each 0.1 mm

D1 +0.005 / -0.010	L2	D2 h5	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	6.00	33	**701S3371-3-0.30**	■	■	■	■	■
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
3.00	9.00	6.00	33	**701S3371-3-3.00**	■	■	■	■	■

Fraises en bout pour usinage en bout plat
Schaftfräser für flache Frontbearbeitung
End mills for flat front machining

3383

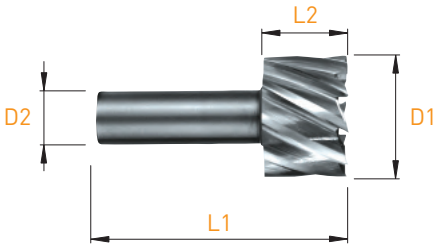


MD VHM HM | λ 30° | Sharp Corner | Z=3

D1 h10	L2	D2 h6	L1	Art. N°	Z
8.00	8.00	6.00	40	**3383-8.0**	■
10.00	10.00	6.00	40	**3383-10.0**	■
12.00	12.00	6.00	40	**3383-12.0**	■

Fraises en bout avec queue réduite
Schaftfräser mit reduziertem Schaft
End mills with reduced shank

3831 / 3833



MD VHM HM | λ 30° | Sharp Corner | Z=10

D1 h10	L2	D2 h6	L1	Art. N°	Z
16.30	15.00	10.00	45	**3831**	■
20.30	15.00	10.00	45	**3833**	■

Fraises à angler
Kegelsenker
Chamfering tools

3611

new

MD VHM HM	λ 0°		Z=3	60°

D1 +0.005 / -0.010	L2	D2 h4	L1	d	Art. N°	N	TiAlN	STF
0.50	3.00	3.00	39	0.10	**3611-0.5**	■	■	■
0.60	3.00	3.00	39	0.10	**3611-0.6**	■	■	■
0.70	3.00	3.00	39	0.10	**3611-0.7**	■	■	■
0.80	3.00	3.00	39	0.10	**3611-0.8**	■	■	■
0.90	3.00	3.00	39	0.10	**3611-0.9**	■	■	■
1.00	3.00	3.00	39	0.10	**3611-1.0**	■	■	■
1.50	4.50	3.00	39	0.10	**3611-1.5**	■	■	■
2.00	6.00	3.00	39	0.10	**3611-2.0**	■	■	■
2.50	7.50	3.00	39	0.10	**3611-2.5**	■	■	■
3.00	-	3.00	39	0.10	**3611-3.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises à angler
Kegelsenker
Chamfering tools

3911

MD VHM HM	λ 0°		Z=3	90°

D1	L2	D2 h4	L1	d	Art. N°	N	TiAlN	STF
0.50	3.00	3.00	39	0.10	**3911-0.5**	■	■	■
0.60	3.00	3.00	39	0.10	**3911-0.6**	■	■	■
0.70	3.00	3.00	39	0.10	**3911-0.7**	■	■	■
0.80	3.00	3.00	39	0.10	**3911-0.8**	■	■	■
0.90	3.00	3.00	39	0.10	**3911-0.9**	■	■	■
1.00	3.00	3.00	39	0.10	**3911-1.0**	■	■	■
1.50	4.50	3.00	39	0.10	**3911-1.5**	■	■	■
2.00	6.00	3.00	39	0.10	**3911-2.0**	■	■	■
2.50	7.50	3.00	39	0.10	**3911-2.5**	■	■	■
3.00	-	3.00	39	0.10	**3911-3.0**	■	■	■

Fraises à angler
Kegelsenker
Chamfering tools

1901 / 3901

L

R

MD VHM HM	λ 0°		Z=4	90°	L		R			
D Ø3h4 Ø6h5 Ø8h6	d	L1	Art. N°	N	Art. N°	N	TiAlN	STF
3.00	0.30	39	**1901-3.0**	■	**3901-3.0**	■	■	■
6.00	0.70	50	**1901-6.0**	■	**3901-6.0**	■	■	■
8.00	1.20	59	**1901-8.0**	■	**3901-8.0**	■	■	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Fraises à graver
Gravierfräser
Engraving mills

Paramètres de coupe indicatif Empfohlene Schnittwerte Standard machining data					14.99
	A	Plat [E] / Rayon [r] Fläche [E] / Radius [r] Flat [E] / Radius [r]	D	Type Typ Type	Page Seite Page
	20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° / 120°	0.05-0.30 0.05-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3h4 Ø6h5	E100-P	14.100 new
	20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.02-0.30 0.02-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3h4	E300-P	14.101
	20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3h4	E300-R	14.102
	20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3h4	E900-P	14.103

Fraises à graver
Gravierfräser
Engraving mills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		n (tr/min)	Vf (mm/min)	N	TiAlN	STF	TiCN	DLC
Acier de décolletage Automatenstahl Free-cutting steel	P	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl < 600 N/mm² Steel	P	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl < 800 N/mm² Steel	P	20 - 50'000	100 - 180	-	★★★	★★★	★★	-
Acier Stahl > 800 N/mm² Steel	P	20 - 50'000	100 - 150	-	★★★	★★★	★★	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	20 - 50'000	-	-	★★★	★★★	★	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	20 - 50'00	-	-	★★★	★★★	★	-
Inox Rostfreistahl Stainless steel	M	20 - 50'000	100 - 170	-	★★★	★★★	★★	-
Aluminium	N	20 - 50'000	100 - 250	★★★	★★	★★	★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	20 - 50'000	70 - 150	★★★	★★	★★	★★	★★★
Matière synthétique Synthetisches Material Synthetic material	N	20 - 50'000	100 - 200	★★★	★★	★★	★★	★★★
Métaux précieux Edelmetalle Precious metals	N	20 - 50'000	100 - 200	★★★	★★	★★	★★	★★★
Titane Titan Titanium	S	20 - 50'000	70 - 150	-	★★★	★★★	★★	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	20 - 50'000	80 - 180	-	★★★	★★★	★★	-
Matière exotique Exotisches material Exotic material	O	20 - 50'000	80 - 180	★	★★★	★★★	★★	★★★

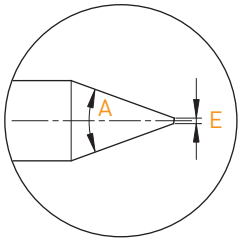
Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

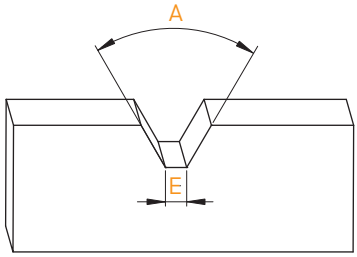
* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Fraises à graver avec plat
Gravierfräser mit Fläche
Engraving mills with flat

E100-P

new





MD
VHM
HM

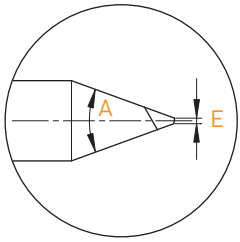
A	E	L2	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E120-P-_(E)**	■	■	■	■	■
30°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E130-P-_(E)**	■	■	■	■	■
35°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	**E135-P-_(E)**	■	■	■	■	■
40°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E140-P-_(E)**	■	■	■	■	■
45°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E145-P-_(E)**	■	■	■	■	■
50°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E150-P-_(E)**	■	■	■	■	■
55°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	**E155-P-_(E)**	■	■	■	■	■
60°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E160-P-_(E)**	■	■	■	■	■
65°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E165-P-_(E)**	■	■	■	■	■
70°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E170-P-_(E)**	■	■	■	■	■
90°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E190-P-_(E)**	■	■	■	■	■
120°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	**E1120-P-_(E)**	■	■	■	■	■
30°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	**E130-6-P-_(E)**	■	■	■	■	■
40°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	**E140-6-P-_(E)**	■	■	■	■	■

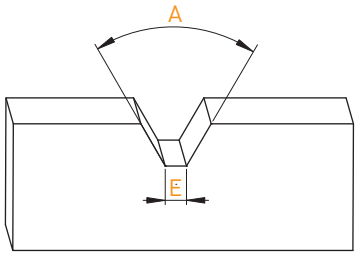
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver avec plat
Gravierfräser mit Fläche
Engraving mills with flat

E300-P





MD
VHM
HM

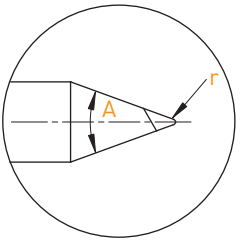
A	E	D h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.02-0.10* / 0.10-0.30**	3.00	33	**E320-P-_(E)**	■	■	■	■	■
30°	0.02-0.10* / 0.10-0.30**	3.00	33	**E330-P-_(E)**	■	■	■	■	■
35°	0.02-0.10* / 0.10-0.30**	3.00	33	**E335-P-_(E)**	■	■	■	■	■
40°	0.02-0.10* / 0.10-0.30**	3.00	33	**E340-P-_(E)**	■	■	■	■	■
45°	0.02-0.10* / 0.10-0.30**	3.00	33	**E345-P-_(E)**	■	■	■	■	■
50°	0.02-0.10* / 0.10-0.30**	3.00	33	**E350-P-_(E)**	■	■	■	■	■
55°	0.02-0.10* / 0.10-0.30**	3.00	33	**E355-P-_(E)**	■	■	■	■	■
60°	0.02-0.10* / 0.10-0.30**	3.00	33	**E360-P-_(E)**	■	■	■	■	■
65°	0.02-0.10* / 0.10-0.30**	3.00	33	**E365-P-_(E)**	■	■	■	■	■
70°	0.02-0.10* / 0.10-0.30**	3.00	33	**E370-P-_(E)**	■	■	■	■	■
90°	0.02-0.10* / 0.10-0.30**	3.00	33	**E390-P-_(E)**	■	■	■	■	■

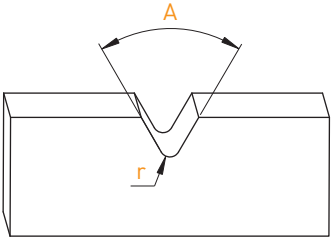
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver à rayon
Gravierfräser mit Radius
Engraving mills with radius

E300-R





MD
VHM
HM

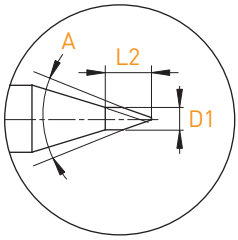
A	r	D h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	3.00	33	**E320-R-_(r)**	■	■	■	■	■
30°	0.04-0.10* / 0.10-0.30**	3.00	33	**E330-R-_(r)**	■	■	■	■	■
35°	0.04-0.10* / 0.10-0.30**	3.00	33	**E335-R-_(r)**	■	■	■	■	■
40°	0.04-0.10* / 0.10-0.30**	3.00	33	**E340-R-_(r)**	■	■	■	■	■
45°	0.04-0.10* / 0.10-0.30**	3.00	33	**E345-R-_(r)**	■	■	■	■	■
50°	0.04-0.10* / 0.10-0.30**	3.00	33	**E350-R-_(r)**	■	■	■	■	■
55°	0.04-0.10* / 0.10-0.30**	3.00	33	**E355-R-_(r)**	■	■	■	■	■
60°	0.04-0.10* / 0.10-0.30**	3.00	33	**E360-R-_(r)**	■	■	■	■	■
65°	0.04-0.10* / 0.10-0.30**	3.00	33	**E365-R-_(r)**	■	■	■	■	■
70°	0.04-0.10* / 0.10-0.30**	3.00	33	**E370-R-_(r)**	■	■	■	■	■
90°	0.04-0.10* / 0.10-0.30**	3.00	33	**E390-R-_(r)**	■	■	■	■	■

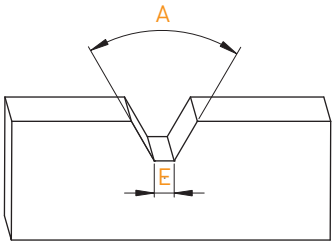
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver renforcées
Verstärkte Gravierfräser
Reinforced engraving mills

E900-P





MD
VHM
HM

A	E	D1	L2	D h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E920-P-_(E)**	■	■	■	■	■
30°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E930-P-_(E)**	■	■	■	■	■
35°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E935-P-_(E)**	■	■	■	■	■
40°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	**E940-P-_(E)**	■	■	■	■	■
45°	0.04-0.10* / 0.10-0.30**	1.00	1.80	3.00	33	**E945-P-_(E)**	■	■	■	■	■
50°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E950-P-_(E)**	■	■	■	■	■
55°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	**E955-P-_(E)**	■	■	■	■	■
60°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E960-P-_(E)**	■	■	■	■	■
65°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E965-P-_(E)**	■	■	■	■	■
70°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E970-P-_(E)**	■	■	■	■	■
90°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	**E990-P-_(E)**	■	■	■	■	■

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Micro-forets et centreurs NC
Mikrobohrer und NC-Zentrierbohrer
Micro drills and NC centering drills

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Paramètres de coupe indicatif
Empfohlene Schnittwerte
Standard machining data

Micro-forets et centreurs
Mikrobohrer und Zentrierbohrer
Micro drills and centering drills

Point angle	λ	L2	D1	D2	Type	Page
60°	25°	Div.	Ø 2.00 - 6.00	D1 = D2	2680-60	14.107
90°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0	2680-90	14.108
90°	25°	Div.	Ø 2.00 - 16.00	D1 = D2	1680-90	14.108
120°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0	2680-120	14.109
120°	25°	Div.	Ø 2.00 - 12.00	D1 = D2	1680-120	14.109

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

Z	Point angle	λ	L2	D1	D2	Type	Page
Z2	90°	25° - 32°	Div.	Ø 0.50 - 3.00	Ø2h5 Ø3h4	2690	14.110
Z2	130°	30°	~ 2 x D1	Ø 0.10 - 2.00	Ø3h6	2020	14.115

Micro-forets avec affûtage à facettes
Mikrobohrer mit Facettenschliff
Micro drills with faceted drill point

Z	Point angle	λ	L2	D1	D2	Type	Page
Z2	118°	25°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	1010	14.111
Z2	118°	25°/35°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	2010	14.112
Z2	120°	30°	~ 2 x D1	Ø 0.80 - 2.00	Ø 2h6	2011	14.113
Z2	120°	24°	~ 3 x D1	Ø 0.50 - 2.40	Ø 1.5 - 3.0 h6	2012	14.113
Z2	120°	35°	~ 8 x D1	Ø 0.40 - 1.90	Ø 1.0 - 2.0 h6	2013	14.114
Z2	120°	30°	~ 12 x D1	Ø 0.50 - 1.95	Ø 1.5 - 2.0 h6	2014	14.114
Z2	130°	35°	6 x D1	Ø 0.10 - 3.00	Ø3h6	2023	14.117
Z2	130°	35°	12 x D1	Ø 0.20 - 2.00	Ø3h6	2026	14.120
Z3	140°	35°	5 x D1	Ø 0.20 - 2.99	Ø3h6	2030	14.122

Forets à centrer NC
NC-Zentrierbohrer
NC centering drills

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		VC (m/min)	f (mm)	N	TiAlN	STF
Acier de décolletage Automatenstahl Free-cutting steel	P	60	D1/55	★★	★★★	★★★
Acier Stahl < 600 N/mm² Steel	P	55	D1/55	★★	★★★	★★★
Acier Stahl < 800 N/mm² Steel	P	55	D1/55	★★	★★★	★★★
Acier Stahl > 800 N/mm² Steel	P	55	D1/55	★★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	10	D1/100	-	★★★	★★★
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	-	-	-	-	-
Inox Rostfreistahl Stainless steel	M	30	D1/85	★★	★★★	★★★
Aluminium	N	100 - 180	D1/50	★★★	★★	★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	60 - 90	D1/60	★★★	★★	★★
Matière synthétique Synthetisches Material Synthetic material	N	350 - 700	D1/60	★★★	★★	★★
Métaux précieux Edelmetalle Precious metals	N	50 - 80	D1/100	★★★	★★	★★
Titane Titan Titanium	S	30	D1/115	★★	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy	S	15 - 20	D1/120	★★	★★★	★★★
Matière exotique Exotisches material Exotic material	O	10	D1/100	★★	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

* Bien / Gut / Good
** Très bien / Sehr Gut / Very good
*** Excellent / Ausgezeichnet / Excellent

Forets
Bohrer
Drills

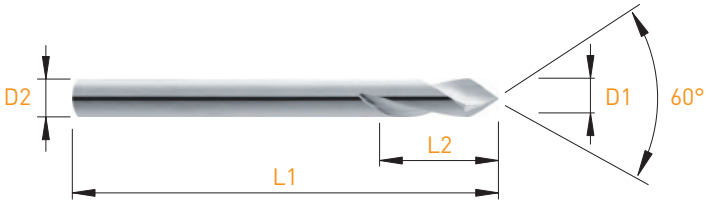
Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

Matière Werkstoff Material		VC (m/min)	f (mm)	Débourrage Enspannvorgang Pecking
Acier de décolletage Automatenstahl Free-cutting steel	P	60 - 90	D1/70	1.5xØ
Acier Stahl Steel < 600 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier Stahl Steel < 800 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier Stahl Steel > 800 N/mm²	P	50 - 80	D1/70	1.5xØ
Acier trempé Gehärteter Stahl Hardened steel -55HRC	H	-	-	-
Acier trempé Gehärteter Stahl Hardened steel +55HRC	H	-	-	-
Inox Rostfreistahl Stainless steel	M	20 - 30	D1/70	3xØ
Aluminium	N	100 - 180	D1/40	2xØ
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	50 - 85	D1/120	1xØ
Matière synthétique Synthetisches Material Synthetic material	N	350 - 750	D1/40	2xØ
Métaux précieux Edelmetalle Precious metals	N	60 - 90	D1/100	0.85xØ
Titane Titan Titanium	S	20 - 40	D1/120	1.3xØ
Alliage de nickel Nickel-Legierung Nickel alloy	S	20	D1/120	1xØ
Matière exotique Exotisches material Exotic material	O	5 - 10	D1/100	1xØ

Avec revêtement, augmenter les valeurs de 20-30%
Mit Beschichtung, Daten um 20-30% erhöhen
With coating, increase data by 20-30%

Centreurs NC
NC-Zentrierbohrer
NC centering drills

2680-60

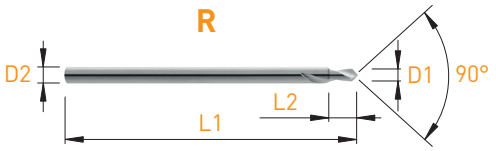


MD VHM HM	λ 25°	60°

D1 h6	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	39	**2680-2.00-60**	■	■	■
3.00	10.00	3.00	39	**2680-3.00-60**	■	■	■
4.00	12.00	4.00	50	**2680-4.00-60**	■	■	■
5.00	14.00	5.00	50	**2680-5.00-60**	■	■	■
6.00	16.00	6.00	50	**2680-6.00-60**	■	■	■

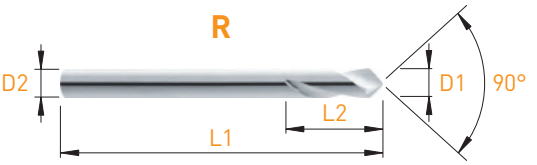
Centreurs NC
NC-Zentrierbohrer
NC centering drills

1680-90° / 2680-90°



MD VHM HM | λ 25° | 90°

D1 h6	L2	D2 h5	L1	R Art. N°	R N
0.50	1.50	2.00	39	**2680-0.50-90**	■
0.60	1.50	2.00	39	**2680-0.60-90**	■
0.70	1.50	2.00	39	**2680-0.70-90**	■
0.80	1.50	2.00	39	**2680-0.80-90**	■
0.90	1.50	2.00	39	**2680-0.90-90**	■
1.00	3.00	2.00	39	**2680-1.00-90**	■
1.10	3.00	2.00	39	**2680-1.10-90**	■
1.20	3.00	2.00	39	**2680-1.20-90**	■
1.30	3.00	2.00	39	**2680-1.30-90**	■
1.40	3.00	2.00	39	**2680-1.40-90**	■
1.50	4.00	2.00	39	**2680-1.50-90**	■
1.60	4.00	2.00	39	**2680-1.60-90**	■
1.70	4.00	2.00	39	**2680-1.70-90**	■
1.80	4.00	2.00	39	**2680-1.80-90**	■
1.90	4.00	2.00	39	**2680-1.90-90**	■

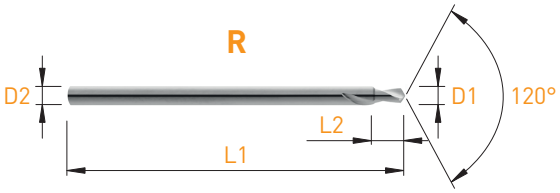


MD VHM HM | λ 25° | 90°

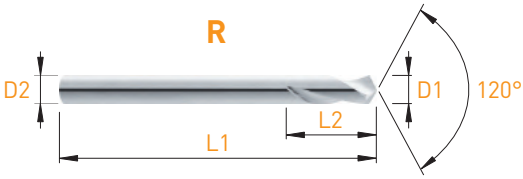
D1	L2	D2 h6	L1	L Art. N°	L N	R Art. N°	R N	R TiAlN	R STF	HSS R Art. N°	HSS R N
2.00	8.00	2.00	39	**1680-2.00-90**	■	**2680-2.00-90**	■	■	■	-	
2.50	8.00	2.50	39	**1680-2.50-90**	■	**2680-2.50-90**	■	■	■	-	
3.00	10.00	3.00	39	**1680-3.00-90**	■	**2680-3.00-90**	■	■	■	**2680-3.00-90-HSS**	■
4.00	12.00	4.00	50	**1680-4.00-90**	■	**2680-4.00-90**	■	■	■	**2680-4.00-90-HSS**	■
5.00	15.00	5.00	50	**1680-5.00-90**	■	**2680-5.00-90**	■	■	■	**2680-5.00-90-HSS**	■
6.00	16.00	6.00	57	**1680-6.00-90**	■	**2680-6.00-90**	■	■	■	**2680-6.00-90-HSS**	■
8.00	20.00	8.00	63	**1680-8.00-90**	■	**2680-8.00-90**	■			**2680-8.00-90-HSS**	■
10.00	22.00	10.00	72	**1680-10.00-90**	■	**2680-10.00-90**	■			**2680-10.00-90-HSS**	■
12.00	24.00	12.00	73	**1680-12.00-90**	■	**2680-12.00-90**	■			**2680-12.00-90-HSS**	■
16.00	26.00	16.00	82	**1680-16.00-90**	■	**2680-16.00-90**	■			-	
20.00	30.00	20.00	92	-		**2680-20.00-90**	■			-	

Centreurs NC
NC-Zentrierbohrer
NC centering drills

1680-120° / 2680-120°



MD VHM HM	λ 25°	120°		R	
D1 h6	L2	D2 h5	L1	Art. N°	N
0.50	1.50	2.00	39	**2680-0.50-120**	■
0.60	1.50	2.00	39	**2680-0.60-120**	■
0.70	1.50	2.00	39	**2680-0.70-120**	■
0.80	1.50	2.00	39	**2680-0.80-120**	■
0.90	1.50	2.00	39	**2680-0.90-120**	■
1.00	3.00	2.00	39	**2680-1.00-120**	■
1.10	3.00	2.00	39	**2680-1.10-120**	■
1.20	3.00	2.00	39	**2680-1.20-120**	■
1.30	3.00	2.00	39	**2680-1.30-120**	■
1.40	3.00	2.00	39	**2680-1.40-120**	■
1.50	4.00	2.00	39	**2680-1.50-120**	■
1.60	4.00	2.00	39	**2680-1.60-120**	■
1.70	4.00	2.00	39	**2680-1.70-120**	■
1.80	4.00	2.00	39	**2680-1.80-120**	■
1.90	4.00	2.00	39	**2680-1.90-120**	■

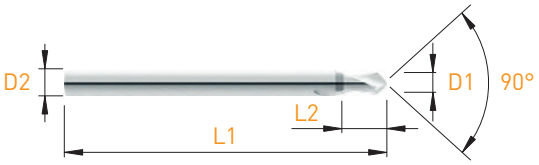


MD VHM HM	λ 25°	120°		L		R			
D1	L2	D2 h6	L1	Art. N°	N	Art. N°	N	TiAlN	STF
2.00	8.00	2.00	39	**1680-2.00-120**	■	**2680-2.00-120**	■	■	■
2.50	8.00	2.50	39	**1680-2.50-120**	■	**2680-2.50-120**	■	■	■
3.00	10.00	3.00	39	**1680-3.00-120**	■	**2680-3.00-120**	■	■	■
4.00	12.00	4.00	50	**1680-4.00-120**	■	**2680-4.00-120**	■	■	■
5.00	15.00	5.00	50	**1680-5.00-120**	■	**2680-5.00-120**	■	■	■
6.00	16.00	6.00	57	**1680-6.00-120**	■	**2680-6.00-120**	■	■	■
8.00	20.00	8.00	63	**1680-8.00-120**	■	**2680-8.00-120**	■		
10.00	22.00	10.00	72	**1680-10.00-120**	■	**2680-10.00-120**	■		
12.00	24.00	12.00	73	**1680-12.00-120**	■	**2680-12.00-120**	■		
16.00	26.00	16.00	82	-		**2680-16.00-120**	■		
20.00	30.00	20.00	92	-		**2680-20.00-120**	■		

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

2690



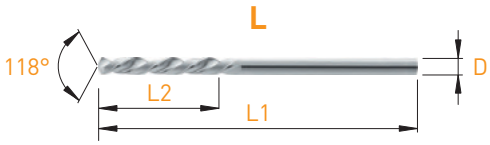
MD VHM HM	λ 32°	* λ 25°	90°

D1 h5	L2	D2 h5	L1	Art. N°	N	TiAlN	STF
0.50*	2.50	2.00	39	**2690-0.50**	■		
0.60*	2.50	2.00	39	**2690-0.60**	■		
0.70*	2.50	2.00	39	**2690-0.70**	■		
0.80*	2.50	2.00	39	**2690-0.80**	■		
0.90*	2.50	2.00	39	**2690-0.90**	■		
1.00	3.00	2.00	39	**2690-1.00**	■		
1.10	3.00	2.00	39	**2690-1.10**	■		
1.20	3.00	2.00	39	**2690-1.20**	■		
1.30	3.00	2.00	39	**2690-1.30**	■		
1.40	3.00	2.00	39	**2690-1.40**	■		
1.50	3.50	2.00	39	**2690-1.50**	■		
1.60	3.50	2.00	39	**2690-1.60**	■		
1.70	3.50	2.00	39	**2690-1.70**	■		
1.80	3.50	2.00	39	**2690-1.80**	■		
1.90	3.50	2.00	39	**2690-1.90**	■		
2.00	-	2.00	39	**2690-2.00**	■	■	■
2.10	4.00	3.00	39	**2690-2.10**	■	■	■
2.20	4.00	3.00	39	**2690-2.20**	■	■	■
2.30	4.00	3.00	39	**2690-2.30**	■	■	■
2.40	4.00	3.00	39	**2690-2.40**	■	■	■
2.50	4.00	3.00	39	**2690-2.50**	■	■	■
2.60	4.00	3.00	39	**2690-2.60**	■	■	■
2.70	4.00	3.00	39	**2690-2.70**	■	■	■
2.80	4.00	3.00	39	**2690-2.80**	■	■	■
2.90	4.00	3.00	39	**2690-2.90**	■	■	■
3.00	-	3.00	50	**2690-3.00**	■	■	■

Forets cylindriques
Zylindrische Bohrer
Cylindrical drills

Coupe à gauche
Linksschneidend
Left hand cut

1010



MD
VHM
HM

λ 25°

Z=2

118°

L

D h6	L1	L2	Art. N°	Z
0.50	30	5.00	**1010-0.50**	■
0.55	30	5.00	**1010-0.55**	■
0.60	30	5.00	**1010-0.60**	■
0.65	30	6.00	**1010-0.65**	■
0.70	30	6.00	**1010-0.70**	■
0.75	30	8.00	**1010-0.75**	■
0.80	30	8.00	**1010-0.80**	■
0.85	30	9.00	**1010-0.85**	■
0.90	30	9.00	**1010-0.90**	■
0.95	30	10.00	**1010-0.95**	■
1.00	30	10.00	**1010-1.00**	■
1.05	30	10.00	**1010-1.05**	■
1.10	30	10.00	**1010-1.10**	■
1.15	30	12.00	**1010-1.15**	■
1.20	30	12.00	**1010-1.20**	■
1.25	30	12.00	**1010-1.25**	■
1.30	30	12.00	**1010-1.30**	■
1.35	30	12.00	**1010-1.35**	■
1.40	30	12.00	**1010-1.40**	■
1.45	30	12.00	**1010-1.45**	■
1.50	30	12.00	**1010-1.50**	■
1.55	40	16.00	**1010-1.55**	■
1.60	40	16.00	**1010-1.60**	■
1.65	40	16.00	**1010-1.65**	■
1.70	40	16.00	**1010-1.70**	■
1.75	40	16.00	**1010-1.75**	■
1.80	40	16.00	**1010-1.80**	■
1.85	40	16.00	**1010-1.85**	■
1.90	40	16.00	**1010-1.90**	■
1.95	40	16.00	**1010-1.95**	■
2.00	40	16.00	**1010-2.00**	■
2.05	40	18.00	**1010-2.05**	■
2.10	40	18.00	**1010-2.10**	■
2.15	40	18.00	**1010-2.15**	■
2.20	40	18.00	**1010-2.20**	■
2.25	40	18.00	**1010-2.25**	■
2.30	40	18.00	**1010-2.30**	■
2.35	40	18.00	**1010-2.35**	■
2.40	40	18.00	**1010-2.40**	■
2.45	40	18.00	**1010-2.45**	■
2.50	40	18.00	**1010-2.50**	■

L

D h6	L1	L2	Art. N°	Z
2.55	45	18.00	**1010-2.55**	■
2.60	45	18.00	**1010-2.60**	■
2.65	45	18.00	**1010-2.65**	■
2.70	45	18.00	**1010-2.70**	■
2.75	45	18.00	**1010-2.75**	■
2.80	45	18.00	**1010-2.80**	■
2.85	45	18.00	**1010-2.85**	■
2.90	45	18.00	**1010-2.90**	■
2.95	45	18.00	**1010-2.95**	■
3.00	45	18.00	**1010-3.00**	■
3.10	50	20.00	**1010-3.10**	■
3.20	50	20.00	**1010-3.20**	■
3.30	50	20.00	**1010-3.30**	■
3.40	50	20.00	**1010-3.40**	■
3.50	50	20.00	**1010-3.50**	■
3.60	50	20.00	**1010-3.60**	■
3.70	50	20.00	**1010-3.70**	■
3.80	50	20.00	**1010-3.80**	■
3.90	50	20.00	**1010-3.90**	■
4.00	50	20.00	**1010-4.00**	■
4.10	50	25.00	**1010-4.10**	■
4.20	50	25.00	**1010-4.20**	■
4.30	50	25.00	**1010-4.30**	■
4.40	50	25.00	**1010-4.40**	■
4.50	50	25.00	**1010-4.50**	■
4.60	50	25.00	**1010-4.60**	■
4.70	50	25.00	**1010-4.70**	■
4.80	50	25.00	**1010-4.80**	■
4.90	50	25.00	**1010-4.90**	■
5.00	50	25.00	**1010-5.00**	■
5.10	50	25.00	**1010-5.10**	■
5.20	50	25.00	**1010-5.20**	■
5.30	50	25.00	**1010-5.30**	■
5.40	50	25.00	**1010-5.40**	■
5.50	50	25.00	**1010-5.50**	■
5.60	50	25.00	**1010-5.60**	■
5.70	50	25.00	**1010-5.70**	■
5.80	50	25.00	**1010-5.80**	■
5.90	50	25.00	**1010-5.90**	■
6.00	50	25.00	**1010-6.00**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Forets cylindriques
Zylindrische Bohrer
Cylindrical drills

2010

MD VHM HM | λ 25°/35° | Z=2 | 118°

D h6	L1	L2	Art. N°	N
0.50	30	5.00	**2010-0.50**	■
0.55	30	5.00	**2010-0.55**	■
0.60	30	5.00	**2010-0.60**	■
0.65	30	6.00	**2010-0.65**	■
0.70	30	6.00	**2010-0.70**	■
0.75	30	8.00	**2010-0.75**	■
0.80	30	8.00	**2010-0.80**	■
0.85	30	9.00	**2010-0.85**	■
0.90	30	9.00	**2010-0.90**	■
0.95	30	10.00	**2010-0.95**	■
1.00	30	10.00	**2010-1.00**	■
1.05	30	10.00	**2010-1.05**	■
1.10	30	10.00	**2010-1.10**	■
1.15	30	12.00	**2010-1.15**	■
1.20	30	12.00	**2010-1.20**	■
1.25	30	12.00	**2010-1.25**	■
1.30	30	12.00	**2010-1.30**	■
1.35	30	12.00	**2010-1.35**	■
1.40	30	12.00	**2010-1.40**	■
1.45	30	12.00	**2010-1.45**	■
1.50	30	12.00	**2010-1.50**	■
1.55	40	16.00	**2010-1.55**	■
1.60	40	16.00	**2010-1.60**	■
1.65	40	16.00	**2010-1.65**	■
1.70	40	16.00	**2010-1.70**	■
1.75	40	16.00	**2010-1.75**	■
1.80	40	16.00	**2010-1.80**	■
1.85	40	16.00	**2010-1.85**	■
1.90	40	16.00	**2010-1.90**	■
1.95	40	16.00	**2010-1.95**	■
2.00	40	16.00	**2010-2.00**	■
2.05	40	18.00	**2010-2.05**	■
2.10	40	18.00	**2010-2.10**	■
2.15	40	18.00	**2010-2.15**	■
2.20	40	18.00	**2010-2.20**	■
2.25	40	18.00	**2010-2.25**	■
2.30	40	18.00	**2010-2.30**	■
2.35	40	18.00	**2010-2.35**	■
2.40	40	18.00	**2010-2.40**	■
2.45	40	18.00	**2010-2.45**	■
2.50	40	18.00	**2010-2.50**	■

D h6	L1	L2	Art. N°	N
2.55	45	18.00	**2010-2.55**	■
2.60	45	18.00	**2010-2.60**	■
2.65	45	18.00	**2010-2.65**	■
2.70	45	18.00	**2010-2.70**	■
2.75	45	18.00	**2010-2.75**	■
2.80	45	18.00	**2010-2.80**	■
2.85	45	18.00	**2010-2.85**	■
2.90	45	18.00	**2010-2.90**	■
2.95	45	18.00	**2010-2.95**	■
3.00	45	18.00	**2010-3.00**	■
3.10	50	20.00	**2010-3.10**	■
3.20	50	20.00	**2010-3.20**	■
3.30	50	20.00	**2010-3.30**	■
3.40	50	20.00	**2010-3.40**	■
3.50	50	20.00	**2010-3.50**	■
3.60	50	20.00	**2010-3.60**	■
3.70	50	20.00	**2010-3.70**	■
3.80	50	20.00	**2010-3.80**	■
3.90	50	20.00	**2010-3.90**	■
4.00	50	20.00	**2010-4.00**	■
4.10	50	25.00	**2010-4.10**	■
4.20	50	25.00	**2010-4.20**	■
4.30	50	25.00	**2010-4.30**	■
4.40	50	25.00	**2010-4.40**	■
4.50	50	25.00	**2010-4.50**	■
4.60	50	25.00	**2010-4.60**	■
4.70	50	25.00	**2010-4.70**	■
4.80	50	25.00	**2010-4.80**	■
4.90	50	25.00	**2010-4.90**	■
5.00	50	25.00	**2010-5.00**	■
5.10	50	25.00	**2010-5.10**	■
5.20	50	25.00	**2010-5.20**	■
5.30	50	25.00	**2010-5.30**	■
5.40	50	25.00	**2010-5.40**	■
5.50	50	25.00	**2010-5.50**	■
5.60	50	25.00	**2010-5.60**	■
5.70	50	25.00	**2010-5.70**	■
5.80	50	25.00	**2010-5.80**	■
5.90	50	25.00	**2010-5.90**	■
6.00	50	25.00	**2010-6.00**	■

Micro-forets
Mikrobohrer
Micro drills

2011 / 2012

MD VHM HM | λ 30° | Z=2 | 120°

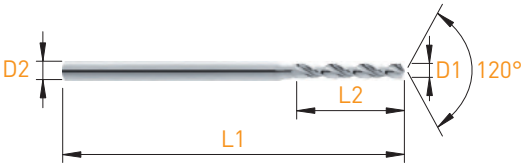
D1 h6	L2	D2 h6	L1	Art. N°	N
0.80	2.50	2.00	30	**2011-0.80**	■
0.90	2.50	2.00	30	**2011-0.90**	■
1.00	2.50	2.00	30	**2011-1.00**	■
1.10	2.50	2.00	30	**2011-1.10**	■
1.20	2.50	2.00	30	**2011-1.20**	■
1.30	2.50	2.00	30	**2011-1.30**	■
1.40	2.50	2.00	30	**2011-1.40**	■
1.50	2.50	2.00	30	**2011-1.50**	■
2.00	2.50	2.00	30	**2011-2.00**	■

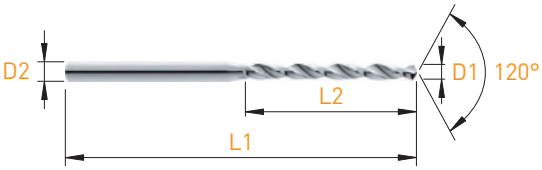
MD VHM HM | λ 24° | Z=2 | 120°

D1 h6	L2	D2 h6	L1	Art. N°	N
0.50	1.70	1.50	30	**2012-0.50**	■
0.55	1.90	1.50	30	**2012-0.55**	■
0.60	1.90	1.50	30	**2012-0.60**	■
0.65	1.90	1.50	30	**2012-0.65**	■
0.70	2.40	1.50	30	**2012-0.70**	■
0.75	2.40	1.50	30	**2012-0.75**	■
0.80	2.60	1.50	30	**2012-0.80**	■
0.85	2.60	1.50	30	**2012-0.85**	■
0.90	3.00	1.50	30	**2012-0.90**	■
0.95	3.00	1.50	30	**2012-0.95**	■
1.00	3.40	1.50	30	**2012-1.00**	■
1.10	3.80	1.50	30	**2012-1.10**	■
1.20	4.20	1.50	30	**2012-1.20**	■
1.30	4.20	1.50	30	**2012-1.30**	■
1.40	4.70	1.50	30	**2012-1.40**	■
1.50	4.70	2.00	38	**2012-1.50**	■
1.60	5.40	2.00	38	**2012-1.60**	■
1.70	5.40	2.00	38	**2012-1.70**	■
1.80	6.50	2.00	38	**2012-1.80**	■
1.90	6.50	2.00	38	**2012-1.90**	■
2.00	6.50	3.00	38	**2012-2.00**	■
2.10	6.50	3.00	38	**2012-2.10**	■
2.20	6.50	3.00	38	**2012-2.20**	■
2.30	6.50	3.00	38	**2012-2.30**	■
2.40	6.50	3.00	38	**2012-2.40**	■

Micro-forets
Mikrobohrer
Micro drills

2013 / 2014





MD VHM HM | λ 35° | Z=2 | 120°

D1 h6	L2	D2 h6	L1	Art. N°	N
0.40	3.60	1.00	25	**2013-0.40**	■
0.45	3.60	1.00	25	**2013-0.45**	■
0.50	4.00	1.00	25	**2013-0.50**	■
0.55	4.50	1.00	25	**2013-0.55**	■
0.60	4.50	1.50	30	**2013-0.60**	■
0.65	5.00	1.50	30	**2013-0.65**	■
0.70	5.60	1.50	30	**2013-0.70**	■
0.75	5.60	1.50	30	**2013-0.75**	■
0.80	6.30	1.50	30	**2013-0.80**	■
0.85	6.30	1.50	30	**2013-0.85**	■
0.90	7.10	1.50	30	**2013-0.90**	■
0.95	7.10	1.50	30	**2013-0.95**	■
1.00	8.00	1.50	30	**2013-1.00**	■
1.05	8.00	1.50	30	**2013-1.05**	■
1.10	9.00	1.50	30	**2013-1.10**	■
1.15	9.00	1.50	30	**2013-1.15**	■
1.20	10.00	1.50	30	**2013-1.20**	■
1.25	10.00	1.50	30	**2013-1.25**	■
1.30	10.00	1.50	30	**2013-1.30**	■
1.35	11.20	1.50	30	**2013-1.35**	■
1.40	11.20	1.50	30	**2013-1.40**	■
1.45	11.20	1.50	30	**2013-1.45**	■
1.50	12.00	2.00	38	**2013-1.50**	■
1.60	12.00	2.00	38	**2013-1.60**	■
1.70	12.00	2.00	38	**2013-1.70**	■
1.80	12.00	2.00	38	**2013-1.80**	■
1.90	12.00	2.00	38	**2013-1.90**	■

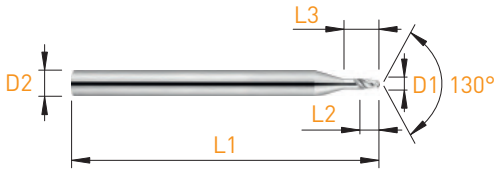
MD VHM HM | λ 30° | Z=2 | 120°

D1 h6	L2	D2 h6	L1	Art. N°	N
0.50	6.00	1.50	30	**2014-0.50**	■
0.55	6.50	1.50	30	**2014-0.55**	■
0.60	6.50	1.50	30	**2014-0.60**	■
0.65	7.50	1.50	30	**2014-0.65**	■
0.70	8.50	1.50	30	**2014-0.70**	■
0.75	8.50	1.50	30	**2014-0.75**	■
0.80	9.50	1.50	30	**2014-0.80**	■
0.85	9.50	1.50	30	**2014-0.85**	■
0.90	10.50	1.50	30	**2014-0.90**	■
0.95	10.50	1.50	30	**2014-0.95**	■
1.00	12.00	1.50	38	**2014-1.00**	■
1.05	12.00	1.50	38	**2014-1.05**	■
1.10	13.50	1.50	38	**2014-1.10**	■
1.15	13.50	1.50	38	**2014-1.15**	■
1.20	15.00	1.50	38	**2014-1.20**	■
1.25	15.00	1.50	38	**2014-1.25**	■
1.30	17.00	1.50	38	**2014-1.30**	■
1.35	17.00	1.50	38	**2014-1.35**	■
1.40	17.00	1.50	38	**2014-1.40**	■
1.45	17.00	1.50	38	**2014-1.45**	■
1.50	18.00	2.00	38	**2014-1.50**	■
1.55	18.00	2.00	38	**2014-1.55**	■
1.60	18.00	2.00	38	**2014-1.60**	■
1.65	18.00	2.00	38	**2014-1.65**	■
1.70	18.00	2.00	38	**2014-1.70**	■
1.75	18.00	2.00	38	**2014-1.75**	■
1.80	18.00	2.00	38	**2014-1.80**	■
1.85	18.00	2.00	38	**2014-1.85**	■
1.90	18.00	2.00	38	**2014-1.90**	■
1.95	18.00	2.00	38	**2014-1.95**	■

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

Ø 0.10 - Ø 0.99 mm

2020



MD VHM HM	λ 30°	2xD1	Z=2	130°	

D1 +0.005 / 0	L2	L3	L1	D2 h6	Art. N°	N
0.10	0.35	0.55	38	3.00	**2020-0.10**	■
0.11	0.35	0.55	38	3.00	**2020-0.11**	■
0.12	0.35	0.55	38	3.00	**2020-0.12**	■
0.13	0.40	0.60	38	3.00	**2020-0.13**	■
0.14	0.40	0.60	38	3.00	**2020-0.14**	■
0.15	0.40	0.60	38	3.00	**2020-0.15**	■
0.16	0.40	0.60	38	3.00	**2020-0.16**	■
0.17	0.50	0.70	38	3.00	**2020-0.17**	■
0.18	0.50	0.70	38	3.00	**2020-0.18**	■
0.19	0.50	0.70	38	3.00	**2020-0.19**	■
0.20	0.55	0.75	38	3.00	**2020-0.20**	■
0.21	0.55	0.75	38	3.00	**2020-0.21**	■
0.22	0.60	0.80	38	3.00	**2020-0.22**	■
0.23	0.60	0.80	38	3.00	**2020-0.23**	■
0.24	0.60	0.80	38	3.00	**2020-0.24**	■
0.25	0.70	0.90	38	3.00	**2020-0.25**	■
0.26	0.70	0.90	38	3.00	**2020-0.26**	■
0.27	0.70	0.90	38	3.00	**2020-0.27**	■
0.28	0.80	1.00	38	3.00	**2020-0.28**	■
0.29	0.80	1.00	38	3.00	**2020-0.29**	■
0.30	0.90	1.20	38	3.00	**2020-0.30**	■
0.31	0.90	1.20	38	3.00	**2020-0.31**	■
0.32	0.90	1.20	38	3.00	**2020-0.32**	■
0.33	0.90	1.20	38	3.00	**2020-0.33**	■
0.34	0.90	1.35	38	3.00	**2020-0.34**	■
0.35	0.90	1.35	38	3.00	**2020-0.35**	■
0.36	0.95	1.35	38	3.00	**2020-0.36**	■
0.37	0.95	1.35	38	3.00	**2020-0.37**	■
0.38	0.95	1.50	38	3.00	**2020-0.38**	■
0.39	0.95	1.50	38	3.00	**2020-0.39**	■
0.40	0.80	1.60	38	3.00	**2020-0.40**	■
0.41	0.82	1.60	38	3.00	**2020-0.41**	■
0.42	0.84	1.60	38	3.00	**2020-0.42**	■
0.43	0.86	1.60	38	3.00	**2020-0.43**	■
0.44	0.88	1.60	38	3.00	**2020-0.44**	■
0.45	0.90	1.60	38	3.00	**2020-0.45**	■
0.46	0.92	1.70	38	3.00	**2020-0.46**	■
0.47	0.94	1.70	38	3.00	**2020-0.47**	■
0.48	0.96	1.70	38	3.00	**2020-0.48**	■

D1 +0.005 / 0	L2	L3	L1	D2 h6	Art. N°	N
0.49	0.98	1.70	38	3.00	**2020-0.49**	■
0.50	1.00	1.70	38	3.00	**2020-0.50**	■
0.51	1.02	1.80	38	3.00	**2020-0.51**	■
0.52	1.04	1.80	38	3.00	**2020-0.52**	■
0.53	1.06	1.80	38	3.00	**2020-0.53**	■
0.54	1.08	1.80	38	3.00	**2020-0.54**	■
0.55	1.10	1.80	38	3.00	**2020-0.55**	■
0.56	1.12	1.90	38	3.00	**2020-0.56**	■
0.57	1.14	1.90	38	3.00	**2020-0.57**	■
0.58	1.16	1.90	38	3.00	**2020-0.58**	■
0.59	1.18	1.90	38	3.00	**2020-0.59**	■
0.60	1.20	1.90	38	3.00	**2020-0.60**	■
0.61	1.22	2.00	38	3.00	**2020-0.61**	■
0.62	1.24	2.00	38	3.00	**2020-0.62**	■
0.63	1.26	2.00	38	3.00	**2020-0.63**	■
0.64	1.28	2.00	38	3.00	**2020-0.64**	■
0.65	1.30	2.00	38	3.00	**2020-0.65**	■
0.66	1.32	2.10	38	3.00	**2020-0.66**	■
0.67	1.34	2.10	38	3.00	**2020-0.67**	■
0.68	1.36	2.10	38	3.00	**2020-0.68**	■
0.69	1.38	2.10	38	3.00	**2020-0.69**	■
0.70	1.40	2.10	38	3.00	**2020-0.70**	■
0.71	1.42	2.20	38	3.00	**2020-0.71**	■
0.72	1.44	2.20	38	3.00	**2020-0.72**	■
0.73	1.46	2.20	38	3.00	**2020-0.73**	■
0.74	1.48	2.20	38	3.00	**2020-0.74**	■
0.75	1.50	2.20	38	3.00	**2020-0.75**	■
0.76	1.52	2.30	38	3.00	**2020-0.76**	■
0.77	1.54	2.30	38	3.00	**2020-0.77**	■
0.78	1.56	2.30	38	3.00	**2020-0.78**	■
0.79	1.58	2.30	38	3.00	**2020-0.79**	■
0.80	1.60	2.30	38	3.00	**2020-0.80**	■
0.81	1.62	2.40	38	3.00	**2020-0.81**	■
0.82	1.64	2.40	38	3.00	**2020-0.82**	■
0.83	1.66	2.40	38	3.00	**2020-0.83**	■
0.84	1.68	2.40	38	3.00	**2020-0.84**	■
0.85	1.70	2.40	38	3.00	**2020-0.85**	■
0.86	1.72	2.50	38	3.00	**2020-0.86**	■
0.87	1.74	2.50	38	3.00	**2020-0.87**	■
0.88	1.76	2.50	38	3.00	**2020-0.88**	■
0.89	1.78	2.50	38	3.00	**2020-0.89**	■
0.90	1.80	2.50	38	3.00	**2020-0.90**	■
0.91	1.82	2.60	38	3.00	**2020-0.91**	■
0.92	1.84	2.60	38	3.00	**2020-0.92**	■
0.93	1.86	2.60	38	3.00	**2020-0.93**	■
0.94	1.88	2.60	38	3.00	**2020-0.94**	■
0.95	1.90	2.60	38	3.00	**2020-0.95**	■
0.96	1.92	2.70	38	3.00	**2020-0.96**	■
0.97	1.94	2.70	38	3.00	**2020-0.97**	■
0.98	1.96	2.70	38	3.00	**2020-0.98**	■
0.99	1.98	2.70	38	3.00	**2020-0.99**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets de préperçage
Mikro Pilotbohrer
Micro pilot drill

Ø 1.00 - Ø 2.00 mm

2020

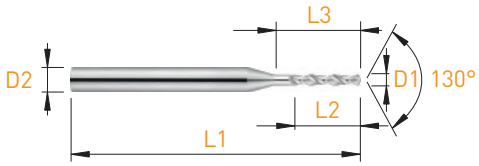
D1 +0.005 / 0	L2	L3	L1	D2 h6	Art. N°	Z
1.00	2.00	2.70	38	3.00	**2020-1.00**	■
1.01	2.02	3.50	38	3.00	**2020-1.01**	■
1.02	2.04	3.50	38	3.00	**2020-1.02**	■
1.03	2.06	3.50	38	3.00	**2020-1.03**	■
1.04	2.08	3.50	38	3.00	**2020-1.04**	■
1.05	2.10	3.50	38	3.00	**2020-1.05**	■
1.06	2.12	3.60	38	3.00	**2020-1.06**	■
1.07	2.14	3.60	38	3.00	**2020-1.07**	■
1.08	2.16	3.60	38	3.00	**2020-1.08**	■
1.09	2.18	3.60	38	3.00	**2020-1.09**	■
1.10	2.20	3.60	38	3.00	**2020-1.10**	■
1.11	2.22	3.70	38	3.00	**2020-1.11**	■
1.12	2.24	3.70	38	3.00	**2020-1.12**	■
1.13	2.26	3.70	38	3.00	**2020-1.13**	■
1.14	2.28	3.70	38	3.00	**2020-1.14**	■
1.15	2.30	3.70	38	3.00	**2020-1.15**	■
1.16	2.32	3.80	38	3.00	**2020-1.16**	■
1.17	2.34	3.80	38	3.00	**2020-1.17**	■
1.18	2.36	3.80	38	3.00	**2020-1.18**	■
1.19	2.38	3.80	38	3.00	**2020-1.19**	■
1.20	2.40	3.80	38	3.00	**2020-1.20**	■
1.21	2.42	4.20	38	3.00	**2020-1.21**	■
1.22	2.44	4.20	38	3.00	**2020-1.22**	■
1.23	2.46	4.20	38	3.00	**2020-1.23**	■
1.24	2.48	4.20	38	3.00	**2020-1.24**	■
1.25	2.50	4.20	38	3.00	**2020-1.25**	■
1.26	2.52	4.30	38	3.00	**2020-1.26**	■
1.27	2.54	4.30	38	3.00	**2020-1.27**	■
1.28	2.56	4.30	38	3.00	**2020-1.28**	■
1.29	2.58	4.30	38	3.00	**2020-1.29**	■
1.30	2.60	4.30	38	3.00	**2020-1.30**	■
1.31	2.62	4.40	38	3.00	**2020-1.31**	■
1.32	2.64	4.40	38	3.00	**2020-1.32**	■
1.33	2.66	4.40	38	3.00	**2020-1.33**	■
1.34	2.68	4.40	38	3.00	**2020-1.34**	■
1.35	2.70	4.40	38	3.00	**2020-1.35**	■
1.36	2.72	4.50	38	3.00	**2020-1.36**	■
1.37	2.74	4.50	38	3.00	**2020-1.37**	■
1.38	2.76	4.50	38	3.00	**2020-1.38**	■
1.39	2.78	4.50	38	3.00	**2020-1.39**	■
1.40	2.80	4.50	38	3.00	**2020-1.40**	■
1.41	2.82	4.60	38	3.00	**2020-1.41**	■
1.42	2.84	4.60	38	3.00	**2020-1.42**	■
1.43	2.86	4.60	38	3.00	**2020-1.43**	■
1.44	2.88	4.60	38	3.00	**2020-1.44**	■
1.45	2.90	4.60	38	3.00	**2020-1.45**	■
1.46	2.92	4.70	38	3.00	**2020-1.46**	■
1.47	2.94	4.70	38	3.00	**2020-1.47**	■
1.48	2.96	4.70	38	3.00	**2020-1.48**	■
1.49	2.98	4.70	38	3.00	**2020-1.49**	■
1.50	3.00	4.70	38	3.00	**2020-1.50**	■

D1 +0.005 / 0	L2	L3	L1	D2 h6	Art. N°	Z
1.51	3.02	5.10	38	3.00	**2020-1.51**	■
1.52	3.04	5.10	38	3.00	**2020-1.52**	■
1.53	3.06	5.10	38	3.00	**2020-1.53**	■
1.54	3.08	5.10	38	3.00	**2020-1.54**	■
1.55	3.10	5.10	38	3.00	**2020-1.55**	■
1.56	3.12	5.20	38	3.00	**2020-1.56**	■
1.57	3.14	5.20	38	3.00	**2020-1.57**	■
1.58	3.16	5.20	38	3.00	**2020-1.58**	■
1.59	3.18	5.20	38	3.00	**2020-1.59**	■
1.60	3.20	5.20	38	3.00	**2020-1.60**	■
1.61	3.22	5.30	38	3.00	**2020-1.61**	■
1.62	3.24	5.30	38	3.00	**2020-1.62**	■
1.63	3.26	5.30	38	3.00	**2020-1.63**	■
1.64	3.28	5.30	38	3.00	**2020-1.64**	■
1.65	3.30	5.30	38	3.00	**2020-1.65**	■
1.66	3.32	5.40	38	3.00	**2020-1.66**	■
1.67	3.34	5.40	38	3.00	**2020-1.67**	■
1.68	3.36	5.40	38	3.00	**2020-1.68**	■
1.69	3.38	5.40	38	3.00	**2020-1.69**	■
1.70	3.40	5.40	38	3.00	**2020-1.70**	■
1.71	3.42	5.50	38	3.00	**2020-1.71**	■
1.72	3.44	5.50	38	3.00	**2020-1.72**	■
1.73	3.46	5.50	38	3.00	**2020-1.73**	■
1.74	3.48	5.50	38	3.00	**2020-1.74**	■
1.75	3.50	5.50	38	3.00	**2020-1.75**	■
1.76	3.52	5.60	38	3.00	**2020-1.76**	■
1.77	3.54	5.60	38	3.00	**2020-1.77**	■
1.78	3.56	5.60	38	3.00	**2020-1.78**	■
1.79	3.58	5.60	38	3.00	**2020-1.79**	■
1.80	3.60	5.60	38	3.00	**2020-1.80**	■
1.81	3.62	5.70	38	3.00	**2020-1.81**	■
1.82	3.64	5.70	38	3.00	**2020-1.82**	■
1.83	3.66	5.70	38	3.00	**2020-1.83**	■
1.84	3.68	5.70	38	3.00	**2020-1.84**	■
1.85	3.70	5.70	38	3.00	**2020-1.85**	■
1.86	3.72	5.80	38	3.00	**2020-1.86**	■
1.87	3.74	5.80	38	3.00	**2020-1.87**	■
1.88	3.76	5.80	38	3.00	**2020-1.88**	■
1.89	3.78	5.80	38	3.00	**2020-1.89**	■
1.90	3.80	5.80	38	3.00	**2020-1.90**	■
1.91	3.82	5.90	38	3.00	**2020-1.91**	■
1.92	3.84	5.90	38	3.00	**2020-1.92**	■
1.93	3.86	5.90	38	3.00	**2020-1.93**	■
1.94	3.88	5.90	38	3.00	**2020-1.94**	■
1.95	3.90	5.90	38	3.00	**2020-1.95**	■
1.96	3.92	6.00	38	3.00	**2020-1.96**	■
1.97	3.94	6.00	38	3.00	**2020-1.97**	■
1.98	3.96	6.00	38	3.00	**2020-1.98**	■
1.99	3.98	6.00	38	3.00	**2020-1.99**	■
2.00	4.00	6.00	38	3.00	**2020-2.00**	■

Micro-forets
Mikrobohrer
Micro drills

Ø 0.10 - Ø 0.99 mm

2023



MD VHM HM	λ 35°	6xD1	Z=2	130°	

D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	N
0.10	0.50	0.70	38	3.00	**2023-0.10**	■
0.11	0.50	0.70	38	3.00	**2023-0.11**	■
0.12	0.50	0.70	38	3.00	**2023-0.12**	■
0.13	0.80	1.00	38	3.00	**2023-0.13**	■
0.14	0.80	1.00	38	3.00	**2023-0.14**	■
0.15	0.80	1.00	38	3.00	**2023-0.15**	■
0.16	1.10	1.40	38	3.00	**2023-0.16**	■
0.17	1.10	1.40	38	3.00	**2023-0.17**	■
0.18	1.10	1.40	38	3.00	**2023-0.18**	■
0.19	1.10	1.40	38	3.00	**2023-0.19**	■
0.20	1.50	1.80	38	3.00	**2023-0.20**	■
0.21	1.50	1.80	38	3.00	**2023-0.21**	■
0.22	1.50	1.80	38	3.00	**2023-0.22**	■
0.23	1.50	1.80	38	3.00	**2023-0.23**	■
0.24	1.50	1.80	38	3.00	**2023-0.24**	■
0.25	1.90	2.20	38	3.00	**2023-0.25**	■
0.26	1.90	2.20	38	3.00	**2023-0.26**	■
0.27	1.90	2.20	38	3.00	**2023-0.27**	■
0.28	1.90	2.20	38	3.00	**2023-0.28**	■
0.29	1.90	2.20	38	3.00	**2023-0.29**	■
0.30	1.80	2.40	38	3.00	**2023-0.30**	■
0.31	1.80	2.40	38	3.00	**2023-0.31**	■
0.32	1.80	2.40	38	3.00	**2023-0.32**	■
0.33	1.80	2.40	38	3.00	**2023-0.33**	■
0.34	1.80	2.40	38	3.00	**2023-0.34**	■
0.35	2.20	2.80	38	3.00	**2023-0.35**	■
0.36	2.20	2.80	38	3.00	**2023-0.36**	■
0.37	2.20	2.80	38	3.00	**2023-0.37**	■
0.38	2.20	2.80	38	3.00	**2023-0.38**	■
0.39	2.70	3.60	38	3.00	**2023-0.39**	■
0.40	2.70	3.60	38	3.00	**2023-0.40**	■
0.41	2.70	3.60	38	3.00	**2023-0.41**	■
0.42	2.70	3.60	38	3.00	**2023-0.42**	■
0.43	2.70	3.60	38	3.00	**2023-0.43**	■
0.44	2.70	3.60	38	3.00	**2023-0.44**	■
0.45	2.70	3.60	38	3.00	**2023-0.45**	■
0.46	2.70	3.60	38	3.00	**2023-0.46**	■
0.47	2.70	3.60	38	3.00	**2023-0.47**	■
0.48	2.70	3.60	38	3.00	**2023-0.48**	■

D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	N
0.49	3.20	4.00	38	3.00	**2023-0.49**	■
0.50	3.20	4.00	38	3.00	**2023-0.50**	■
0.51	3.20	4.00	38	3.00	**2023-0.51**	■
0.52	3.20	4.00	38	3.00	**2023-0.52**	■
0.53	3.20	4.00	38	3.00	**2023-0.53**	■
0.54	3.60	4.50	38	3.00	**2023-0.54**	■
0.55	3.60	4.50	38	3.00	**2023-0.55**	■
0.56	3.60	4.50	38	3.00	**2023-0.56**	■
0.57	3.60	4.50	38	3.00	**2023-0.57**	■
0.58	3.60	4.50	38	3.00	**2023-0.58**	■
0.59	3.60	4.50	38	3.00	**2023-0.59**	■
0.60	3.60	4.50	38	3.00	**2023-0.60**	■
0.61	3.90	5.00	38	3.00	**2023-0.61**	■
0.62	3.90	5.00	38	3.00	**2023-0.62**	■
0.63	3.90	5.00	38	3.00	**2023-0.63**	■
0.64	3.90	5.00	38	3.00	**2023-0.64**	■
0.65	3.90	5.00	38	3.00	**2023-0.65**	■
0.66	3.90	5.00	38	3.00	**2023-0.66**	■
0.67	3.90	5.00	38	3.00	**2023-0.67**	■
0.68	4.50	5.60	38	3.00	**2023-0.68**	■
0.69	4.50	5.60	38	3.00	**2023-0.69**	■
0.70	4.50	5.60	38	3.00	**2023-0.70**	■
0.71	4.50	5.60	38	3.00	**2023-0.71**	■
0.72	4.50	5.60	38	3.00	**2023-0.72**	■
0.73	4.50	5.60	38	3.00	**2023-0.73**	■
0.74	4.50	5.60	38	3.00	**2023-0.74**	■
0.75	4.50	5.60	38	3.00	**2023-0.75**	■
0.76	5.00	6.30	38	3.00	**2023-0.76**	■
0.77	5.00	6.30	38	3.00	**2023-0.77**	■
0.78	5.00	6.30	38	3.00	**2023-0.78**	■
0.79	5.00	6.30	38	3.00	**2023-0.79**	■
0.80	5.00	6.30	38	3.00	**2023-0.80**	■
0.81	5.00	6.30	38	3.00	**2023-0.81**	■
0.82	5.00	6.30	38	3.00	**2023-0.82**	■
0.83	5.00	6.30	38	3.00	**2023-0.83**	■
0.84	5.00	6.30	38	3.00	**2023-0.84**	■
0.85	5.00	6.30	38	3.00	**2023-0.85**	■
0.86	5.70	7.10	38	3.00	**2023-0.86**	■
0.87	5.70	7.10	38	3.00	**2023-0.87**	■
0.88	5.70	7.10	38	3.00	**2023-0.88**	■
0.89	5.70	7.10	38	3.00	**2023-0.89**	■
0.90	5.70	7.10	38	3.00	**2023-0.90**	■
0.91	5.70	7.10	38	3.00	**2023-0.91**	■
0.92	5.70	7.10	38	3.00	**2023-0.92**	■
0.93	5.70	7.10	38	3.00	**2023-0.93**	■
0.94	5.70	7.10	38	3.00	**2023-0.94**	■
0.95	5.70	7.10	38	3.00	**2023-0.95**	■
0.96	6.50	8.00	38	3.00	**2023-0.96**	■
0.97	6.50	8.00	38	3.00	**2023-0.97**	■
0.98	6.50	8.00	38	3.00	**2023-0.98**	■
0.99	6.50	8.00	38	3.00	**2023-0.99**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets
Mikrobohrer
Micro drills

Ø 1.00 - Ø 2.00 mm

2023

D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	Z
1.00	6.50	8.00	38	3.00	**2023-1.00**	■
1.01	6.50	8.00	38	3.00	**2023-1.01**	■
1.02	6.50	8.00	38	3.00	**2023-1.02**	■
1.03	6.50	8.00	38	3.00	**2023-1.03**	■
1.04	6.50	8.00	38	3.00	**2023-1.04**	■
1.05	6.50	8.00	38	3.00	**2023-1.05**	■
1.06	7.30	9.00	38	3.00	**2023-1.06**	■
1.07	7.30	9.00	38	3.00	**2023-1.07**	■
1.08	7.30	9.00	38	3.00	**2023-1.08**	■
1.09	7.30	9.00	38	3.00	**2023-1.09**	■
1.10	7.30	9.00	38	3.00	**2023-1.10**	■
1.11	7.30	9.00	38	3.00	**2023-1.11**	■
1.12	7.30	9.00	38	3.00	**2023-1.12**	■
1.13	7.30	9.00	38	3.00	**2023-1.13**	■
1.14	7.30	9.00	38	3.00	**2023-1.14**	■
1.15	7.30	9.00	38	3.00	**2023-1.15**	■
1.16	8.20	10.00	38	3.00	**2023-1.16**	■
1.17	8.20	10.00	38	3.00	**2023-1.17**	■
1.18	8.20	10.00	38	3.00	**2023-1.18**	■
1.19	8.20	10.00	38	3.00	**2023-1.19**	■
1.20	8.20	10.00	38	3.00	**2023-1.20**	■
1.21	8.20	10.00	38	3.00	**2023-1.21**	■
1.22	8.20	10.00	38	3.00	**2023-1.22**	■
1.23	8.20	10.00	38	3.00	**2023-1.23**	■
1.24	8.20	10.00	38	3.00	**2023-1.24**	■
1.25	8.20	10.00	38	3.00	**2023-1.25**	■
1.26	8.20	10.00	38	3.00	**2023-1.26**	■
1.27	8.20	10.00	38	3.00	**2023-1.27**	■
1.28	8.20	10.00	38	3.00	**2023-1.28**	■
1.29	8.20	10.00	38	3.00	**2023-1.29**	■
1.30	8.20	10.00	38	3.00	**2023-1.30**	■
1.31	9.20	11.20	38	3.00	**2023-1.31**	■
1.32	9.20	11.20	38	3.00	**2023-1.32**	■
1.33	9.20	11.20	38	3.00	**2023-1.33**	■
1.34	9.20	11.20	38	3.00	**2023-1.34**	■
1.35	9.20	11.20	38	3.00	**2023-1.35**	■
1.36	9.20	11.20	38	3.00	**2023-1.36**	■
1.37	9.20	11.20	38	3.00	**2023-1.37**	■
1.38	9.20	11.20	38	3.00	**2023-1.38**	■
1.39	9.20	11.20	38	3.00	**2023-1.39**	■
1.40	9.20	11.20	38	3.00	**2023-1.40**	■
1.41	9.20	11.20	38	3.00	**2023-1.41**	■
1.42	9.20	11.20	38	3.00	**2023-1.42**	■
1.43	9.20	11.20	38	3.00	**2023-1.43**	■
1.44	9.20	11.20	38	3.00	**2023-1.44**	■
1.45	9.20	11.20	38	3.00	**2023-1.45**	■
1.46	9.20	11.20	38	3.00	**2023-1.46**	■
1.47	9.20	11.20	38	3.00	**2023-1.47**	■
1.48	9.20	11.20	38	3.00	**2023-1.48**	■
1.49	9.20	11.20	38	3.00	**2023-1.49**	■
1.50	9.20	11.20	38	3.00	**2023-1.50**	■

D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	Z
1.51	11.20	13.40	38	3.00	**2023-1.51**	■
1.52	11.20	13.40	38	3.00	**2023-1.52**	■
1.53	11.20	13.40	38	3.00	**2023-1.53**	■
1.54	11.20	13.40	38	3.00	**2023-1.54**	■
1.55	11.20	13.40	38	3.00	**2023-1.55**	■
1.56	11.20	13.40	38	3.00	**2023-1.56**	■
1.57	11.20	13.40	38	3.00	**2023-1.57**	■
1.58	11.20	13.40	38	3.00	**2023-1.58**	■
1.59	11.20	13.40	38	3.00	**2023-1.59**	■
1.60	11.20	13.40	38	3.00	**2023-1.60**	■
1.61	11.20	13.40	38	3.00	**2023-1.61**	■
1.62	11.20	13.40	38	3.00	**2023-1.62**	■
1.63	11.20	13.40	38	3.00	**2023-1.63**	■
1.64	11.20	13.40	38	3.00	**2023-1.64**	■
1.65	11.20	13.40	38	3.00	**2023-1.65**	■
1.66	11.20	13.40	38	3.00	**2023-1.66**	■
1.67	11.20	13.40	38	3.00	**2023-1.67**	■
1.68	11.20	13.40	38	3.00	**2023-1.68**	■
1.69	11.20	13.40	38	3.00	**2023-1.69**	■
1.70	11.20	13.40	38	3.00	**2023-1.70**	■
1.71	11.20	13.40	38	3.00	**2023-1.71**	■
1.72	11.20	13.40	38	3.00	**2023-1.72**	■
1.73	11.20	13.40	38	3.00	**2023-1.73**	■
1.74	11.20	13.40	38	3.00	**2023-1.74**	■
1.75	11.20	13.40	38	3.00	**2023-1.75**	■
1.76	11.20	13.40	38	3.00	**2023-1.76**	■
1.77	11.20	13.40	38	3.00	**2023-1.77**	■
1.78	11.20	13.40	38	3.00	**2023-1.78**	■
1.79	11.20	13.40	38	3.00	**2023-1.79**	■
1.80	11.20	13.40	38	3.00	**2023-1.80**	■
1.81	11.20	13.40	38	3.00	**2023-1.81**	■
1.82	11.20	13.40	38	3.00	**2023-1.82**	■
1.83	11.20	13.40	38	3.00	**2023-1.83**	■
1.84	11.20	13.40	38	3.00	**2023-1.84**	■
1.85	11.20	13.40	38	3.00	**2023-1.85**	■
1.86	11.20	13.40	38	3.00	**2023-1.86**	■
1.87	11.20	13.40	38	3.00	**2023-1.87**	■
1.88	11.20	13.40	38	3.00	**2023-1.88**	■
1.89	11.20	13.40	38	3.00	**2023-1.89**	■
1.90	11.20	13.40	38	3.00	**2023-1.90**	■
1.91	11.20	13.40	38	3.00	**2023-1.91**	■
1.92	11.20	13.40	38	3.00	**2023-1.92**	■
1.93	11.20	13.40	38	3.00	**2023-1.93**	■
1.94	11.20	13.40	38	3.00	**2023-1.94**	■
1.95	11.20	13.40	38	3.00	**2023-1.95**	■
1.96	11.20	13.40	38	3.00	**2023-1.96**	■
1.97	11.20	13.40	38	3.00	**2023-1.97**	■
1.98	11.20	13.40	38	3.00	**2023-1.98**	■
1.99	11.20	13.40	38	3.00	**2023-1.99**	■
2.00	11.20	13.40	38	3.00	**2023-2.00**	■

Micro-forets
Mikrobohrer
Micro drills

Ø 2.01 - Ø 3.00 mm

2023

D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	N
2.01	12.50	14.00	38	3.00	**2023-2.01**	■
2.02	12.50	14.00	38	3.00	**2023-2.02**	■
2.03	12.50	14.00	38	3.00	**2023-2.03**	■
2.04	12.50	14.00	38	3.00	**2023-2.04**	■
2.05	12.50	14.00	38	3.00	**2023-2.05**	■
2.06	12.50	14.00	38	3.00	**2023-2.06**	■
2.07	12.50	14.00	38	3.00	**2023-2.07**	■
2.08	12.50	14.00	38	3.00	**2023-2.08**	■
2.09	12.50	14.00	38	3.00	**2023-2.09**	■
2.10	12.50	14.00	38	3.00	**2023-2.10**	■
2.11	12.50	14.00	38	3.00	**2023-2.11**	■
2.12	12.50	14.00	38	3.00	**2023-2.12**	■
2.13	12.50	14.00	38	3.00	**2023-2.13**	■
2.14	12.50	14.00	38	3.00	**2023-2.14**	■
2.15	12.50	14.00	38	3.00	**2023-2.15**	■
2.16	12.50	14.00	38	3.00	**2023-2.16**	■
2.17	12.50	14.00	38	3.00	**2023-2.17**	■
2.18	12.50	14.00	38	3.00	**2023-2.18**	■
2.19	12.50	14.00	38	3.00	**2023-2.19**	■
2.20	12.50	14.00	38	3.00	**2023-2.20**	■
2.21	12.50	14.00	38	3.00	**2023-2.21**	■
2.22	12.50	14.00	38	3.00	**2023-2.22**	■
2.23	12.50	14.00	38	3.00	**2023-2.23**	■
2.24	12.50	14.00	38	3.00	**2023-2.24**	■
2.25	12.50	14.00	38	3.00	**2023-2.25**	■
2.26	12.50	14.00	38	3.00	**2023-2.26**	■
2.27	12.50	14.00	38	3.00	**2023-2.27**	■
2.28	12.50	14.00	38	3.00	**2023-2.28**	■
2.29	12.50	14.00	38	3.00	**2023-2.29**	■
2.30	12.50	14.00	38	3.00	**2023-2.30**	■
2.31	12.50	14.00	38	3.00	**2023-2.31**	■
2.32	12.50	14.00	38	3.00	**2023-2.32**	■
2.33	12.50	14.00	38	3.00	**2023-2.33**	■
2.34	12.50	14.00	38	3.00	**2023-2.34**	■
2.35	12.50	14.00	38	3.00	**2023-2.35**	■
2.36	12.50	14.00	38	3.00	**2023-2.36**	■
2.37	12.50	14.00	38	3.00	**2023-2.37**	■
2.38	12.50	14.00	38	3.00	**2023-2.38**	■
2.39	12.50	14.00	38	3.00	**2023-2.39**	■
2.40	12.50	14.00	38	3.00	**2023-2.40**	■
2.41	12.50	14.00	38	3.00	**2023-2.41**	■
2.42	12.50	14.00	38	3.00	**2023-2.42**	■
2.43	12.50	14.00	38	3.00	**2023-2.43**	■
2.44	12.50	14.00	38	3.00	**2023-2.44**	■
2.45	12.50	14.00	38	3.00	**2023-2.45**	■
2.46	12.50	14.00	38	3.00	**2023-2.46**	■
2.47	12.50	14.00	38	3.00	**2023-2.47**	■
2.48	12.50	14.00	38	3.00	**2023-2.48**	■
2.49	12.50	14.00	38	3.00	**2023-2.49**	■
2.50	14.00	17.00	38	3.00	**2023-2.50**	■

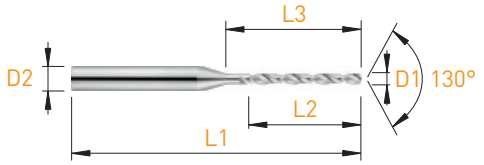
D1 0 / -0.004	L2	L3	L1	D2 h6	Art. N°	N
2.51	14.00	17.00	38	3.00	**2023-2.51**	■
2.52	14.00	17.00	38	3.00	**2023-2.52**	■
2.53	14.00	17.00	38	3.00	**2023-2.53**	■
2.54	14.00	17.00	38	3.00	**2023-2.54**	■
2.55	14.00	17.00	38	3.00	**2023-2.55**	■
2.56	14.00	17.00	38	3.00	**2023-2.56**	■
2.57	14.00	17.00	38	3.00	**2023-2.57**	■
2.58	14.00	17.00	38	3.00	**2023-2.58**	■
2.59	14.00	17.00	38	3.00	**2023-2.59**	■
2.60	14.00	17.00	38	3.00	**2023-2.60**	■
2.61	14.00	17.00	38	3.00	**2023-2.61**	■
2.62	14.00	17.00	38	3.00	**2023-2.62**	■
2.63	14.00	17.00	38	3.00	**2023-2.63**	■
2.64	14.00	17.00	38	3.00	**2023-2.64**	■
2.65	14.00	17.00	38	3.00	**2023-2.65**	■
2.66	14.00	17.00	38	3.00	**2023-2.66**	■
2.67	14.00	17.00	38	3.00	**2023-2.67**	■
2.68	14.00	17.00	38	3.00	**2023-2.68**	■
2.69	14.00	17.00	38	3.00	**2023-2.69**	■
2.70	14.00	17.00	38	3.00	**2023-2.70**	■
2.71	14.00	17.00	38	3.00	**2023-2.71**	■
2.72	14.00	17.00	38	3.00	**2023-2.72**	■
2.73	14.00	17.00	38	3.00	**2023-2.73**	■
2.74	14.00	17.00	38	3.00	**2023-2.74**	■
2.75	14.00	17.00	38	3.00	**2023-2.75**	■
2.76	14.00	17.00	38	3.00	**2023-2.76**	■
2.77	14.00	17.00	38	3.00	**2023-2.77**	■
2.78	14.00	17.00	38	3.00	**2023-2.78**	■
2.79	14.00	17.00	38	3.00	**2023-2.79**	■
2.80	14.00	17.00	38	3.00	**2023-2.80**	■
2.81	14.00	17.00	38	3.00	**2023-2.81**	■
2.82	14.00	17.00	38	3.00	**2023-2.82**	■
2.83	14.00	17.00	38	3.00	**2023-2.83**	■
2.84	14.00	17.00	38	3.00	**2023-2.84**	■
2.85	14.00	17.00	38	3.00	**2023-2.85**	■
2.86	14.00	17.00	38	3.00	**2023-2.86**	■
2.87	14.00	17.00	38	3.00	**2023-2.87**	■
2.88	14.00	17.00	38	3.00	**2023-2.88**	■
2.89	14.00	17.00	38	3.00	**2023-2.89**	■
2.90	14.00	17.00	38	3.00	**2023-2.90**	■
2.91	14.00	17.00	38	3.00	**2023-2.91**	■
2.92	14.00	17.00	38	3.00	**2023-2.92**	■
2.93	14.00	17.00	38	3.00	**2023-2.93**	■
2.94	14.00	17.00	38	3.00	**2023-2.94**	■
2.95	14.00	17.00	38	3.00	**2023-2.95**	■
2.96	14.00	17.00	38	3.00	**2023-2.96**	■
2.97	14.00	17.00	38	3.00	**2023-2.97**	■
2.98	14.00	17.00	38	3.00	**2023-2.98**	■
2.99	14.00	17.00	38	3.00	**2023-2.99**	■
3.00	14.00	17.00	38	3.00	**2023-3.00**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets
Mikrobohrer
Micro drills

Ø 0.20 - Ø 1.09 mm

2026



MD VHM HM	λ 25°	Z=2	12xD1	130°	

D1 h6	L2	L3	L1	D2 h6	Art. N°	N
0.20	2.40	3.50	38	3.00	**2026-0.20**	■
0.21	2.50	3.50	38	3.00	**2026-0.21**	■
0.22	2.70	3.50	38	3.00	**2026-0.22**	■
0.23	2.80	3.50	38	3.00	**2026-0.23**	■
0.24	2.90	4.00	38	3.00	**2026-0.24**	■
0.25	3.00	4.00	38	3.00	**2026-0.25**	■
0.26	3.10	4.00	38	3.00	**2026-0.26**	■
0.27	3.30	4.00	38	3.00	**2026-0.27**	■
0.28	3.40	4.50	38	3.00	**2026-0.28**	■
0.29	3.50	4.50	38	3.00	**2026-0.29**	■
0.30	3.60	4.50	38	3.00	**2026-0.30**	■
0.31	3.70	4.50	38	3.00	**2026-0.31**	■
0.32	3.90	5.00	38	3.00	**2026-0.32**	■
0.33	4.00	5.00	38	3.00	**2026-0.33**	■
0.34	4.10	5.00	38	3.00	**2026-0.34**	■
0.35	4.20	5.00	38	3.00	**2026-0.35**	■
0.36	4.30	5.50	38	3.00	**2026-0.36**	■
0.37	4.50	5.50	38	3.00	**2026-0.37**	■
0.38	4.60	5.50	38	3.00	**2026-0.38**	■
0.39	4.70	5.50	38	3.00	**2026-0.39**	■
0.40	4.80	6.00	38	3.00	**2026-0.40**	■
0.41	4.90	6.00	38	3.00	**2026-0.41**	■
0.42	5.10	6.00	38	3.00	**2026-0.42**	■
0.43	5.20	6.00	38	3.00	**2026-0.43**	■
0.44	5.30	6.50	38	3.00	**2026-0.44**	■
0.45	5.40	6.50	38	3.00	**2026-0.45**	■
0.46	5.50	6.50	38	3.00	**2026-0.46**	■
0.47	5.70	6.50	38	3.00	**2026-0.47**	■
0.48	5.80	7.00	38	3.00	**2026-0.48**	■
0.49	5.90	7.00	38	3.00	**2026-0.49**	■
0.50	6.00	7.00	38	3.00	**2026-0.50**	■
0.51	6.10	7.00	38	3.00	**2026-0.51**	■
0.52	6.30	7.50	38	3.00	**2026-0.52**	■
0.53	6.40	7.50	38	3.00	**2026-0.53**	■
0.54	6.50	7.50	38	3.00	**2026-0.54**	■
0.55	6.60	7.50	38	3.00	**2026-0.55**	■
0.56	6.70	8.00	38	3.00	**2026-0.56**	■
0.57	6.90	8.00	38	3.00	**2026-0.57**	■
0.58	7.00	8.00	38	3.00	**2026-0.58**	■

D1 h6	L2	L3	L1	D2 h6	Art. N°	N
0.59	7.10	8.00	38	3.00	**2026-0.59**	■
0.60	7.20	9.00	38	3.00	**2026-0.60**	■
0.61	7.30	9.00	38	3.00	**2026-0.61**	■
0.62	7.50	9.00	38	3.00	**2026-0.62**	■
0.63	7.60	9.00	38	3.00	**2026-0.63**	■
0.64	7.70	9.50	38	3.00	**2026-0.64**	■
0.65	7.80	9.50	38	3.00	**2026-0.65**	■
0.66	7.90	9.50	38	3.00	**2026-0.66**	■
0.67	8.10	9.50	38	3.00	**2026-0.67**	■
0.68	8.20	10.00	38	3.00	**2026-0.68**	■
0.69	8.30	10.00	38	3.00	**2026-0.69**	■
0.70	8.40	10.00	38	3.00	**2026-0.70**	■
0.71	8.50	10.00	38	3.00	**2026-0.71**	■
0.72	8.70	10.50	38	3.00	**2026-0.72**	■
0.73	8.80	10.50	38	3.00	**2026-0.73**	■
0.74	8.90	10.50	38	3.00	**2026-0.74**	■
0.75	9.00	10.50	38	3.00	**2026-0.75**	■
0.76	9.10	11.00	38	3.00	**2026-0.76**	■
0.77	9.30	11.00	38	3.00	**2026-0.77**	■
0.78	9.40	11.00	38	3.00	**2026-0.78**	■
0.79	9.50	11.00	38	3.00	**2026-0.79**	■
0.80	9.60	11.50	38	3.00	**2026-0.80**	■
0.81	9.70	11.50	38	3.00	**2026-0.81**	■
0.82	9.90	11.50	38	3.00	**2026-0.82**	■
0.83	10.00	11.50	38	3.00	**2026-0.83**	■
0.84	10.10	12.00	38	3.00	**2026-0.84**	■
0.85	10.20	12.00	38	3.00	**2026-0.85**	■
0.86	10.30	12.00	38	3.00	**2026-0.86**	■
0.87	10.50	12.00	38	3.00	**2026-0.87**	■
0.88	10.60	12.50	38	3.00	**2026-0.88**	■
0.89	10.70	12.50	38	3.00	**2026-0.89**	■
0.90	10.80	12.50	38	3.00	**2026-0.90**	■
0.91	10.90	12.50	38	3.00	**2026-0.91**	■
0.92	11.10	13.00	38	3.00	**2026-0.92**	■
0.93	11.20	13.00	38	3.00	**2026-0.93**	■
0.94	11.30	13.00	38	3.00	**2026-0.94**	■
0.95	11.40	13.00	38	3.00	**2026-0.95**	■
0.96	11.50	13.50	38	3.00	**2026-0.96**	■
0.97	11.70	13.50	38	3.00	**2026-0.97**	■
0.98	11.80	13.50	38	3.00	**2026-0.98**	■
0.99	11.90	13.50	38	3.00	**2026-0.99**	■
1.00	12.00	14.50	38	3.00	**2026-1.00**	■
1.01	12.10	14.50	38	3.00	**2026-1.01**	■
1.02	12.30	14.50	38	3.00	**2026-1.02**	■
1.03	12.40	14.50	38	3.00	**2026-1.03**	■
1.04	12.50	15.00	38	3.00	**2026-1.04**	■
1.05	12.60	15.00	38	3.00	**2026-1.05**	■
1.06	12.70	15.00	38	3.00	**2026-1.06**	■
1.07	12.90	15.00	38	3.00	**2026-1.07**	■
1.08	13.00	15.50	38	3.00	**2026-1.08**	■
1.09	13.10	15.50	38	3.00	**2026-1.09**	■

Micro-forets
Mikrobohrer
Micro drills

Ø 1.10 - Ø 2.00 mm

2026

D1 h6	L2	L3	L1	D2 h6	Art. N°	N
1.10	13.20	15.50	38	3.00	**2026-1.10**	■
1.11	13.30	15.50	38	3.00	**2026-1.11**	■
1.12	13.50	16.00	38	3.00	**2026-1.12**	■
1.13	13.60	16.00	38	3.00	**2026-1.13**	■
1.14	13.70	16.00	38	3.00	**2026-1.14**	■
1.15	13.80	16.00	38	3.00	**2026-1.15**	■
1.16	13.90	16.50	38	3.00	**2026-1.16**	■
1.17	14.10	16.50	38	3.00	**2026-1.17**	■
1.18	14.20	16.50	38	3.00	**2026-1.18**	■
1.19	14.30	16.50	38	3.00	**2026-1.19**	■
1.20	14.40	17.00	38	3.00	**2026-1.20**	■
1.21	14.50	17.00	38	3.00	**2026-1.21**	■
1.22	14.70	17.00	38	3.00	**2026-1.22**	■
1.23	14.80	17.00	38	3.00	**2026-1.23**	■
1.24	14.90	17.50	38	3.00	**2026-1.24**	■
1.25	15.00	17.50	38	3.00	**2026-1.25**	■
1.26	15.10	17.50	50	3.00	**2026-1.26**	■
1.27	15.30	17.50	50	3.00	**2026-1.27**	■
1.28	15.40	18.00	50	3.00	**2026-1.28**	■
1.29	15.50	18.00	50	3.00	**2026-1.29**	■
1.30	15.60	18.00	50	3.00	**2026-1.30**	■
1.31	15.70	18.00	50	3.00	**2026-1.31**	■
1.32	15.90	18.50	50	3.00	**2026-1.32**	■
1.33	16.00	18.50	50	3.00	**2026-1.33**	■
1.34	16.10	18.50	50	3.00	**2026-1.34**	■
1.35	16.20	18.50	50	3.00	**2026-1.35**	■
1.36	16.30	19.00	50	3.00	**2026-1.36**	■
1.37	16.50	19.00	50	3.00	**2026-1.37**	■
1.38	16.60	19.00	50	3.00	**2026-1.38**	■
1.39	16.70	19.00	50	3.00	**2026-1.39**	■
1.40	16.80	19.50	50	3.00	**2026-1.40**	■
1.41	16.90	19.50	50	3.00	**2026-1.41**	■
1.42	17.10	19.50	50	3.00	**2026-1.42**	■
1.43	17.20	19.50	50	3.00	**2026-1.43**	■
1.44	17.30	20.00	50	3.00	**2026-1.44**	■
1.45	17.40	20.00	50	3.00	**2026-1.45**	■
1.46	17.50	20.00	50	3.00	**2026-1.46**	■
1.47	17.70	20.00	50	3.00	**2026-1.47**	■
1.48	17.80	20.50	50	3.00	**2026-1.48**	■
1.49	17.90	20.50	50	3.00	**2026-1.49**	■
1.50	18.00	21.00	50	3.00	**2026-1.50**	■
1.51	18.10	21.00	50	3.00	**2026-1.51**	■
1.52	18.30	21.00	50	3.00	**2026-1.52**	■
1.53	18.40	21.00	50	3.00	**2026-1.53**	■
1.54	18.50	21.50	50	3.00	**2026-1.54**	■
1.55	18.60	21.50	50	3.00	**2026-1.55**	■
1.56	18.70	21.50	50	3.00	**2026-1.56**	■
1.57	18.90	21.50	50	3.00	**2026-1.57**	■
1.58	19.00	22.00	50	3.00	**2026-1.58**	■
1.59	19.10	22.00	50	3.00	**2026-1.59**	■
1.60	19.20	22.00	50	3.00	**2026-1.60**	■

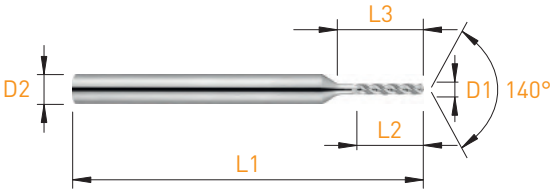
D1 h6	L2	L3	L1	D2 h6	Art. N°	N
1.61	19.30	22.00	50	3.00	**2026-1.61**	■
1.62	19.40	22.50	50	3.00	**2026-1.62**	■
1.63	19.60	22.50	50	3.00	**2026-1.63**	■
1.64	19.70	22.50	50	3.00	**2026-1.64**	■
1.65	19.80	22.50	50	3.00	**2026-1.65**	■
1.66	19.90	23.00	50	3.00	**2026-1.66**	■
1.67	20.10	23.00	50	3.00	**2026-1.67**	■
1.68	20.20	23.00	50	3.00	**2026-1.68**	■
1.69	20.30	23.00	50	3.00	**2026-1.69**	■
1.70	20.40	23.50	50	3.00	**2026-1.70**	■
1.71	20.50	23.50	50	3.00	**2026-1.71**	■
1.72	20.70	23.50	50	3.00	**2026-1.72**	■
1.73	20.80	23.50	50	3.00	**2026-1.73**	■
1.74	20.90	24.00	50	3.00	**2026-1.74**	■
1.75	21.00	24.00	50	3.00	**2026-1.75**	■
1.76	21.10	24.00	50	3.00	**2026-1.76**	■
1.77	21.30	24.00	50	3.00	**2026-1.77**	■
1.78	21.40	24.50	50	3.00	**2026-1.78**	■
1.79	21.50	24.50	50	3.00	**2026-1.79**	■
1.80	21.60	25.00	50	3.00	**2026-1.80**	■
1.81	21.70	25.00	50	3.00	**2026-1.81**	■
1.82	21.90	25.00	50	3.00	**2026-1.82**	■
1.83	22.00	25.00	50	3.00	**2026-1.83**	■
1.84	22.10	25.50	50	3.00	**2026-1.84**	■
1.85	22.20	25.50	50	3.00	**2026-1.85**	■
1.86	22.30	25.50	50	3.00	**2026-1.86**	■
1.87	22.50	25.50	50	3.00	**2026-1.87**	■
1.88	22.60	26.00	50	3.00	**2026-1.88**	■
1.89	22.70	26.00	50	3.00	**2026-1.89**	■
1.90	22.80	26.00	50	3.00	**2026-1.90**	■
1.91	22.90	26.00	50	3.00	**2026-1.91**	■
1.92	23.10	26.50	50	3.00	**2026-1.92**	■
1.93	23.20	26.50	50	3.00	**2026-1.93**	■
1.94	23.30	26.50	50	3.00	**2026-1.94**	■
1.95	23.40	26.50	50	3.00	**2026-1.95**	■
1.96	23.50	27.00	50	3.00	**2026-1.96**	■
1.97	23.70	27.00	50	3.00	**2026-1.97**	■
1.98	23.80	27.00	50	3.00	**2026-1.98**	■
1.99	23.90	27.00	50	3.00	**2026-1.99**	■
2.00	24.00	27.00	50	3.00	**2026-2.00**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets
Mikrobohrer
Micro drills

Ø 0.20 - Ø 1.09 mm

2030



MD VHM HM	λ 35°	5xD1	Z=3	140°

D1 h6	L2	L3	L1	D2 h6	Art. N°	N
0.20	1.00	1.50	38	3.00	**2030-0.20**	■
0.21	1.05	1.50	38	3.00	**2030-0.21**	■
0.22	1.10	1.60	38	3.00	**2030-0.22**	■
0.23	1.15	1.60	38	3.00	**2030-0.23**	■
0.24	1.20	1.70	38	3.00	**2030-0.24**	■
0.25	1.25	1.70	38	3.00	**2030-0.25**	■
0.26	1.30	1.80	38	3.00	**2030-0.26**	■
0.27	1.35	1.80	38	3.00	**2030-0.27**	■
0.28	1.40	1.90	38	3.00	**2030-0.28**	■
0.29	1.45	1.90	38	3.00	**2030-0.29**	■
0.30	1.50	2.00	38	3.00	**2030-0.30**	■
0.31	1.55	2.00	38	3.00	**2030-0.31**	■
0.32	1.60	2.10	38	3.00	**2030-0.32**	■
0.33	1.65	2.10	38	3.00	**2030-0.33**	■
0.34	1.70	2.20	38	3.00	**2030-0.34**	■
0.35	1.75	2.20	38	3.00	**2030-0.35**	■
0.36	1.80	2.30	38	3.00	**2030-0.36**	■
0.37	1.85	2.30	38	3.00	**2030-0.37**	■
0.38	1.90	2.40	38	3.00	**2030-0.38**	■
0.39	1.95	2.40	38	3.00	**2030-0.39**	■
0.40	2.00	2.50	38	3.00	**2030-0.40**	■
0.41	2.05	2.50	38	3.00	**2030-0.41**	■
0.42	2.10	2.60	38	3.00	**2030-0.42**	■
0.43	2.15	2.60	38	3.00	**2030-0.43**	■
0.44	2.20	2.70	38	3.00	**2030-0.44**	■
0.45	2.25	2.70	38	3.00	**2030-0.45**	■
0.46	2.30	2.80	38	3.00	**2030-0.46**	■
0.47	2.35	2.80	38	3.00	**2030-0.47**	■
0.48	2.40	2.90	38	3.00	**2030-0.48**	■
0.49	2.45	2.90	38	3.00	**2030-0.49**	■
0.50	2.50	3.00	38	3.00	**2030-0.50**	■
0.51	2.55	3.00	38	3.00	**2030-0.51**	■
0.52	2.60	3.10	38	3.00	**2030-0.52**	■
0.53	2.65	3.10	38	3.00	**2030-0.53**	■
0.54	2.70	3.20	38	3.00	**2030-0.54**	■
0.55	2.75	3.20	38	3.00	**2030-0.55**	■
0.56	2.80	3.30	38	3.00	**2030-0.56**	■
0.57	2.85	3.30	38	3.00	**2030-0.57**	■
0.58	2.90	3.40	38	3.00	**2030-0.58**	■

D1 h6	L2	L3	L1	D2 h6	Art. N°	N
0.59	2.95	3.40	38	3.00	**2030-0.59**	■
0.60	3.00	3.50	38	3.00	**2030-0.60**	■
0.61	3.05	3.50	38	3.00	**2030-0.61**	■
0.62	3.10	3.60	38	3.00	**2030-0.62**	■
0.63	3.15	3.60	38	3.00	**2030-0.63**	■
0.64	3.20	3.70	38	3.00	**2030-0.64**	■
0.65	3.25	3.70	38	3.00	**2030-0.65**	■
0.66	3.30	3.80	38	3.00	**2030-0.66**	■
0.67	3.35	3.80	38	3.00	**2030-0.67**	■
0.68	3.40	3.90	38	3.00	**2030-0.68**	■
0.69	3.45	3.90	38	3.00	**2030-0.69**	■
0.70	3.50	4.00	38	3.00	**2030-0.70**	■
0.71	3.55	4.00	38	3.00	**2030-0.71**	■
0.72	3.60	4.10	38	3.00	**2030-0.72**	■
0.73	3.65	4.10	38	3.00	**2030-0.73**	■
0.74	3.70	4.20	38	3.00	**2030-0.74**	■
0.75	3.75	4.20	38	3.00	**2030-0.75**	■
0.76	3.80	4.30	38	3.00	**2030-0.76**	■
0.77	3.85	4.30	38	3.00	**2030-0.77**	■
0.78	3.90	4.40	38	3.00	**2030-0.78**	■
0.79	3.95	4.40	38	3.00	**2030-0.79**	■
0.80	4.00	4.50	38	3.00	**2030-0.80**	■
0.81	4.05	4.50	38	3.00	**2030-0.81**	■
0.82	4.10	4.60	38	3.00	**2030-0.82**	■
0.83	4.15	4.60	38	3.00	**2030-0.83**	■
0.84	4.20	4.70	38	3.00	**2030-0.84**	■
0.85	4.25	4.70	38	3.00	**2030-0.85**	■
0.86	4.30	4.80	38	3.00	**2030-0.86**	■
0.87	4.35	4.80	38	3.00	**2030-0.87**	■
0.88	4.40	4.90	38	3.00	**2030-0.88**	■
0.89	4.45	4.90	38	3.00	**2030-0.89**	■
0.90	4.50	5.00	38	3.00	**2030-0.90**	■
0.91	4.55	5.00	38	3.00	**2030-0.91**	■
0.92	4.60	5.10	38	3.00	**2030-0.92**	■
0.93	4.65	5.10	38	3.00	**2030-0.93**	■
0.94	4.70	5.20	38	3.00	**2030-0.94**	■
0.95	4.75	5.20	38	3.00	**2030-0.95**	■
0.96	4.80	5.30	38	3.00	**2030-0.96**	■
0.97	4.85	5.30	38	3.00	**2030-0.97**	■
0.98	4.90	5.40	38	3.00	**2030-0.98**	■
0.99	4.95	5.40	38	3.00	**2030-0.99**	■
1.00	5.00	6.50	38	3.00	**2030-1.00**	■
1.01	5.05	6.50	38	3.00	**2030-1.01**	■
1.02	5.10	6.50	38	3.00	**2030-1.02**	■
1.03	5.15	6.50	38	3.00	**2030-1.03**	■
1.04	5.20	6.50	38	3.00	**2030-1.04**	■
1.05	5.25	6.50	38	3.00	**2030-1.05**	■
1.06	5.30	6.50	38	3.00	**2030-1.06**	■
1.07	5.35	7.50	38	3.00	**2030-1.07**	■
1.08	5.40	7.50	38	3.00	**2030-1.08**	■
1.09	5.45	7.50	38	3.00	**2030-1.09**	■

Micro-forets
Mikrobohrer
Micro drills

Ø 1.10 - Ø 2.11 mm

2030

D1 h6	L2	L3	L1	D2 h6	Art. N°	Z
1.10	5.50	7.50	38	3.00	**2030-1.10**	■
1.11	5.55	7.50	38	3.00	**2030-1.11**	■
1.12	5.60	7.50	38	3.00	**2030-1.12**	■
1.13	5.65	7.50	38	3.00	**2030-1.13**	■
1.14	5.70	7.50	38	3.00	**2030-1.14**	■
1.15	5.75	7.50	38	3.00	**2030-1.15**	■
1.16	5.80	7.50	38	3.00	**2030-1.16**	■
1.17	5.85	7.50	38	3.00	**2030-1.17**	■
1.18	5.90	8.50	38	3.00	**2030-1.18**	■
1.19	5.95	8.50	38	3.00	**2030-1.19**	■
1.20	6.00	8.50	38	3.00	**2030-1.20**	■
1.21	6.05	8.50	38	3.00	**2030-1.21**	■
1.22	6.10	8.50	38	3.00	**2030-1.22**	■
1.23	6.15	8.50	38	3.00	**2030-1.23**	■
1.24	6.20	8.50	38	3.00	**2030-1.24**	■
1.25	6.25	8.50	38	3.00	**2030-1.25**	■
1.26	6.30	8.50	38	3.00	**2030-1.26**	■
1.27	6.35	8.50	38	3.00	**2030-1.27**	■
1.28	6.40	8.50	38	3.00	**2030-1.28**	■
1.29	6.45	8.50	38	3.00	**2030-1.29**	■
1.30	6.50	8.50	38	3.00	**2030-1.30**	■
1.31	6.55	8.50	38	3.00	**2030-1.31**	■
1.32	6.60	8.50	38	3.00	**2030-1.32**	■
1.33	6.65	9.50	38	3.00	**2030-1.33**	■
1.34	6.70	9.50	38	3.00	**2030-1.34**	■
1.35	6.75	9.50	38	3.00	**2030-1.35**	■
1.36	6.80	9.50	38	3.00	**2030-1.36**	■
1.37	6.85	9.50	38	3.00	**2030-1.37**	■
1.38	6.90	9.50	38	3.00	**2030-1.38**	■
1.39	6.95	9.50	38	3.00	**2030-1.39**	■
1.40	7.00	9.50	38	3.00	**2030-1.40**	■
1.41	7.05	9.50	38	3.00	**2030-1.41**	■
1.42	7.10	9.50	38	3.00	**2030-1.42**	■
1.43	7.15	9.50	38	3.00	**2030-1.43**	■
1.44	7.20	9.50	38	3.00	**2030-1.44**	■
1.45	7.25	9.50	38	3.00	**2030-1.45**	■
1.46	7.30	9.50	38	3.00	**2030-1.46**	■
1.47	7.35	9.50	38	3.00	**2030-1.47**	■
1.48	7.40	9.50	38	3.00	**2030-1.48**	■
1.49	7.45	9.50	38	3.00	**2030-1.49**	■
1.50	7.50	9.50	38	3.00	**2030-1.50**	■
1.51	7.55	10.50	38	3.00	**2030-1.51**	■
1.52	7.60	10.50	38	3.00	**2030-1.52**	■
1.53	7.65	10.50	38	3.00	**2030-1.53**	■
1.54	7.70	10.50	38	3.00	**2030-1.54**	■
1.55	7.75	10.50	38	3.00	**2030-1.55**	■
1.56	7.80	10.50	38	3.00	**2030-1.56**	■
1.57	7.85	10.50	38	3.00	**2030-1.57**	■
1.58	7.90	10.50	38	3.00	**2030-1.58**	■
1.59	7.95	10.50	38	3.00	**2030-1.59**	■
1.60	8.00	10.50	38	3.00	**2030-1.60**	■

D1 h6	L2	L3	L1	D2 h6	Art. N°	Z
1.61	8.05	10.50	38	3.00	**2030-1.61**	■
1.62	8.10	10.50	38	3.00	**2030-1.62**	■
1.63	8.15	10.50	38	3.00	**2030-1.63**	■
1.64	8.20	10.50	38	3.00	**2030-1.64**	■
1.65	8.25	10.50	38	3.00	**2030-1.65**	■
1.66	8.30	10.50	38	3.00	**2030-1.66**	■
1.67	8.35	10.50	38	3.00	**2030-1.67**	■
1.68	8.40	10.50	38	3.00	**2030-1.68**	■
1.69	8.45	10.50	38	3.00	**2030-1.69**	■
1.70	8.50	10.50	38	3.00	**2030-1.70**	■
1.71	8.55	11.50	38	3.00	**2030-1.71**	■
1.72	8.60	11.50	38	3.00	**2030-1.72**	■
1.73	8.65	11.50	38	3.00	**2030-1.73**	■
1.74	8.70	11.50	38	3.00	**2030-1.74**	■
1.75	8.75	11.50	38	3.00	**2030-1.75**	■
1.76	8.80	11.50	38	3.00	**2030-1.76**	■
1.77	8.85	11.50	38	3.00	**2030-1.77**	■
1.78	8.90	11.50	38	3.00	**2030-1.78**	■
1.79	8.95	11.50	38	3.00	**2030-1.79**	■
1.80	9.00	11.50	38	3.00	**2030-1.80**	■
1.81	9.05	11.50	38	3.00	**2030-1.81**	■
1.82	9.10	11.50	38	3.00	**2030-1.82**	■
1.83	9.15	11.50	38	3.00	**2030-1.83**	■
1.84	9.20	11.50	38	3.00	**2030-1.84**	■
1.85	9.25	11.50	38	3.00	**2030-1.85**	■
1.86	9.30	11.50	38	3.00	**2030-1.86**	■
1.87	9.35	11.50	38	3.00	**2030-1.87**	■
1.88	9.40	11.50	38	3.00	**2030-1.88**	■
1.89	9.45	11.50	38	3.00	**2030-1.89**	■
1.90	9.50	11.50	38	3.00	**2030-1.90**	■
1.91	9.55	12.50	38	3.00	**2030-1.91**	■
1.92	9.60	12.50	38	3.00	**2030-1.92**	■
1.93	9.65	12.50	38	3.00	**2030-1.93**	■
1.94	9.70	12.50	38	3.00	**2030-1.94**	■
1.95	9.75	12.50	38	3.00	**2030-1.95**	■
1.96	9.80	12.50	38	3.00	**2030-1.96**	■
1.97	9.85	12.50	38	3.00	**2030-1.97**	■
1.98	9.90	12.50	38	3.00	**2030-1.98**	■
1.99	9.95	12.50	38	3.00	**2030-1.99**	■
2.00	10.00	12.50	38	3.00	**2030-2.00**	■
2.01	10.05	12.50	38	3.00	**2030-2.01**	■
2.02	10.10	12.50	38	3.00	**2030-2.02**	■
2.03	10.15	12.50	38	3.00	**2030-2.03**	■
2.04	10.20	12.50	38	3.00	**2030-2.04**	■
2.05	10.25	12.50	38	3.00	**2030-2.05**	■
2.06	10.30	12.50	38	3.00	**2030-2.06**	■
2.07	10.35	12.50	38	3.00	**2030-2.07**	■
2.08	10.40	12.50	38	3.00	**2030-2.08**	■
2.09	10.45	12.50	38	3.00	**2030-2.09**	■
2.10	10.50	12.50	38	3.00	**2030-2.10**	■
2.11	10.55	12.50	38	3.00	**2030-2.11**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

Micro-forets
Mikrobohrer
Micro drills

Ø 2.12 - Ø 2.99 mm

2030

D1 h6	L2	L3	L1	D2 h6	Art. N°	Z
2.12	10.60	12.50	38	3.00	**2030-2.12**	■
2.13	10.65	13.50	38	3.00	**2030-2.13**	■
2.14	10.70	13.50	38	3.00	**2030-2.14**	■
2.15	10.75	13.50	38	3.00	**2030-2.15**	■
2.16	10.80	13.50	38	3.00	**2030-2.16**	■
2.17	10.85	13.50	38	3.00	**2030-2.17**	■
2.18	10.90	13.50	38	3.00	**2030-2.18**	■
2.19	10.95	13.50	38	3.00	**2030-2.19**	■
2.20	11.00	13.50	38	3.00	**2030-2.20**	■
2.21	11.05	13.50	38	3.00	**2030-2.21**	■
2.22	11.10	13.50	38	3.00	**2030-2.22**	■
2.23	11.15	13.50	38	3.00	**2030-2.23**	■
2.24	11.20	13.50	38	3.00	**2030-2.24**	■
2.25	11.25	13.50	38	3.00	**2030-2.25**	■
2.26	11.30	13.50	38	3.00	**2030-2.26**	■
2.27	11.35	13.50	38	3.00	**2030-2.27**	■
2.28	11.40	13.50	38	3.00	**2030-2.28**	■
2.29	11.45	13.50	38	3.00	**2030-2.29**	■
2.30	11.50	13.50	38	3.00	**2030-2.30**	■
2.31	11.55	13.50	38	3.00	**2030-2.31**	■
2.32	11.60	13.50	38	3.00	**2030-2.32**	■
2.33	11.65	13.50	38	3.00	**2030-2.33**	■
2.34	11.70	13.50	38	3.00	**2030-2.34**	■
2.35	11.75	13.50	38	3.00	**2030-2.35**	■
2.36	11.80	13.50	38	3.00	**2030-2.36**	■
2.37	11.85	14.50	38	3.00	**2030-2.37**	■
2.38	11.90	14.50	38	3.00	**2030-2.38**	■
2.39	11.95	14.50	38	3.00	**2030-2.39**	■
2.40	12.00	14.50	38	3.00	**2030-2.40**	■
2.41	12.05	14.50	38	3.00	**2030-2.41**	■
2.42	12.10	14.50	38	3.00	**2030-2.42**	■
2.43	12.15	14.50	38	3.00	**2030-2.43**	■
2.44	12.20	14.50	38	3.00	**2030-2.44**	■
2.45	12.25	14.50	38	3.00	**2030-2.45**	■
2.46	12.30	14.50	38	3.00	**2030-2.46**	■
2.47	12.35	14.50	38	3.00	**2030-2.47**	■
2.48	12.40	14.50	38	3.00	**2030-2.48**	■
2.49	12.45	14.50	38	3.00	**2030-2.49**	■
2.50	12.50	14.50	38	3.00	**2030-2.50**	■
2.51	12.55	14.50	38	3.00	**2030-2.51**	■
2.52	12.60	14.50	38	3.00	**2030-2.52**	■
2.53	12.65	14.50	38	3.00	**2030-2.53**	■
2.54	12.70	14.50	38	3.00	**2030-2.54**	■
2.55	12.75	14.50	38	3.00	**2030-2.55**	■
2.56	12.80	14.50	38	3.00	**2030-2.56**	■
2.57	12.85	14.50	38	3.00	**2030-2.57**	■
2.58	12.90	14.50	38	3.00	**2030-2.58**	■
2.59	12.95	14.50	38	3.00	**2030-2.59**	■
2.60	13.00	14.50	38	3.00	**2030-2.60**	■
2.61	13.05	14.50	38	3.00	**2030-2.61**	■
2.62	13.10	14.50	38	3.00	**2030-2.62**	■

D1 h6	L2	L3	L1	D2 h6	Art. N°	Z
2.63	13.15	14.50	38	3.00	**2030-2.63**	■
2.64	13.20	14.50	38	3.00	**2030-2.64**	■
2.65	13.25	14.50	38	3.00	**2030-2.65**	■
2.66	13.30	16.50	38	3.00	**2030-2.66**	■
2.67	13.35	16.50	38	3.00	**2030-2.67**	■
2.68	13.40	16.50	38	3.00	**2030-2.68**	■
2.69	13.45	16.50	38	3.00	**2030-2.69**	■
2.70	13.50	16.50	38	3.00	**2030-2.70**	■
2.71	13.55	16.55	38	3.00	**2030-2.71**	■
2.72	13.60	16.50	38	3.00	**2030-2.72**	■
2.73	13.65	16.50	38	3.00	**2030-2.73**	■
2.74	13.70	16.50	38	3.00	**2030-2.74**	■
2.75	13.75	16.50	38	3.00	**2030-2.75**	■
2.76	13.80	16.50	38	3.00	**2030-2.76**	■
2.77	13.85	16.50	38	3.00	**2030-2.77**	■
2.78	13.90	16.50	38	3.00	**2030-2.78**	■
2.79	13.95	16.50	38	3.00	**2030-2.79**	■
2.80	14.00	16.50	38	3.00	**2030-2.80**	■
2.81	14.05	16.50	38	3.00	**2030-2.81**	■
2.82	14.10	16.50	38	3.00	**2030-2.82**	■
2.83	14.15	16.50	38	3.00	**2030-2.83**	■
2.84	14.20	16.50	38	3.00	**2030-2.84**	■
2.85	14.25	16.50	38	3.00	**2030-2.85**	■
2.86	14.30	16.50	38	3.00	**2030-2.86**	■
2.87	14.35	16.50	38	3.00	**2030-2.87**	■
2.88	14.40	16.50	38	3.00	**2030-2.88**	■
2.89	14.45	16.50	38	3.00	**2030-2.89**	■
2.90	14.50	16.50	38	3.00	**2030-2.90**	■
2.91	14.55	16.50	38	3.00	**2030-2.91**	■
2.92	14.60	16.50	38	3.00	**2030-2.92**	■
2.93	14.65	16.50	38	3.00	**2030-2.93**	■
2.94	14.70	16.50	38	3.00	**2030-2.94**	■
2.95	14.75	16.50	38	3.00	**2030-2.95**	■
2.96	14.80	16.50	38	3.00	**2030-2.96**	■
2.97	14.85	16.50	38	3.00	**2030-2.97**	■
2.98	14.90	16.50	38	3.00	**2030-2.98**	■
2.99	14.95	16.50	38	3.00	**2030-2.99**	■

Autre revêtement sur demande / Andere Beschichtung auf Anfrage / Other coating on request

MICRO-LINE

Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

60° 90° 120°	Angle Winkel Angle
λ 25°	Angle d'hélice Spiralwinkel Helix angle
λ 36° λ 38° λ 40°	Hélice différente Verschiedene Spirale Different propeller
λ 35°/38°	Hélice progressive Progressive Spirale Progressiv propeller
Z	Nombre de dents Anzahl der Zähne Number of teeth
2xD1	Rapport longueur-diamètre Länge-Durchmesser Verhältnis Length to diameter ratio
	Lèvres, affûtage à facettes Schneiden, Facettenschärfen Flutes, sharpening with facets
	Taillage demi-lune Kanonenbohrer Spitze Gundrills tip
	Taillage renforcé 3/4 3/4 genuteter Fräser 3/4 straight fluted
	Usinage radial, diagonal et axial Radiale, diagonale und axiale Bearbeitung Radial, diagonal and axial machining
	Usinage radial et axial Radiale und axiale Bearbeitung Radial and axial machining

Sharp Corner	Coins vifs Scharfkantige Ecken Sharp corners
	Fraises hémisphériques Radiusfräser End mills with ball nose
Radius Corner	Rayon de coin Eckradius Corner radius
	Dents avec coupe centrale Zähne Zentrumschnitt Teeth center cutting
	Denture décalée Versetzte Verzahnung Alterned teeth
DHD	Denture décalée hélice différente Versetzte Verzahnung unterschiedliche Spirale Alterned teeth different helix
DHP	Denture décalée hélice progressive Versetzte Verzahnung progressive Spirale Alterned teeth progressive helix

Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

Diamètre outil Werkzeugdurchmesser Tool diameter	D (mm)		
Nombre de dents Zähnezahl Number of teeth	Z		
Profondeur de coupe Schnitttiefe Cutting depth	ap (mm)		
Largeur de coupe Schnittbreite Cutting width	ae (mm)		
Vitesse de coupe Schnittgeschwindigkeit Cutting speed	(m/min)	**Vc =**	$\frac{D \times \pi \times n}{1000}$
Nombre de tours Umdrehungen Rotations	(U/min)	**n =**	$\frac{Vc \times 1000}{\pi \times D}$
Avance par dent Vorschub pro Zahn Cutting feed per tooth	(mm/tooth)	**fz =**	$\frac{Vf}{n \times Z}$
Vitesse d'avance Vorschubgeschwindigkeit Cutting feed	(mm/min)	**Vf =**	**fz x Z x n**
Débit d'enlèvement de copeaux Spanvolumen Removal of cutting up shaving	(mm^3/min)	**Q =**	**ap x ae x Vf**
Avance par tour Vorschub pro Umdrehung Cutting feed per rotation	(mm/U)	**f =**	$\frac{Vf}{n}$

Nos propositions techniques s'appliquent à la plupart des utilisations courantes.
N'hésitez pas à nous contacter pour des conseils plus précis.

Diese technische Empfehlungen gelten für die Mehrzahl der Standardanwendungen.
Unsere Techniker beraten Sie gerne für spezifische Anliegen.

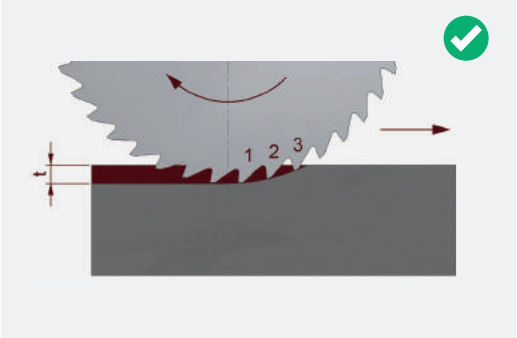
These technical propositions apply to the majority of standard usages.
Do not hesitate to contact us for more specific advices.

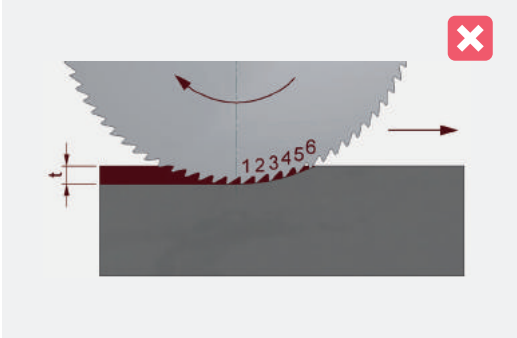
APPLITEC

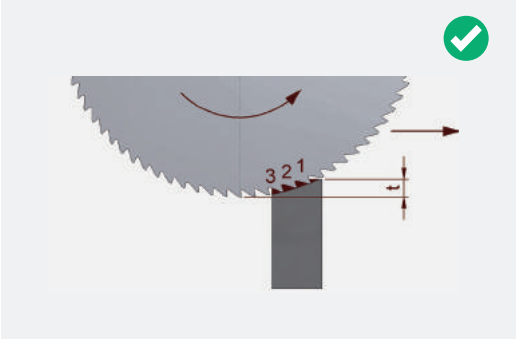
Index

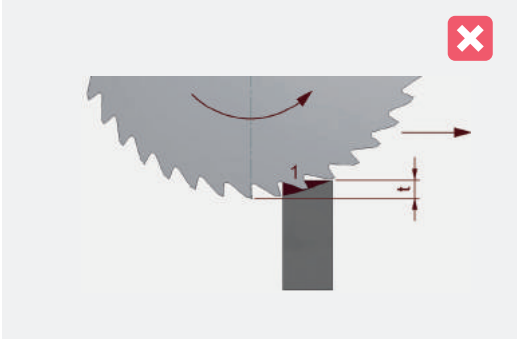
Définition du nombre de dents
Empfohlene Zähnezahl
Recommended number of teeth

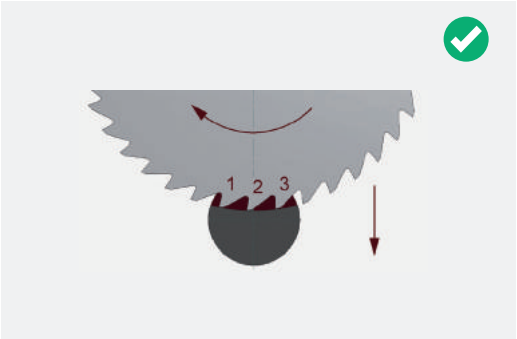
OK	KO
Idéalement 2-3 dents en contact **Im Idealfall 2-3 Zähne im Einsatz** **Ideally 2-3 teeth in contact**	**Trop de dents** = avance trop faible par dent / pas assez de place pour le copeau **Trop peu de dents** = risque de vibration / usure prématurée **Zu viele Zähne** = zu geringer Vorschub pro Zahn / zu kleiner Spanraum **Zu wenig Zähne** = Vibrationen / Verschleissrisiko **Too many teeth** = feed too low per tooth / not enough place for the chips **Not enough teeth** = vibration / risk of quick wearout

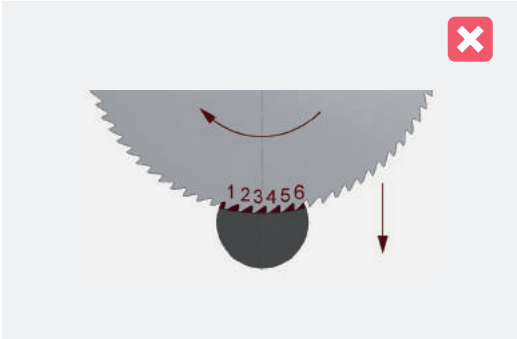












Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations

Matière Werkstoff Material		Lubrifiant* Kühlung* Coolant*	VC (m/min)
		Fraises circulaires en métal dur VHM-Kreissägeblätter Solid carbide slitting saws	
Acier de décolletage Automatenstahl Free-cutting steel	P	O / E	120 - 240
Acier Stahl < 600 N/mm² Steel	P	O / E	100 - 200
Acier Stahl < 800 N/mm² Steel	P	O / E	80 - 160
Acier Stahl < 1000 N/mm² Steel	P	O / E	60 - 120
Acier Stahl > 1000 N/mm² Steel	P	O / E	40 - 80
Fonte Gusseisen Cast iron	K	A / E	60 - 120
Acier inoxydable Rostfreistahl Stainless steel	M	O / E	50 - 100
Aluminium Si < 12%	N	O / E	150 - 600
Aluminium Si > 12%	N	O /E	80 - 300
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	A / O / E	80 - 300
Thermoplastique Thermoplaste Thermoplastics	N	A	200 - 700
Duroplastique Duroplaste Duroplastics	N	A	150 - 600
Acier réfractaire Warmfester Stahl Heat resistant steel	S	O / E	25 - 60
Titane Titan Titanium	S	O / E	30 - 60

Choix de la denture / avance
Verzahnungswahl / Vorschub
Teeth selection / cutting feed

Type 1101 + 1104

- Pour usinage peu profond ou longueur à fendre faible.
  Avance par dent: 0.005 - 0.05**
- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen.
  Vorschub pro Zahn: 0.005 - 0.05**
- For low machining depth or short slots.
  Feed per tooth: 0.005 - 0.05**

Type 1102

- Pour usinage profond ou grande longueur à fendre.
  Avance par dent: 0.01 - 0.1**
- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen.
  Vorschub pro Zahn: 0.01 - 0.1**
- For deep machining or long slots. Feed per tooth: 0.01 - 0.1**

Type 1103

- Pour usinage de pièces fragiles ou fines.
  Avance par dent: 0.002 - 0.02**
- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken.
  Vorschub pro Zahn: 0.002 - 0.02**
- For machining of fragile or thin workpieces.
  Feed per tooth: 0.002 - 0.02**

** selon la matière, l'épaisseur ainsi que la rigidité globale

** je nach Werkstoff, Dicke und Gesamtstarrheit

** according to material, thickness and global rigidity

* O = huile de coupe /Schneidöl / cutting oil
* E = Emulsion
* A = sec (air comprimé) / Trocken (Pressluft) / dry (air)

avec revêtement TiN / TiCN / TiAlN, augmenter les valeurs de 20%
mit TiN / TiCN / TiAlN Beschichtung, Daten um 20% erhöhen
with TiN / TiCN / TiAlN coating, increase data by 20%

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1101

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Avance par dent: 0.005 - 0.05 mm
- Revêtement sur demande

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- Vorschub pro Zahn: 0.005 - 0.05 mm
- Beschichtung auf Anfrage

- For low machining depth or short slots
- Feed per tooth: 0.005 - 0.05 mm
- Coating on request

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1101

Denture fine Feine Verzahnung Fine teeth												DIN 1837
D js12	**15**	**20**	**25**	**30**	**40**	**50**	**63**	**80**	**100**	**125**	**160**	**D js12**
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth											**Epaisseur Dicke Thickness** E ±0.01
0.10	64	80	80	100	128							**0.10**
0.15	64	80	80	100	128							**0.15**
0.20	64	80	80	100	128	128	160					**0.20**
0.25	64	64	80	100	100	128	128					**0.25**
0.30	64	64	80	80	100	128	128	160				**0.30**
0.35	64	64	64	80	100	100	128	160				**0.35**
0.40	64	64	64	80	100	100	128	160				**0.40**
0.45	48	48	64	80	80	100	128	128				**0.45**
0.50	48	48	64	80	80	100	128	128	160			**0.50**
0.60	48	48	64	64	80	100	100	128	160	160		**0.60**
0.70	48	48	48	64	80	80	100	128	128	160		**0.70**
0.80	40	40	48	64	80	80	100	128	128	160		**0.80**
0.90	40	40	48	64	64	80	100	100	128	160		**0.90**
1.00	40	40	48	64	64	80	100	100	128	160	160	**1.00**
1.10	40	40	48	48	64	80	80	100	128	128		**1.10**
1.20	40	40	48	48	64	80	80	100	128	128	160	**1.20**
1.30	40	40	40	48	64	64	80	100	100			**1.30**
1.40	40	40	40	48	64	64	80	100	100	128		**1.40**
1.50	40	40	40	48	64	64	80	100	100	128	160	**1.50**
1.60	40	40	40	48	64	64	80	100	100	128	160	**1.60**
1.70	40	32	40	48	48	64	80	80	100			**1.70**
1.80	40	32	40	48	48	64	80	80	100	128	128	**1.80**
1.90	40	32	40	48	48	64	80	80	100			**1.90**
2.00	40	32	40	48	48	64	80	80	100	128	128	**2.00**
2.50	40	32	40	40	48	64	64	80	100	100	128	**2.50**
3.00	40	32	32	40	48	48	64	80	80	100	128	**3.00**
3.50	24	24	32	40	40	48	64	64	80	100		**3.50**
4.00	24	24	32	40	40	48	64	64	80	100		**4.00**
5.00	24	24	32	32	40	48	48	64	80	100		**5.00**
6.00	24	24	24	32	40	40	48	64	64	100		**6.00**

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1102

Denture grossière
Grobe Verzahnung
Large teeth

DIN 1838

- Pour usinage profond ou grande longueur à fendre
- Avance par dent: 0.01 - 0.1 mm
- Revêtement sur demande

- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen
- Vorschub pro Zahn: 0.01 - 0.1 mm
- Beschichtung auf Anfrage

- For deep machining or long slots
- Feed per tooth: 0.01 - 0.1 mm
- Coating on request

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1102

Denture grossière
Grobe Verzahnung
Large teeth

DIN 1838

D js12	15	20	25	30	40	50	63	80	100	125	160	D js12
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents / Zähnezahl / Number of teeth											**Epaisseur Dicke Thickness** E ±0.01
0.20	20	20	20	30	40							**0.20**
0.25	20	20	20	30	40							**0.25**
0.30	20	20	20	30	40							**0.30**
0.40	20	20	20	30	40	48	64					**0.40**
0.50	20	20	20	30	40	48	64					**0.50**
0.60	20	20	20	30	40	48	48	64	80			**0.60**
0.70	20	20	20	30	40	40	48	64	64			**0.70**
0.80	20	20	20	24	32	40	48	64	64	80		**0.80**
0.90	20	20	20	24	32	40	48	48	64	80		**0.90**
1.00	20	20	20	24	32	40	48	48	64	80	80	**1.00**
1.20	20	20	20	24	32	40	40	48	64	64	80	**1.20**
1.50	20	20	20	24	32	32	40	48	48	64	80	**1.50**
1.60	20	20	20	24	32	32	40	48	48	64		**1.60**
1.80	20	20	20	24	24	32	40	40	48	64		**1.80**
2.00	20	20	20	24	24	32	40	40	48	64	80	**2.00**
2.50	20	20	20	24	24	32	32	40	48	48	80	**2.50**
3.00	20	20	20	24	24	24	32	40	40	48	64	**3.00**
4.00	20	20	20	24	20	24	32	32	40	48		**4.00**
5.00	20	20	20	24	20	24	24	32	40	40		**5.00**
6.00	20	20	20	24	20	20	24	32	32	40		**6.00**

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

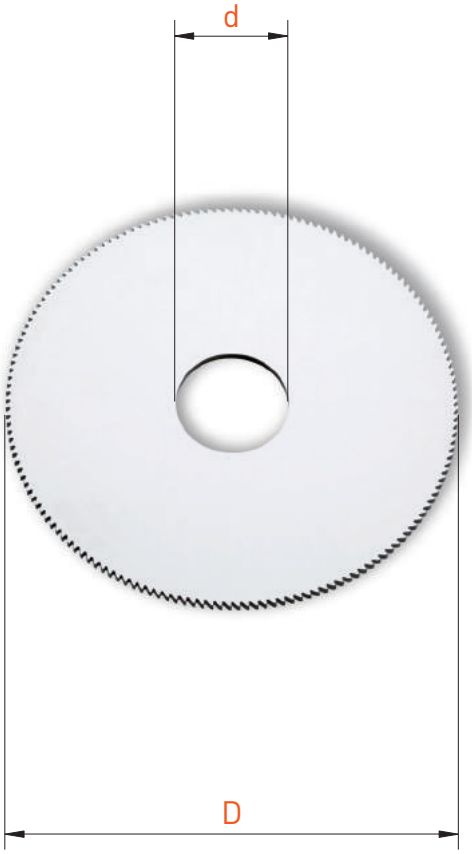
Type 1103

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

- Pour usinage de pièces fragiles ou fines
- Avance par dent: 0.002 - 0.03 mm
- Idéal pour le décolletage
- Revêtement sur demande

- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken
- Vorschub pro Zahn: 0.002 - 0.03 mm
- Für Langdrehautomaten besonders empfehlenswert
- Beschichtung auf Anfrage

- For machining of fragile or thin workpieces
- Feed per tooth: 0.002 - 0.03 mm
- Recommended on automatic lathes
- Coating on request



Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

D js12	8	10	12	15	D js12
d H7	3	3	5	5	d H7
Epaisseur Dicke Thickness E ±0.005	Z = Nombre de dents Zähnezahl Number of teeth				**Epaisseur Dicke Thickness** E ±0.005
0.10	48	64	64	80	**0.10**
0.11	48	64	64	80	**0.11**
0.12	48	64	64	80	**0.12**
0.13	48	64	64	80	**0.13**
0.14	48	64	64	80	**0.14**
0.15	48	64	64	80	**0.15**
0.16	48	64	64	80	**0.16**
0.17	48	64	64	80	**0.17**
0.18	48	64	64	80	**0.18**
0.19	48	64	64	80	**0.19**
0.20	48	64	64	80	**0.20**

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1103

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

D js12	8	10	12	15	20	20	20	25	25	25	30	32	D js12
d H7	3	3	5	5	5	5	6	5	6	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents / Zähnezahl / Number of teeth												**Epaisseur Dicke Thickness** E ±0.01
0.10	**	**	**	**	*	100	80	80					**0.10**
0.15	**	**	**	**	*	100	80	80	100	100		80	**0.15**
0.20	**	**	**	**	*	100	80	80	100	100	*	80	**0.20**
0.25	48	64	64	80	80	100	80	80	100	100	*	80	**0.25**
0.30	48	64	64	80	80	100	80	80	100	100	100	80	**0.30**
0.35	48	64	64	80	80		80	80	100	100	100	80	**0.35**
0.40	48	64	64	80	80	100	80	80	100	100	100	80	**0.40**
0.50	48	64	64	80	80	100	80	80	100	100	100	80	**0.50**
0.60	48	64	64	80	80		80	80	100	100	100	80	**0.60**
0.70	48	64	64	80	80		80	80	100	100	100	80	**0.70**
0.80	48	64	64	80	80		80	80	100	100	100	80	**0.80**
0.90	48	64	64	80	80		80	80	100	100	100	80	**0.90**
1.00	48	64	64	80	80		80	80	100	100	100	80	**1.00**
1.20				80	80		80	80	100	100	100	80	**1.20**
1.50				80	80		80	80	100	100	100	80	**1.50**
2.00				80	80		80	80	100	100	100	80	**2.00**
2.50				80	80		80	80	100	100	100	80	**2.50**
3.00				80	80		80	80	100	100	100	80	**3.00**

D js12	35	40	40	40	40	45	45	50	50	63	80	D js12
d H7	8	8	8	10	10	8	8	10	13	16	16	d H7
0.10												**0.10**
0.15	96	100	160	100	160	100	160					**0.15**
0.20	96	100	160	100	160	100	160	100				**0.20**
0.25	96	100	160	*	160	100	160	100	120	120		**0.25**
0.30	96	100	160	*	160	100	160	100	120	120		**0.30**
0.35	96	100	160	*	160	100	160	100	120	120		**0.35**
0.40	96	100	160	*	160	100	160	100	120	120		**0.40**
0.50	96	100	160	100	160	100	160	100	120	120	128	**0.50**
0.60	96	100	160	100	160	100	160	100	120	120	128	**0.60**
0.70	96	100	160	100	160	100	160	100	120	120	128	**0.70**
0.80	96	100	160	100	160	100	160	100	120	120	128	**0.80**
0.90	96	100	160	100	160	100	160	100	120	120	128	**0.90**
1.00	96	100	160	100	160	100	160	100	120	120	128	**1.00**
1.20	96	100	160	100	160	100	160	100	120	120	128	**1.20**
1.50	96	100	160	100	160	100	160	100	120	120	128	**1.50**
2.00	96	100	160	100	160	100	160	100	120	120	128	**2.00**
2.50	96	100	160	100	160	100	160	100	120	120	128	**2.50**
3.00	96	100	160	100	160	100	160	100	120	120	128	**3.00**

** voir page 15.08 / siehe Seite 15.08 / see page 15.08
* voir type 1101 / siehe Typ 1101 / see type 1101

Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1104

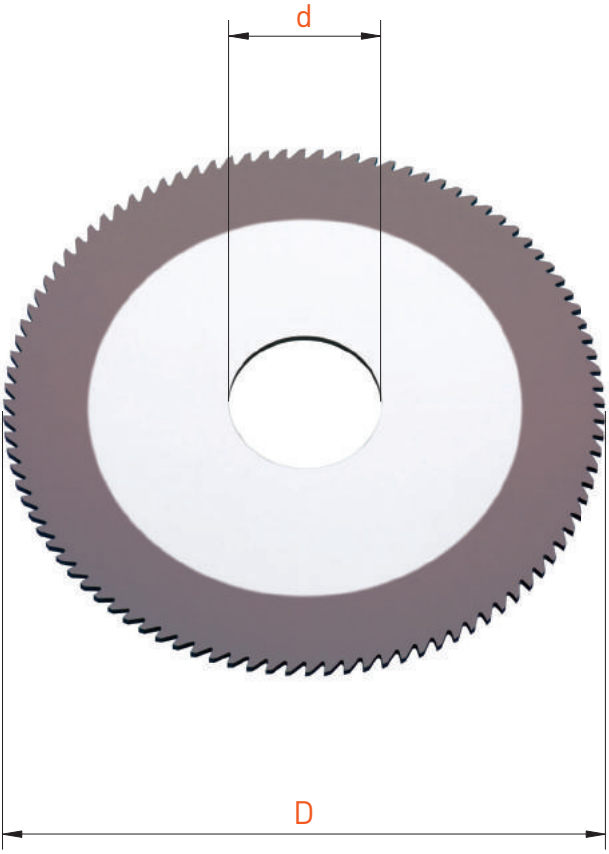
Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible
- Avance par dent: 0.005 - 0.05 mm

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen
- Vorschub pro Zahn: 0.005 - 0.05 mm

- For low machining depth or short slots
- Feed per tooth: 0.005 - 0.05 mm



Fraises circulaires en métal dur
VHM-Kreissägeblätter
Solid carbide slitting saws

Type 1104

		Denture INOX INOX Verzahnung INOX teeth		DIN 1837	
D js12	**63**	**80**	**100**	**D js12**	
d H7	16	22	22	d H7	
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth			**Epaisseur Dicke Thickness** E ±0.01	**MAXINOX**
0.80	80	100	120	**0.80**	■
1.00	80	100	120	**1.00**	■

Exécutions spéciales
Sonderanfertigungen
Special executions

- *Denture forme B*
- *Denture forme W*
- *Train de fraises*
- *Alésage avec entrée de clavette*
- *Autres exécutions spéciales sur demande*
- *Revêtement sur demande*

- *B Zahnform*
- *W Zahnform*
- *Spezielle Kreissägeblätter im Satz*
- *Bohrung mit Keilnute*
- *Andere Sonderanfertigungen auf Anfrage*
- *Beschichtung auf Anfrage*

- *Tooth form B*
- *Tooth form W*
- *Special slitting saws in set*
- *Bore with keyway*
- *Other special executions on request*
- *Coating on request*

Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

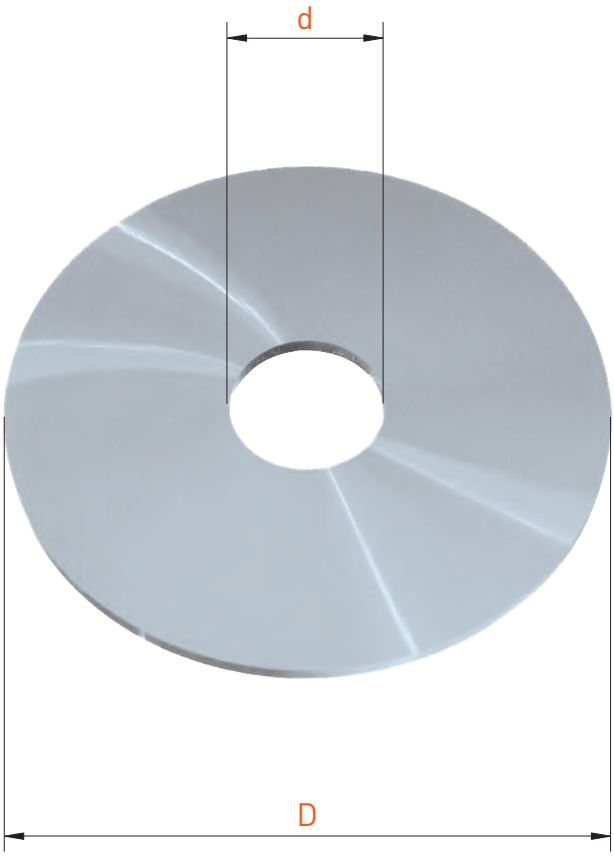
Type 1106

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanz Seiten mit Hohlschliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Ø 8-35 mm

Type 1106

Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding													
D +0.15/0	8	10	12	15	20	20	25	25	25	30	32	35	D ±0.15
d H7	3	3	5	5	5	6	5	6	8	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												Epaisseur Dicke Thickness E ±0.01
0.10	■	■	■	■	■	■	■	■	■	■			0.10
0.15	■	■	■	■	■	■	■	■	■	■	■	■	0.15
0.20	■	■	■	■	■	■	■	■	■	■	■	■	0.20
0.25	■	■	■	■	■	■	■	■	■	■	■	■	0.25
0.30	■	■	■	■	■	■	■	■	■	■	■	■	0.30
0.35	■	■	■	■	■	■	■	■	■	■	■	■	0.35
0.40	■	■	■	■	■	■	■	■	■	■	■	■	0.40
0.45	□	□	□	■	■	■	■	□	■	■	□	■	0.45
0.50	■	■	■	■	■	■	■	■	■	■	■	■	0.50
0.60	■	■	■	■	■	■	■	■	■	■	■	■	0.60
0.70	■	■	■	■	■	■	■	■	■	■	■	■	0.70
0.80	■	■	■	■	■	■	■	■	■	■	■	■	0.80
0.90	■	■	■	■	■	■	■	■	■	■	■	■	0.90
1.00	■	■	■	■	■	■	■	■	■	■	■	■	1.00
1.10			□	■	■	□	□	□	■	■	□	□	1.10
1.20			□	■	■	■	■	■	■	■	■	■	1.20
1.30			□	■	■	□	□	□	■	■	□	□	1.30
1.40			□	■	■	□	□	□	■	■	□	□	1.40
1.50			■	■	■	■	■	■	■	■	■	■	1.50
1.60				■	■	□	□	□	■	■	□	□	1.60
1.70				■	■	□	□	□	■	■	□	□	1.70
1.80				■	■	□	□	□	■	■	□	□	1.80
1.90				■	■	□	□	□	■	■	□	□	1.90
2.00				■	■	■	■	■	■	■	■	■	2.00
2.50				■	■	■	■	■	■	■	■	■	2.50
3.00				■	■	■	■	■	■	■	■	■	3.00
3.50				□	□				□	□			3.50
4.00				□	□				□	□			4.00
5.00				□	□				□	□			5.00
6.00				□	□				□	□			6.00

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

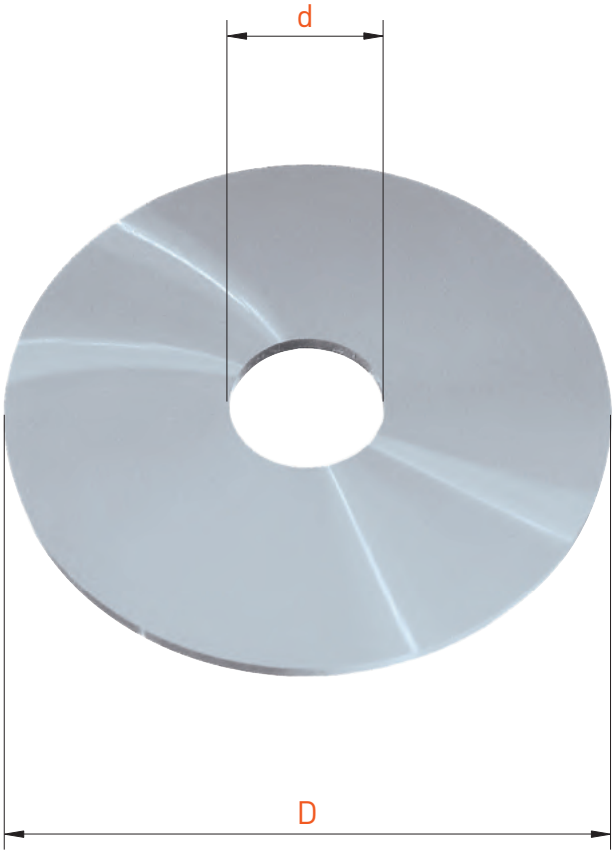
Type 1106

Prêt pour le taillage de la denture
Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanz Seiten mit Hohlschliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
Fertig geschliffene VHM-Ronden
Fully ground solid carbide discs

Ø 40-160 mm

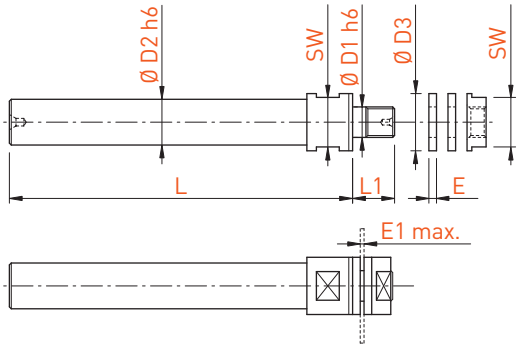
Type 1106

Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding													
D +0.15/0	40	40	45	50	50	63	80	80	100	125	160	160	D ±0.15
d H7	8	10	8	10	13	16	16	22	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												Epaisseur Dicke Thickness E ±0.01
0.10		■											0.10
0.15	■	■	■										0.15
0.20	■	■	■	■	■	■							0.20
0.25	■	■	■	■	■	■							0.25
0.30	■	■	■	■	■	■		■					0.30
0.35	■	■	■	■	■	■		■					0.35
0.40	■	■	■	■	■	■		■					0.40
0.45	■	■	□	□	■	■		■					0.45
0.50	■	■	■	■	■	■	■	■	□				0.50
0.60	■	■	■	■	■	■	■	■	□	□			0.60
0.70	■	■	■	■	■	■	■	■	□	□			0.70
0.80	■	■	■	■	■	■	■	■	□	□			0.80
0.90	■	■	■	■	■	■	■	■	□	□			0.90
1.00	■	■	■	■	■	■	■	■	□	□		□	1.00
1.10	□	■	□	□	■	■	□	■	□	□		□	1.10
1.20	■	■	■	■	■	■	■	■	□	□	□	□	1.20
1.30	■	■	□	□	■	■	□	■	□	□		□	1.30
1.40	■	■	□	□	■	■	□	■	□	□		□	1.40
1.50	■	■	■	■	■	■	■	■	□	□	□	□	1.50
1.60	□	■	□	□	■	■	□	□	□	□		□	1.60
1.70	□	■	□	□	■	■	□	□	□	□		□	1.70
1.80	□	■	□	□	■	■	□	□	□	□		□	1.80
1.90	□	■	□	□	■	■	□	□	□	□		□	1.90
2.00	■	■	■	■	■	■	□	□	□	□		□	2.00
2.50	■	■	■	■	■	■	□	□	□	□		□	2.50
3.00	■	■	■	■	■	■	□	□	□	□		□	3.00
3.50		□			□	□		□	□	□			3.50
4.00		□			□	□		□	□	□			4.00
5.00		□			□	□		□	□	□			5.00
6.00		□			□	□		□	□	□			6.00

■ = disponible / verfügbar / available
□ = selon disponibilité du stock / jenach Lagerverfügbarkeit / depending on stock availability

Tasseaux porte-fraise avec serrage avant
Fräsdorne mit Spannung von vorne
Milling arbors with front clamping

Type 2810 / 2811 / 2815



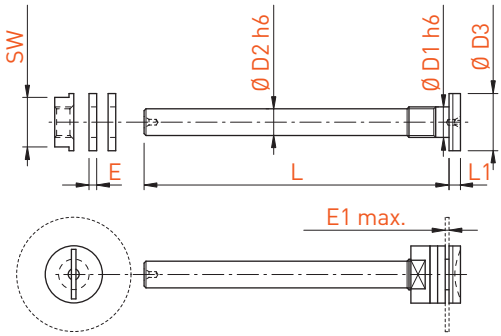
Type 2810	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	6.0	10.0	70	9.0	2.0	8.0	6.0	**2810-5-6**
5.0	10.0	10.0	80	9.0	2.0	8.0	6.0	**2810-5-10**
6.0	10.0	12.0	80	9.5	2.0	10.0	6.0	**2810-6-10**
8.0	10.0	15.0	80	10.0	2.0	13.0	6.0	**2810-8-10**
8.0	12.0	15.0	90	10.0	2.0	13.0	6.0	**2810-8-12**
10.0	6.0	18.0	80	10.5	2.0	15.0	6.0	**2810-10-6**
10.0	10.0	18.0	80	10.5	2.0	15.0	6.0	**2810-10-10**
10.0	16.0	18.0	100	10.5	2.0	15.0	6.0	**2810-10-16**
13.0	16.0	22.0	110	11.0	2.0	19.0	6.0	**2810-13-16**
16.0	20.0	26.0	120	12.0	2.0	22.0	6.0	**2810-16-20**
22.0	16.0	32.0	120	12.0	2.0	27.0	6.0	**2810-22-16**

Type 2811	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
16.0	10.0	22.0	80	8.0	2.0	19.0	3.0	**2811-16-10**

Type 2815	Pour petites fraises circulaires (filet à droite) Für kleine Kreissägeblätter (Rechtsgewinde) For small slitting saws (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
3.0	5.0	5.0	60	7.0	1.0	4.0	3.0	**2815-3-5**
5.0	6.0	7.5	70	7.0	1.0	6.0	3.0	**2815-5-6**

Tasseaux porte-fraise avec serrage arrière
Fräsdorne mit Spannung von hinten
Milling arbors with rear clamping

Type 2820 / 1820



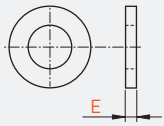
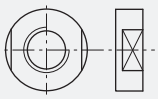
Type 2820	Rotation à droite (filet à gauche) Drehrichtung rechts (Linksgewinde) Right hand rotation (left hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	4.0	10.0	50	3.0	2.0	8.0	6.0	**2820-5-4**
6.0	5.0	12.0	60	3.0	2.0	10.0	6.0	**2820-6-5**
8.0	6.0	15.0	80	3.0	2.0	13.0	6.0	**2820-8-6**
8.0	7.0	15.0	80	3.0	2.0	13.0	6.0	**2820-8-7**
10.0	6.0	18.0	70	3.5	2.0	15.0	6.0	**2820-10-6**
10.0	8.0	18.0	90	3.5	2.0	15.0	6.0	**2820-10-8**
13.0	10.0	22.0	110	3.5	2.0	19.0	6.0	**2820-13-10**
16.0	12.0	26.0	120	3.5	2.0	22.0	6.0	**2820-16-12**

Type 1820	Rotation à gauche (filet à droite) Drehrichtung links (Rechtsgewinde) Left hand rotation (right hand thread)							
D1 h6	D2 h6	D3	L	L1	E	SW	E1 max.	**Art. N°**
5.0	4.0	10.0	50	3.0	2.0	8.0	6.0	**1820-5-4**
6.0	5.0	12.0	60	3.0	2.0	10.0	6.0	**1820-6-5**
8.0	6.0	15.0	70	3.0	2.0	13.0	6.0	**1820-8-6**
10.0	6.0	18.0	70	3.5	2.0	15.0	6.0	**1820-10-6**

Chaque tasseau est livré avec 2 entretoises et 1 écrou

Jeder Fräsdorn wird mit 2 Abstandsringen und 1 Mutter geliefert

2 distance rings and 1 nut are included with each arbor

Pièces de rechange Ersatzteile Spare parts	E	**Art. N°**		**Art. N°**
	2	**1820-D1*-A**		**1820-D1*-B**
	2	**2810-D1*-A**		**2810-D1*-B**
	2	**2811-D1*-A**		**2811-D1*-B**
	1	**2815-D1*-A**		**2815-D1*-B**
	2	**2820-D1*-A**		**2820-D1*-B**

* Diamètre D1 à spécifier * Durchmesser D1 angeben * Diameter D1 to be specified

Réduisez le temps de changement d'outil jusqu'à 75%!
Reduzieren Sie die Wechselzeit Ihrer IK-Halter um bis zu 75%!
Reduce tool change time by up to 75%!

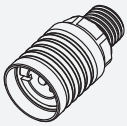
Le système de distribution de réfrigérant Applitec JET-LINE est conçu pour tirer parti de tous les avantages offerts par le refroidissement à haute pression jusqu'à 220 bar. Associé à nos porte-outils, il permet des préparations rapides et flexibles tout en garantissant l'orientation et la quantité correcte de débit de l'agent de refroidissement directement sur l'outil de coupe!

Mit dem Applitec Hochdruckkühlmittelsystem JET-LINE profitieren Sie von einer effizienten Kühlmittelversorgung Ihrer IK-Werkzeuge bis zu 220 bar. In Verbindung mit den IK-Haltern von Applitec wird ein schneller, und flexibler Werkzeugwechsel ermöglicht!

Applitec JET-LINE coolant distribution system is designed to maximise the benefits and advantages offered by high pressure coolant up to 220 bar. Associared to our holders with intergrated coolant, the quick change and flexible system reduces set up times without compromising the correct orientation and quantity of coolant flow directly to the cutting tool!

Les avantages
Die Vorteile
The advantages

Changement rapide
Schnellwechselsystem
Quick change



Réduit le temps de préparation et garantit le repositionnement des sorties de liquide de refroidissement

Verkürzung der Rüstzeiten bei gleicher Position der Kühlmittelauslässe

Reduces set up times with coolant outlets remain in the same position

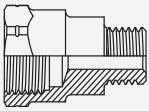
Refroidissement à haute pression
Hochdruck abgekühlt
High pressure

Tuyaux flexibles renforcés garantis jusqu'à 220 bar !

Hochdruck verstärkten Schläuchen bis 220 bar !

High pressure flexible reinforced hoses up to 220 bar!

Facilité d'adaptation
Einfache Anpassungsmöglichkeiten
Easy to adapt

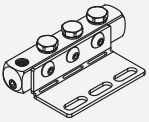


Adaptateur disponible pour filetage M5, M6, M8X1 and BSP1/8

Adapter für M5, M6, M8X1 und BSP1/8 erhältlich

Adaptors available for M5, M6, M8X1, and BSP1/8 thread

Multiples possibilités de connexion
Vielfältige Anschlussoptionen
Large range of connection possibilites

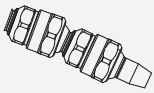


Vaste gamme de connecteurs pour tous les types de machines

Grosse Auswahl von Anschlüsse für alle Machinentypen

Huge range of possible coolant connections to suit all machine types

Système articulé
Gelenksystem
Articulated system



Module flexible d'arrosage en acier pour une meilleure stabilité

Flexibler Stahlkühlmittelmodul für eine bessere Stabilität

Flexible steel coolant unit for better stability

Augmentation de la durée de vie et une meilleure efficacité de l'outil dû au contrôle des copeaux

JET-LINE steigert die Lebensdauer der Werkzeuge und verbessert die Spankontrolle

Increased tool life with better swarf control

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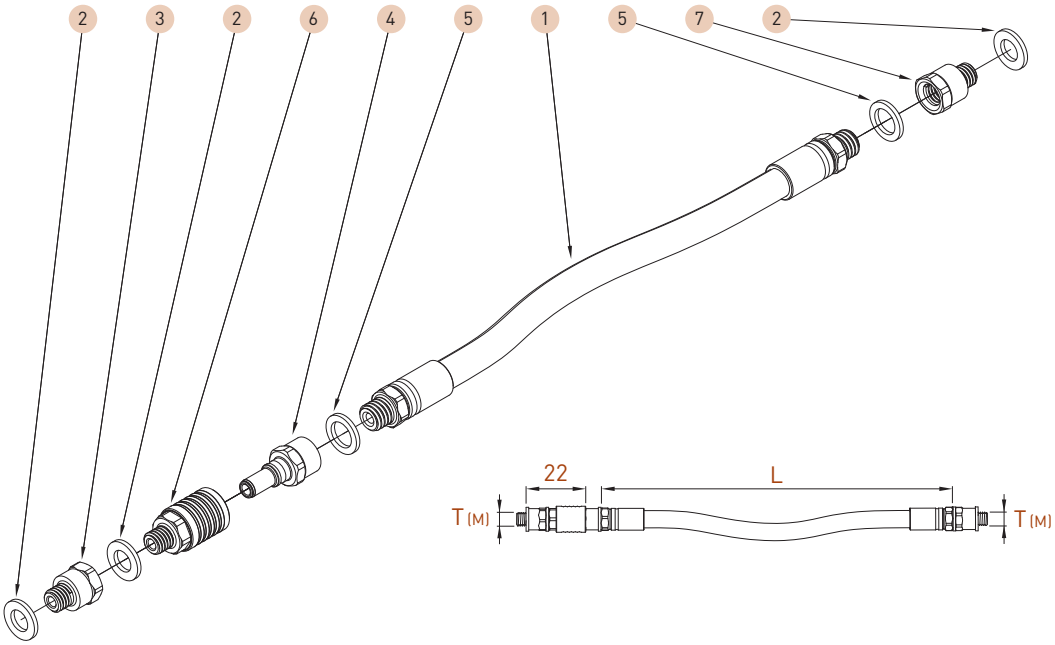
Système articulé avec arrosage / Gelenksystem mit Kühlung / Articulated system with coolant new

Kit de connexion
Verbindungskit
Connection kit

Quick / Fix

M5

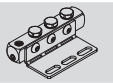
JKIT-M5-D4-...-QF



Ref	Qty	Kit composition
1	1	JTX-AC-M6-L...
2	3	JO-M5
3	1	JRMF-M5-M5-L6.5
4	1	JVF-M6-D4
5	2	JO-M6
6	1	JS-M5-D4
7	1	JRMF-M5-M6-L7.5

D	T (M)	L	Art. N°
4	M5	102	**JKIT-M5-D4-102-QF**
		203	**JKIT-M5-D4-203-QF**
		305	**JKIT-M5-D4-305-QF**
		406	**JKIT-M5-D4-406-QF**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M5
	ISO-Line 8X10 MODU-Line TOP-Line 8X10 TURN-Line 8X10

Options		
	Art. N°	**Art. N°**
	JK-M5-1010-4T	**C-SW8-E2.5**
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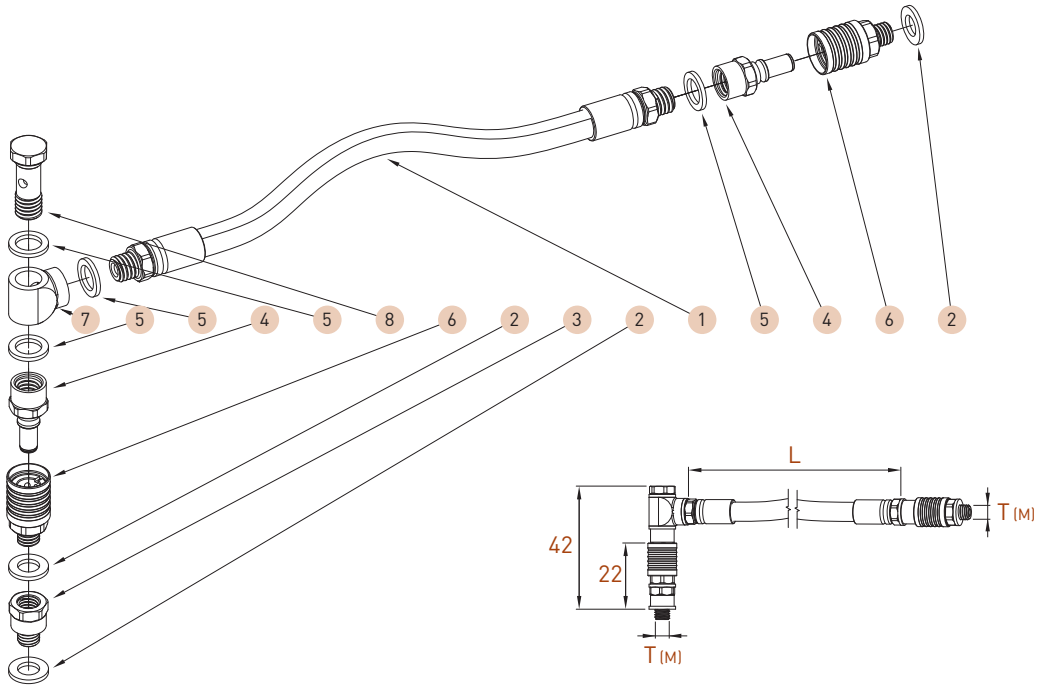
Kit de connexion
Verbindungskit
Connection kit

Quick / Quick

M5

JKIT-M5-D4-...-QQ



Ref	Qty	Kit composition
1	1	JTX-AC-M6-L...
2	3	JO-M5
3	1	JRMF-M5-M5-L6.5
4	2	JVF-M6-D4
5	4	JO-M6
6	2	JS-M5-D4
7	1	JCBF-Ø6-M6
8	1	JEB-M6-L19

D	T (M)	L	Art. N°
4	M5	102	**JKIT-M5-D4-102-QQ**
		203	**JKIT-M5-D4-203-QQ**
		305	**JKIT-M5-D4-305-QQ**
		406	**JKIT-M5-D4-406-QQ**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M5
	ISO-Line 8X10 MODU-Line TOP-Line 8X10 TURN-Line 8X10

Options		
	Art. N°	**Art. N°**
	JK-M5-1010-4T	**C-SW8-E2.5**
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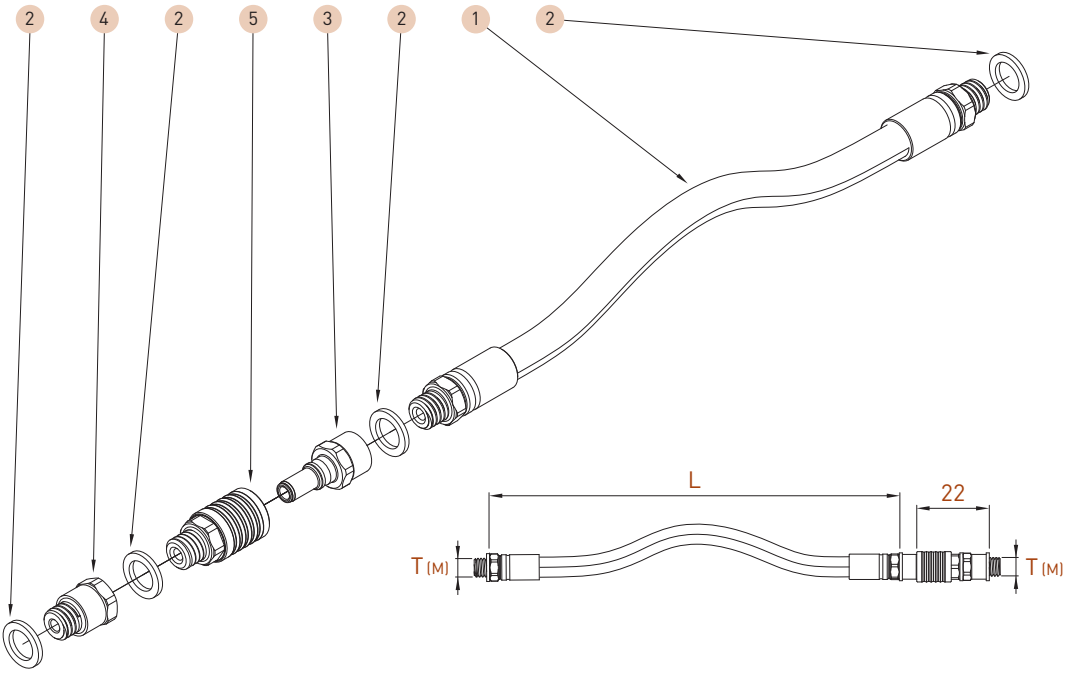
Kit de connexion
Verbindungskit
Connection kit

Quick / Fix

M6

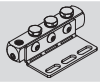
JKIT-M6-D4-...-QF



Ref	Qty	Kit composition
1	1	JTX-AC-M6-L...
2	4	JO-M6
3	1	JVF-M6-D4
4	1	JRMF-M6-M6-L7.5
5	1	JS-M6-D4

D	T (M)	L	Art. N°
4	M6	102	**JKIT-M6-D4-102-QF**
		203	**JKIT-M6-D4-203-QF**
		305	**JKIT-M6-D4-305-QF**
		406	**JKIT-M6-D4-406-QF**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M6

Options		
	Art. N°	**Art. N°**
	JK-M6-1010-4T	**C-SW8-E2.5**
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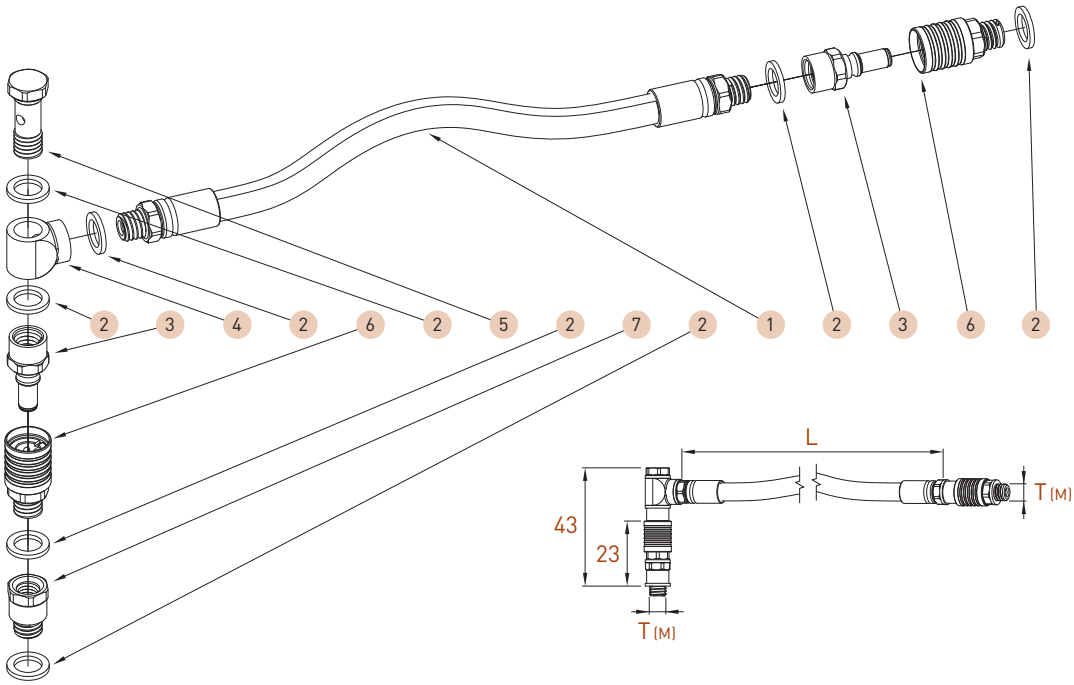
Kit de connexion
Verbindungskit
Connection kit

Quick / Quick

M6

JKIT-M6-D4-...-QQ



Ref	Qty	Kit composition
1	1	JTX-AC-M6-L...
2	7	JO-M6
3	2	JVF-M6-D4
4	1	JCBF-Ø6-M6
5	1	JEB-M6-L19
6	2	JS-M6-D4
7	1	JRMF-M6-M6-L7.5

D	T (M)	L	Art. N°
4	M6	102	**JKIT-M6-D4-102-QQ**
		203	**JKIT-M6-D4-203-QQ**
		305	**JKIT-M6-D4-305-QQ**
		406	**JKIT-M6-D4-406-QQ**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M6

Options		
	Art. N°	**Art. N°**
	JK-M6-1010-4T	**C-SW8-E2.5**
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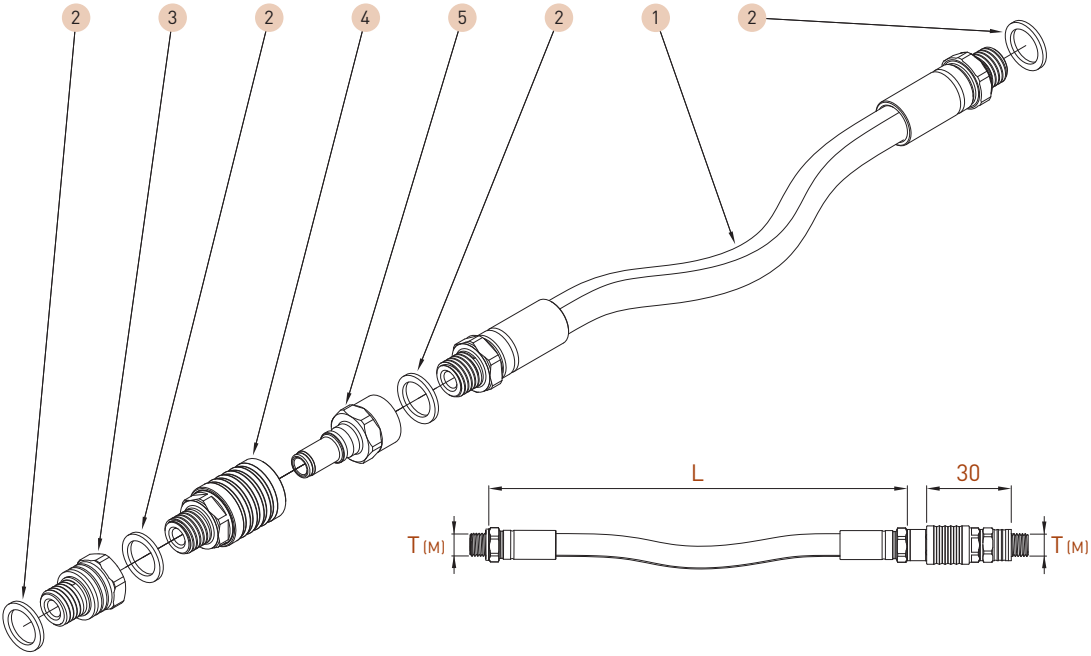
Kit de connexion
Verbindungskit
Connection kit

Quick / Fix

M8X1

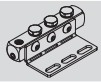
JKIT-M8X1-D6-...-QF



Ref	Qty	Kit composition
1	1	JTX-AC-M8X1-L...
2	4	JO-M8X1
3	1	JRMF-M8X1-M8X1-L9.5
4	1	JS-M8X1-D6
5	1	JVF-M8X1-D6

D	T (M)	L	Art. N°
6	M8X1	102	**JKIT-M8X1-D6-102-QF**
		203	**JKIT-M8X1-D6-203-QF**
		305	**JKIT-M8X1-D6-305-QF**
		406	**JKIT-M8X1-D6-406-QF**

Compatibilité Kompatibilität Compatibility	 **Porte-outil/Halter/Holder M8X1** CUT-Line 16X16 - 25X25 ECO-Line 10X12 - 20X20 EVOCUT-Line 10X12 - 20X20 IN-Line Ø12 - Ø28 ISO-Line 10X10 - 20X20 MODU-Line PRO-Line 10X12 - 20X20 TOP-Line 10X12 - 20X20 TURN-Line 10X12 - 20X20

Options		
	Art. N°	**Art. N°**
	JK-M8X1-1515-4T	**C-SW11-E3.7**
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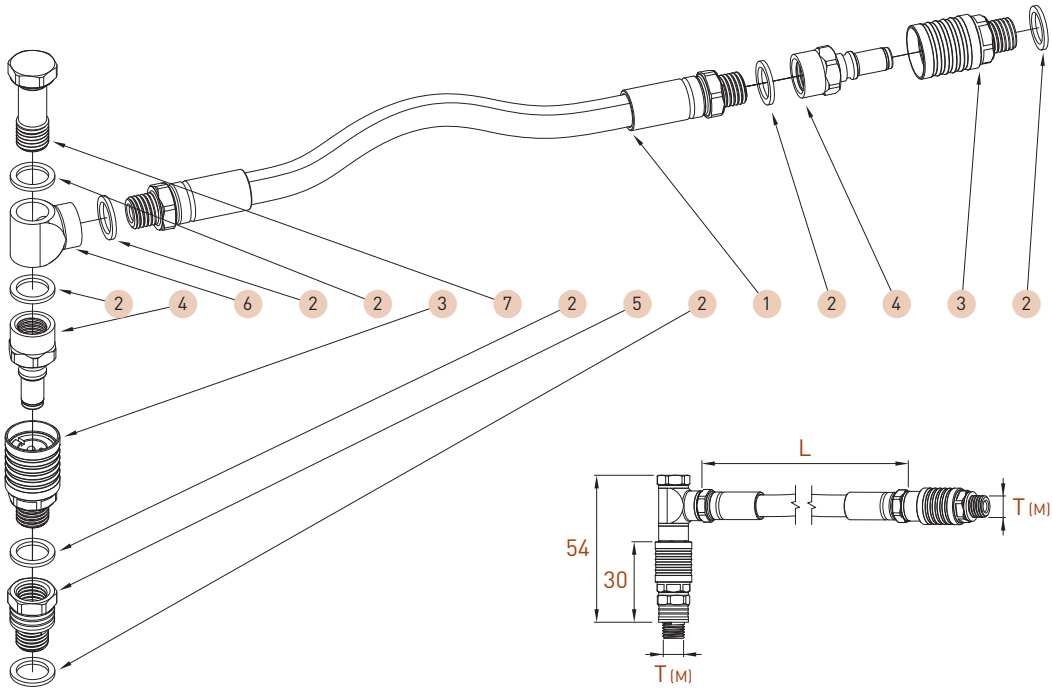
Kit de connexion / Verbindungskit / Connection kit

Quick / Quick **M8X1** **JKIT-M8X1-D6-...-QQ**



Ref	Qty	Kit composition
1	1	JTX-AC-M8X1-L...
2	7	JO-M8X1
3	2	JS-M8X1-D6
4	2	JVF-M8X1-D6
5	1	JRMF-M8X1-M8X1-L9.5
6	1	JCBF-Ø8-M8X1
7	1	JEB-M8X1-L24

D	T (M)	L	Art. N°
6	M8X1	102	**JKIT-M8X1-D6-102-QQ**
		203	**JKIT-M8X1-D6-203-QQ**
		305	**JKIT-M8X1-D6-305-QQ**
		406	**JKIT-M8X1-D6-406-QQ**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M8X1
	CUT-Line 16X16 - 25X25 ECO-Line 10X12 - 20X20 EVOCUT-Line 10X12 - 20X20 IN-Line Ø12 - Ø28 ISO-Line 10X10 - 20X20 MODU-Line PRO-Line 10X12 - 20X20 TOP-Line 10X12 - 20X20 TURN-Line 10X12 - 20X20

Options		
	Art. N°	**Art. N°**
	JK-M8X1-1515-4T	**C-SW11-E3.7**
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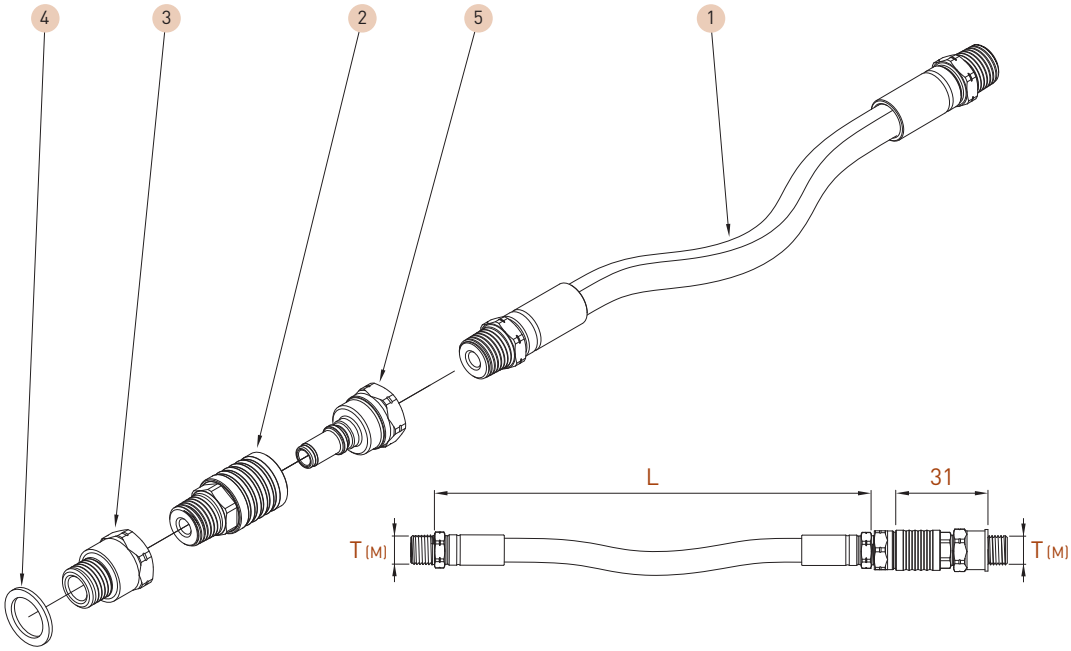
Kit de connexion / Verbindungskit / Connection kit

Quick / Fix

BSP1/8

JKIT-BSP1/8-D6-...-QF



Ref	Qty	Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	1	JS-BSPT1/8-D6
3	1	JRMF-BSP1/8-BSP1/8-L10.5
4	1	JO-BSP1/8
5	1	JVF-BSP1/8-D6

D	T (M)	L	Art. N°
6	BSP1/8	102	**JKIT-BSP1/8-D6-102-QF**
		203	**JKIT-BSP1/8-D6-203-QF**
		305	**JKIT-BSP1/8-D6-305-QF**
		406	**JKIT-BSP1/8-D6-406-QF**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder BSP1/8

Options		
	Art. N°	**Art. N°**
	JK-BSP1/8-1515-4T	**C-SW11-E3.7**
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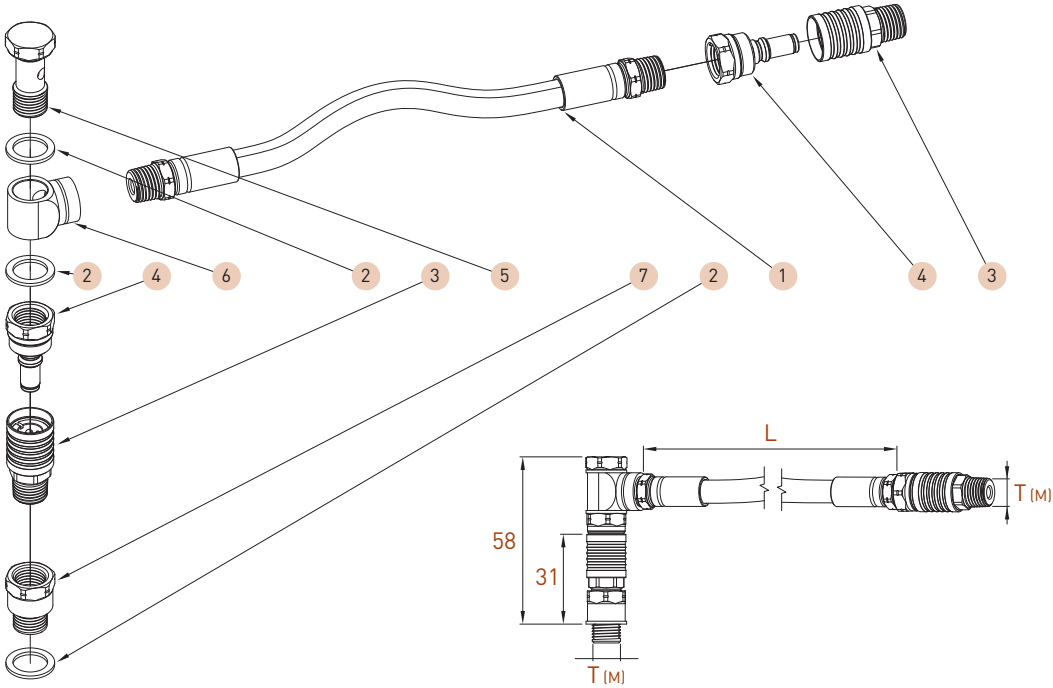
Kit de connexion / Verbindungskit / Connection kit

Quick / Quick **BSP1/8** **JKIT-BSP1/8-D6-...-QQ**



Ref	Qty	Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	3	JO-BSP1/8
3	2	JS-BSPT1/8-D6
4	2	JVF-BSP1/8-D6
5	1	JEB-BSP1/8-L26
6	1	JCBF-Ø10-BSP1/8
7	1	JRMF-BSP1/8-BSP1/8-L10.5

D	T (M)	L	Art. N°
6	BSP1/8	102	**JKIT-BSP1/8-D6-102-QQ**
		203	**JKIT-BSP1/8-D6-203-QQ**
		305	**JKIT-BSP1/8-D6-305-QQ**
		406	**JKIT-BSP1/8-D6-406-QQ**

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder BSP1/8

Options		
	Art. N°	**Art. N°**
	JK-BSP1/8-1515-4T	**C-SW11-E3.7**
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Starter Kit

M6 (+ M5)

JSTART-D4

Qty	Kit composition	Art. N°
2	C-SW8-E2.5	JSTART-D4
4	JO-M6	
2	JO-M5	
2	JK-M6-1010-4T	
10	JS-M6-D4	
2	JTX-AC-M6-102	
2	JTX-AC-M6-203	
2	JTX-AC-M6-305	
2	JTX-AC-M6-406	
10	JVF-M6-D4	
2	JVB-D4	
2	JWF-M6-D4	
2	JRMF-M6-M6-L7.5	
2	JRMF-M6-M6-L12.5	
2	JRMF-M6-M6-L17.5	
10	JRMF-M5-M6-L7.5	
2	JRFF-M6-L9.0	
5	JCBF-Ø6-M6	
2	JABF-Ø6-M6-45°	
5	JEB-M6-L19	
2	JEB-M6-L30-DUO	
1	JT-CU-M6-102	
1	JT-CU-M6-203	

Starter Kit

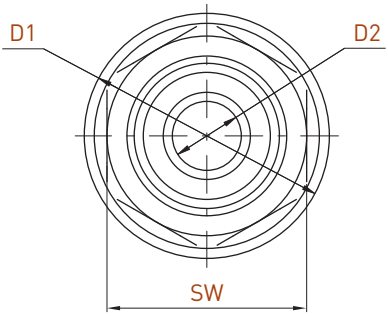
M8X1 (+ BSP1/8)

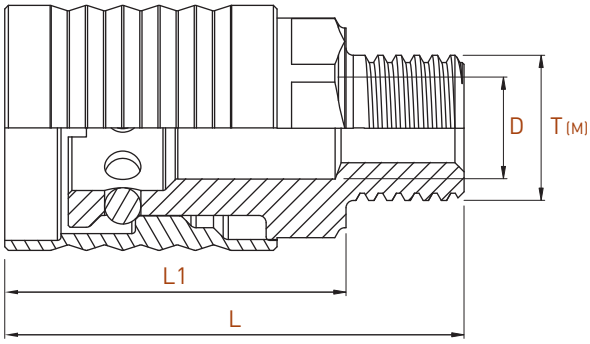
JSTART-D6

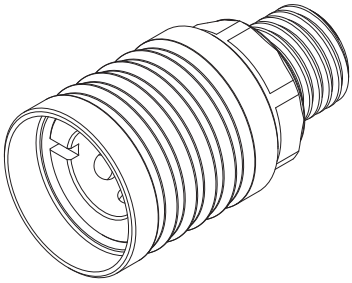
Qty	Kit composition	Art. N°
2	C-SW11-E3.7	JSTART-D6
4	JO-M8X1	
2	JK-M8X1-1515-4T	
10	JS-M8X1-D6	
2	JTX-AC-M8X1-102	
2	JTX-AC-M8X1-203	
2	JTX-AC-M8X1-305	
2	JTX-AC-M8X1-406	
10	JVF-M8X1-D6	
2	JVB-D6	
2	JWF-M8X1-D6	
2	JRMF-M8X1-M8X1-L9.5	
2	JRMF-M8X1-M8X1-L14.5	
2	JRMF-M8X1-M8X1-L19.5	
10	JRMF-BSPT1/8-M8X1-L9.0	
2	JRFF-M8X1-L12.0	
5	JCBF-Ø8-M8X1	
2	JABF-Ø8-M8X1-45°	
5	JEB-M8X1-L24	
2	JEB-M8X1-L38-DUO	
1	JT-CU-M8X1-102	
1	JT-CU-M8X1-203	

Raccord rapide
Schnellkupplungen
Quick connector

JS





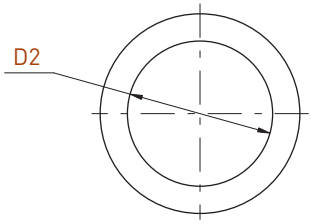


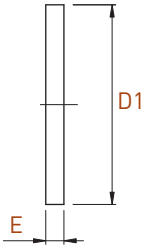
T (M)	L	L1	SW	D	D1	D2	Art. N°
M5	18	14	8	4	9.8	2.3	**JS-M5-D4**
M6	18	14	8	4	9.8	2.3	**JS-M6-D4**
M8X1KEG	20	14	8	4	9.8	2.3	**JS-M8X1KEG-D4**
M8X1	25	19	11	6	13.5	3.8	**JS-M8X1-D6**
BSPT1/8	29.3	19	11	6	13.5	3.8	**JS-BSPT1/8-D6**

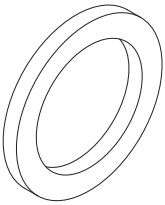
Pression max Max. Druck max. pressure	KEG =	BSPT =
= 220 Bar (3.190 PSI)	filetage conique konisches Gewinde conical thread	filetage conique konisches Gewinde conical thread

Joint d'étanchéité en cuivre
Kupferdichtungsringe
Copper sealing gasket

J0





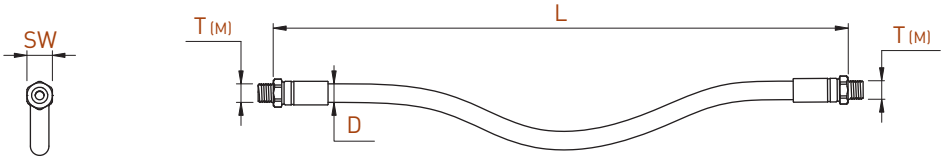


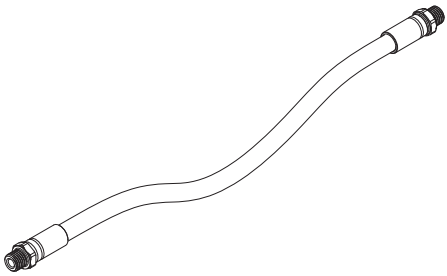
D1	D2	E	Art. N°
9	5	1	**J0-M5***
9	6	1	**J0-M6***
11	8	1	**J0-M8X1***
14	10	1	**J0-BSP1/8***

* vendu par 10 pces
10-facherweise verkauft
sold by 10 pcs

Tube de distribution flexible en acier inoxydable tressé
Rostfreier Stahlflex-Schlauch
Flexible distribution tube of stainless steel braiding

JTX-AC





T (M)	L*	SW	D	Art. N°
M6	102	8	Ø6.5	**JTX-AC-M6-102**
	203	8	Ø6.5	**JTX-AC-M6-203**
	305	8	Ø6.5	**JTX-AC-M6-305**
	406	8	Ø6.5	**JTX-AC-M6-406**
M8X1	102	11	Ø8	**JTX-AC-M8X1-102**
	203	11	Ø8	**JTX-AC-M8X1-203**
	305	11	Ø8	**JTX-AC-M8X1-305**
	406	11	Ø8	**JTX-AC-M8X1-406**
BSPT1/8	102	11	Ø8	**JTX-AC-BSPT1/8-102**
	203	11	Ø8	**JTX-AC-BSPT1/8-203**
	305	11	Ø8	**JTX-AC-BSPT1/8-305**
	406	11	Ø8	**JTX-AC-BSPT1/8-406**

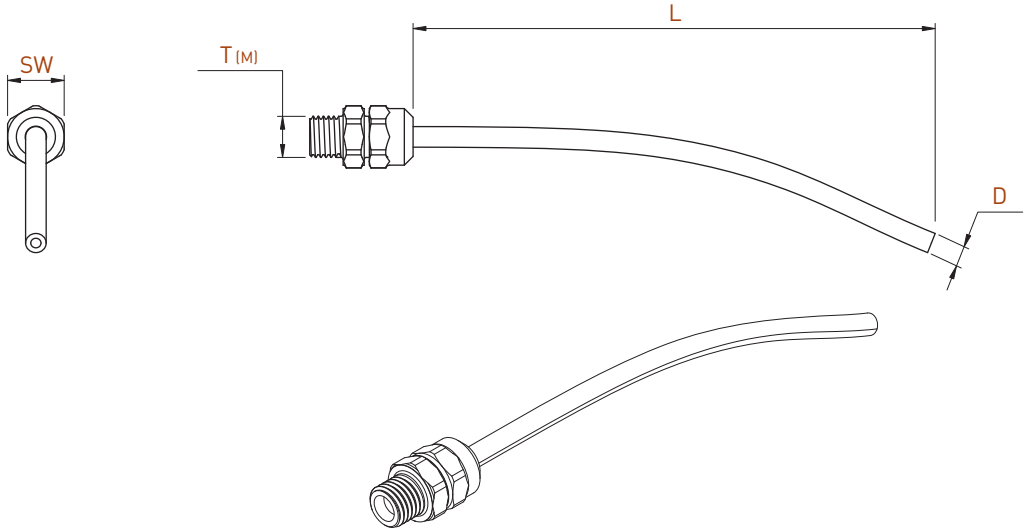
* Longueur spécifique possible sur demande
Spezifische Länge auf Anfrage möglich
Specific length possible on request

Pression max Max. Druck max. pressure	KEG =	BSPT =
= 220 Bar (3.190 PSI)	filetage conique konisches Gewinde conical thread	filetage conique konisches Gewinde conical thread

Pression (bar)	Ø 6.5 (l/min)	Ø 8 (l/min)
2	3.5	9.5
8	7.0	19.0
15	9.6	26.0
20	11.0	30.1
30	13.5	36.9
50	17.5	47.6
80	22.1	60.3
100	24.7	67.4
150	30.2	82.5

Tube de distribution en cuivre
Kupferrohr
Copper distribution tube

JT-CU



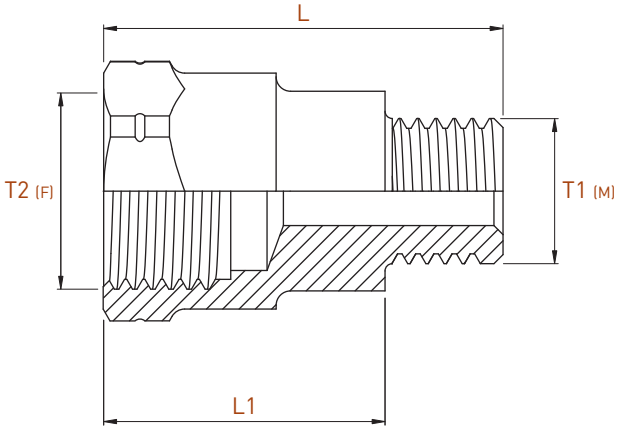
T (M)	L*	SW	D	Art. N°
M6	102	8	Ø3	**JT-CU-M6-102**
	203	8	Ø3	**JT-CU-M6-203**
	305	8	Ø3	**JT-CU-M6-305**
	406	8	Ø3	**JT-CU-M6-406**
M8X1	102	11	Ø4	**JT-CU-M8X1-102**
	203	11	Ø4	**JT-CU-M8X1-203**
	305	11	Ø4	**JT-CU-M8X1-305**
	406	11	Ø4	**JT-CU-M8X1-406**

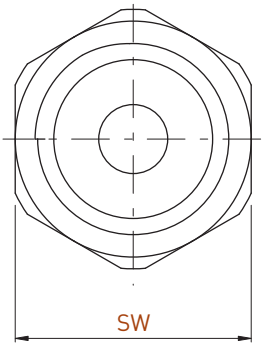
* Longueur spécifique possible sur demande
Spezifische Länge auf Anfrage möglich
Specific length possible on request

Pression max Max. Druck max. pressure
= 220 Bar (3.190 PSI)

Connecteurs mâle/femelle
Gewindeadapter Innen und Außengewinde
Male/female connectors

JRMF

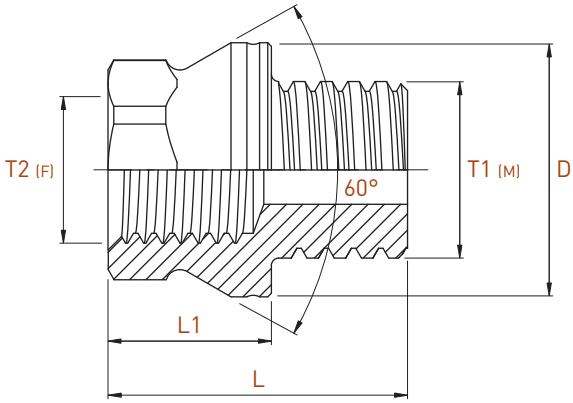


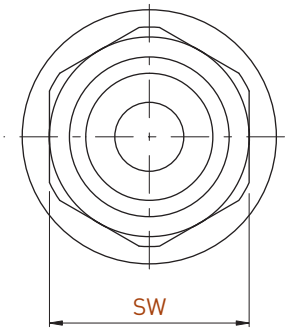


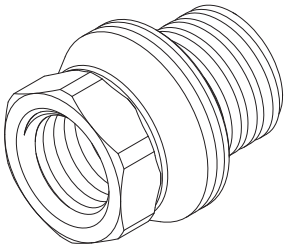
T1 (M)	T2 (F)	L1	L	SW	Art. N°
M5	M5	6.5	11	8	JRMF-M5-M5-L6.5
		11.5	16	8	JRMF-M5-M5-L11.5
		16.5	21	8	JRMF-M5-M5-L16.5
	M6	7.5	12	8	JRMF-M5-M6-L7.5
	M8X1	9.5	14	11	JRMF-M5-M8X1-L9.5
M6	M6	7.5	12.5	8	JRMF-M6-M6-L7.5
		12.5	17.5	8	JRMF-M6-M6-L12.5
		17.5	22.5	8	JRMF-M6-M6-L17.5
	M8X1	9.5	14.5	11	JRMF-M6-M8X1-L9.5
M8X1KEG	M6	6	12	8	JRMF-M8X1KEG-M6-L6.0
	M8X1	9.5	16.5	11	JRMF-M8X1KEG-M8X1-L9.5
M8X1	M5	5.5	12	11	JRMF-M8X1-M5-L5.5
	M6	7	13.5	11	JRMF-M8X1-M6-L7.0
	M8X1	9.5	16	11	JRMF-M8X1-M8X1-L9.5
		14.5	21	11	JRMF-M8X1-M8X1-L14.5
		19.5	26	11	JRMF-M8X1-M8X1-L19.5
	BSP1/8	10.5	17	13	JRMF-M8X1-BSP1/8-L10.5
		15.5	22	13	JRMF-M8X1-BSP1/8-L15.5
		20.5	27	13	JRMF-M8X1-BSP1/8-L20.5
	NPT1/8	11	17.5	13	JRMF-M8X1-NPT1/8-L11 new
M8X1.25	M8X1	9.5	16	11	JRMF-M8X1.25-M8X1-L9.5 new
BSPT1/8	M5	3.5	14.6	11	JRMF-BSPT1/8-M5-L3.5
	M6	3.5	14.6	11	JRMF-BSPT1/8-M6-L3.5
	M8X1	9	20.3	11	JRMF-BSPT1/8-M8X1-L9.0
BSP1/8	BSP1/8	10.5	18	13	JRMF-BSP1/8-BSP1/8-L10.5
		15.5	23	13	JRMF-BSP1/8-BSP1/8-L15.5
		20.5	28	13	JRMF-BSP1/8-BSP1/8-L20.5
NPT1/8	M8X1	7	17	13	JRMF-NPT1/8-M8X1-L7.0 new
	BSP1/8	9	20.3	13	JRMF-NPT1/8-BSP1/8-L9.0 new
NTP1/16	M6	6	15	11	JRMF-NPT1/16-M6-L6.0 new
	M8X1	9	18	13	JRMF-NPT1/16-M8X1-L9.0 new
SAE7/16-20	M6	4.5	12	13	JRMF-SAE7/16-20-M6-L4.5 new
	M8X1	7	14.5	13	JRMF-SAE7/16-20-M8X1-L7 new

Connecteurs mâle/femelle avec cône 60°
Innen und Außengewinde mit 60°-Kegel
Male/female connectors with cone 60°

JRMF-A60°



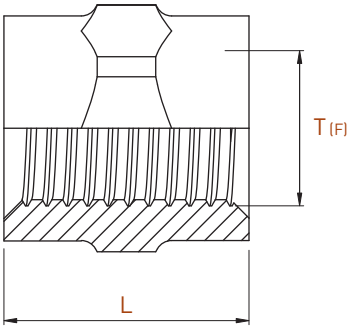


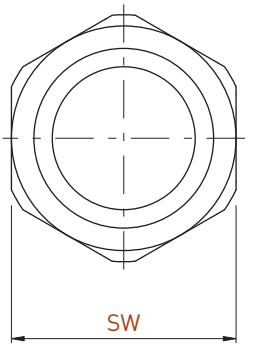


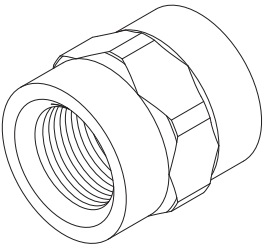
T1 (M)	T2 (F)	L1	L	D	SW	Art. N°
BSP1/8	M8X1	9	16.5	14	11	**JRMF-BSP1/8-M8X1-A60°-L9.0**

Connecteurs femelle/femelle
Gewindeadapter Innengewinde
Female connectors

JRFF



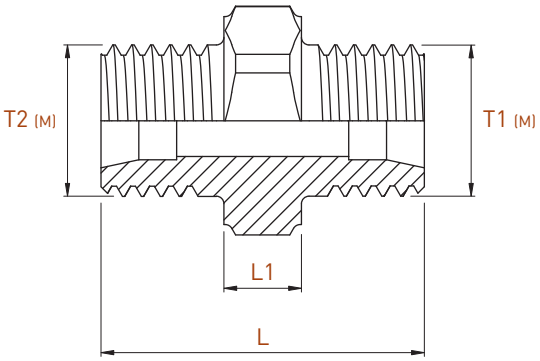


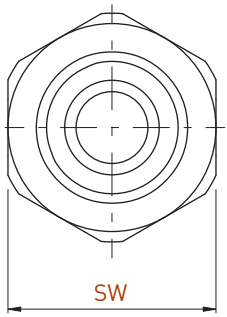


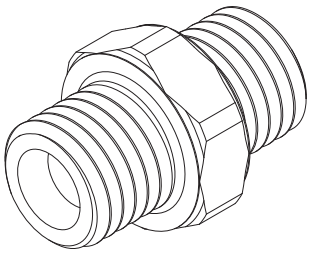
T (F)	L	SW	Art. N°
M6	9	8	**JRFF-M6-L9.0**
M8X1	12	11	**JRFF-M8X1-L12.0**

Connecteurs mâle/mâle
Gewindeadapter Außengewinde
Male connectors

JRMM



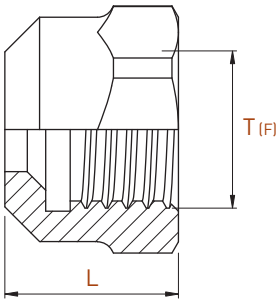


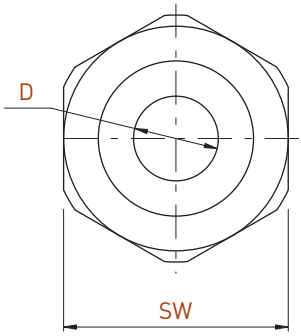


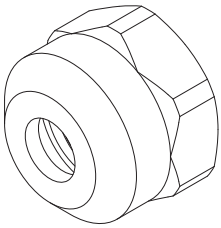
T1 (M)	T2 (M)	L1	L	SW	Art. N°
M6	M6	3	13	8	**JRMM-M6-M6-L3.0**
M8X1	M8X1	4	17	11	**JRMM-M8X1-M8X1-L4.0**
M10	M8X1	3.5	17.5	11	**JRMM-M10-M8X1-3.5** new

Écrous d'étanchéité
Dichtungsmutter
Sealing nuts

JN



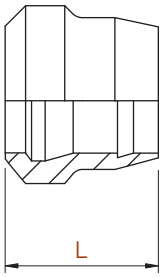


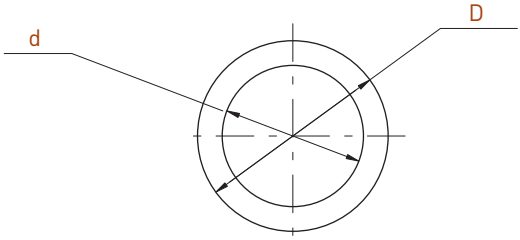


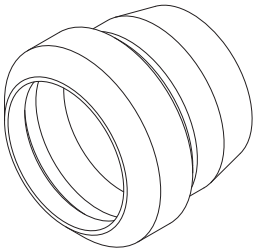
T (F)	L	D	SW	Art. N°
M6	6.5	3	8	**JN-M6-D3**
M8X1	8.5	4	11	**JN-M8X1-D4**
M10	11.5	6	12	**JN-M10-D6** new

Bague d'étanchéité
Dichtungsring
Sealing ring

JNG



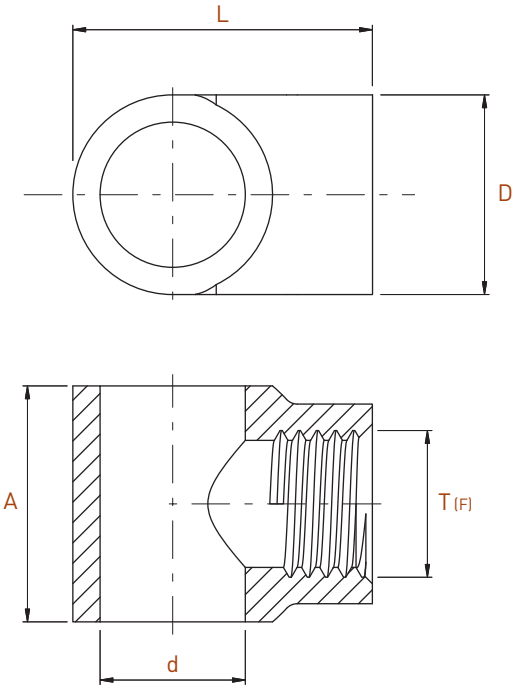


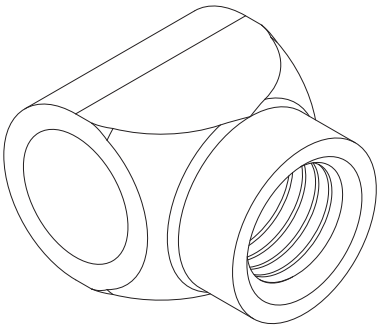


d	D	L	Art. N°
3	4	3.3	**JNG-D3**
4	5.5	4.5	**JNG-D4**
6	8.5	7	**JNG-D6** new

Banjos courts femelle
Kurzer Innengewindeadapter
Short female banjos

JCBF

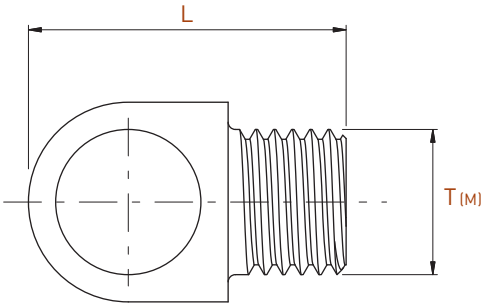


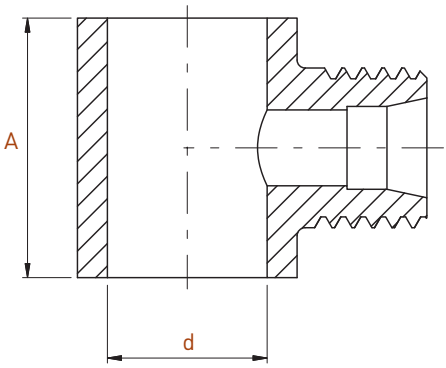


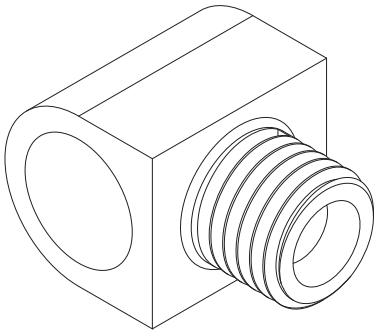
T (F)	A	L	d	D	Art. N°
M6	10	12.5	6	9	**JCBF-Ø6-M6**
M8X1	13	16.5	8	11	**JCBF-Ø8-M8X1**
	13	18.5	10	11	**JCBF-Ø10-M8X1**
BSP1/8	13	19.5	10	13	**JCBF-Ø10-BSP1/8**

Banjos courts mâle
Kurzer Aussengewindeadapter
Short male banjos

JCBM



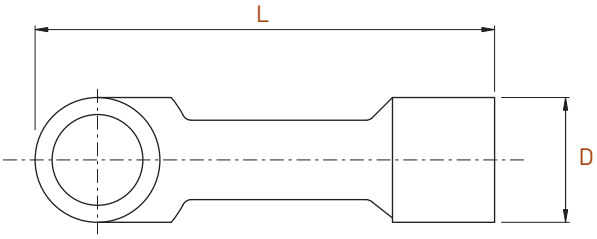


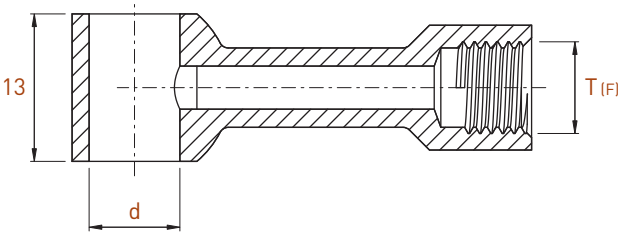


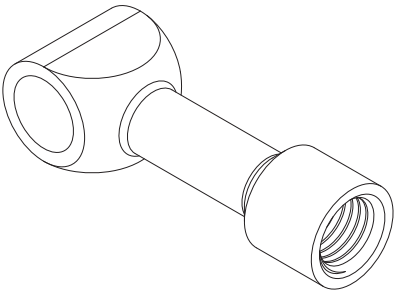
T (M)	A	L	d	Art. N°
M6	10	14	6	**JCBM-Ø6-M6**
M8X1	13	17.5	8	**JCBM-Ø8-M8X1**
	13	19.5	10	**JCBM-Ø10-M8X1**

Banjos longs droits femelle
Langer Innengewindeadapter
Long straight female banjos

JABF



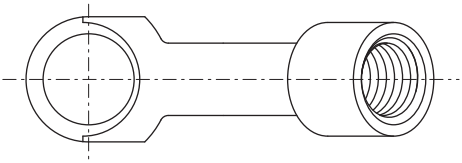


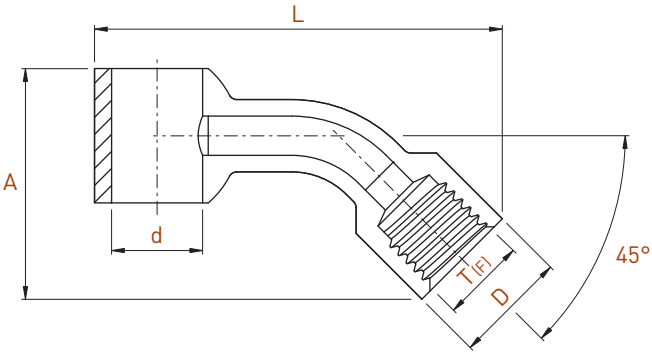


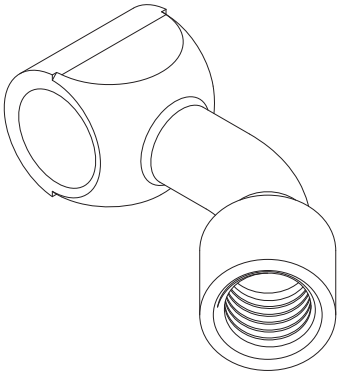
T (F)	A	L	d	D	Art. N°
M6	10	31.5	6	9	**JABF-Ø6-M6**
M8X1	13	40.5	8	11	**JABF-Ø8-M8X1**
	13	42.5	10	11	**JABF-Ø10-M8X1**
BSP1/8	13	42.5	10	13	**JABF-Ø10-BSP1/8**

Banjos longs coudés femelle
Adapter lang 45° Innengewinde
Long curved female banjos

JABF-45°



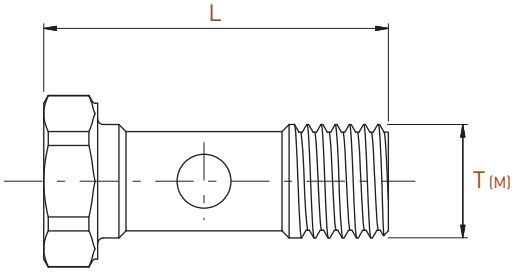


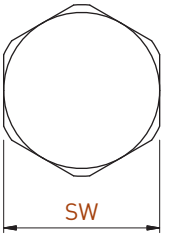


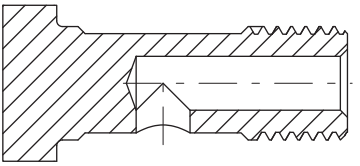
T (F)	A	L	d	D	Art. N°
M6	10	33	6	9	**JABF-Ø6-M6-45°**
M8X1	11.8	40	8	11	**JABF-Ø8-M8X1-45°**
	13	40.5	10	11	**JABF-Ø10-M8X1-45°**

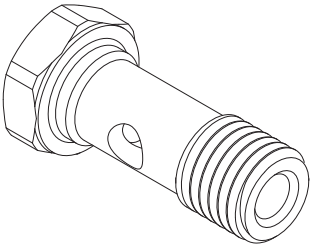
Vis banjo
Hohlschrauben
Banjo screws

JEB





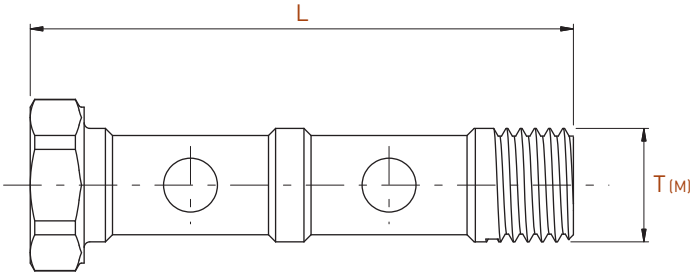


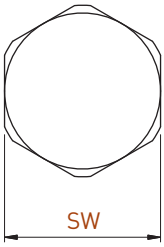


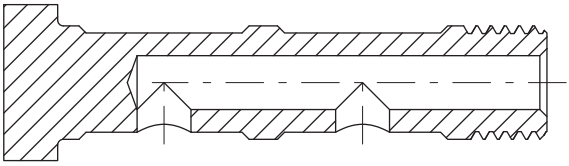
T (M)	L	SW	Art. N°
M5	18.3	8	**JEB-M5-L18**
M6	18.8	8	**JEB-M6-L19**
M8X1	24.3	11	**JEB-M8X1-L24**
BSP1/8	26	13	**JEB-BSP1/8-L26**

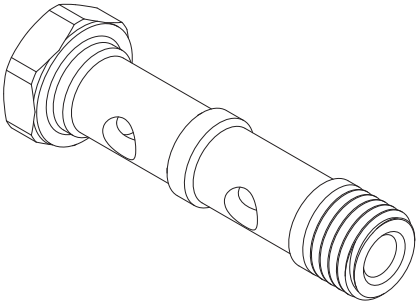
Vis banjo double
Hohlschrauben doppelt
Double banjo screws

JEB-DUO





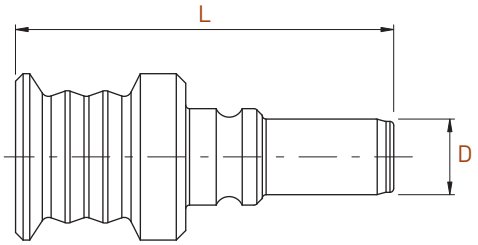


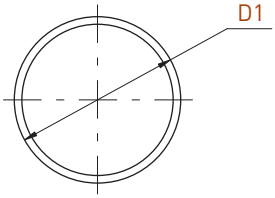


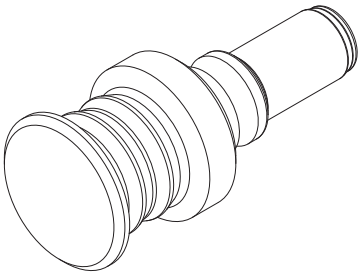
T (M)	L	SW	Art. N°
M6	29.8	8	**JEB-M6-L30-DUO**
M8X1	38.3	11	**JEB-M8X1-L38-DUO**
BSP1/8	40	13	**JEB-BSP1/8-L40-DUO**

Fiches de verrouillage
Verschlußstecker
Sealing connecting plugs

JVB



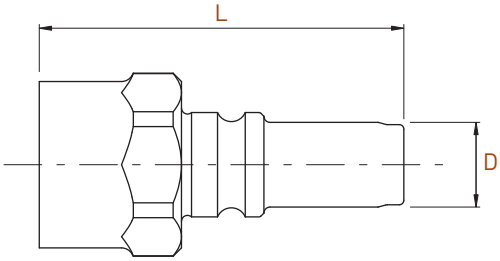


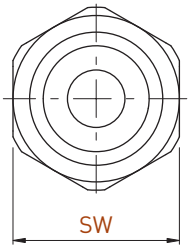


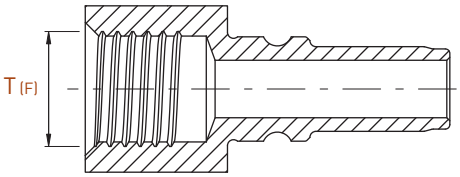
D	D1	L	Art. N°
4	8.8	20	**JVB-D4**
6	12	27	**JVB-D6**

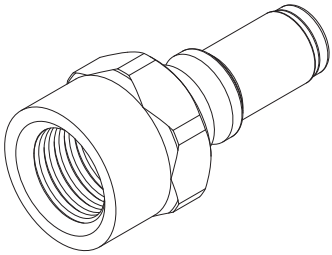
Fiches de connexion
Innengewindestecker
Connecting plugs

JVF





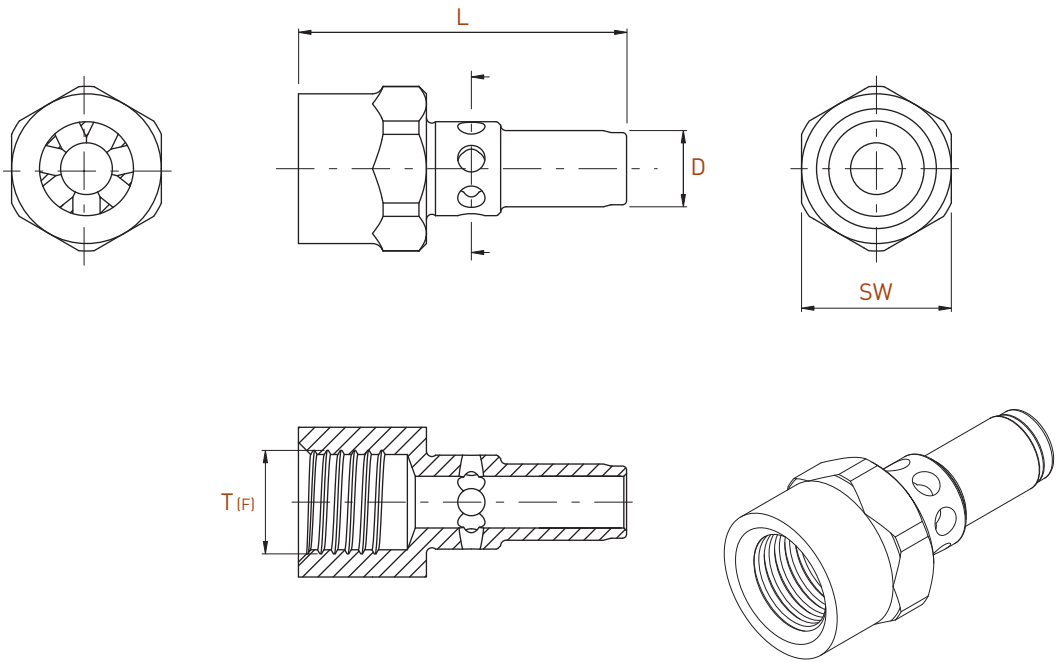




D	T (F)	L	SW	Art. N°
4	M6	18.3	8	**JVF-M6-D4**
6	M8X1	24	11	**JVF-M8X1-D6**
6	BSP1/8	25.5	11	**JVF-BSP1/8-D6**

Fiches de connexion fixes femelle
Innengewindestecker mit Verdrehsicherung
Female positionning connection plugs

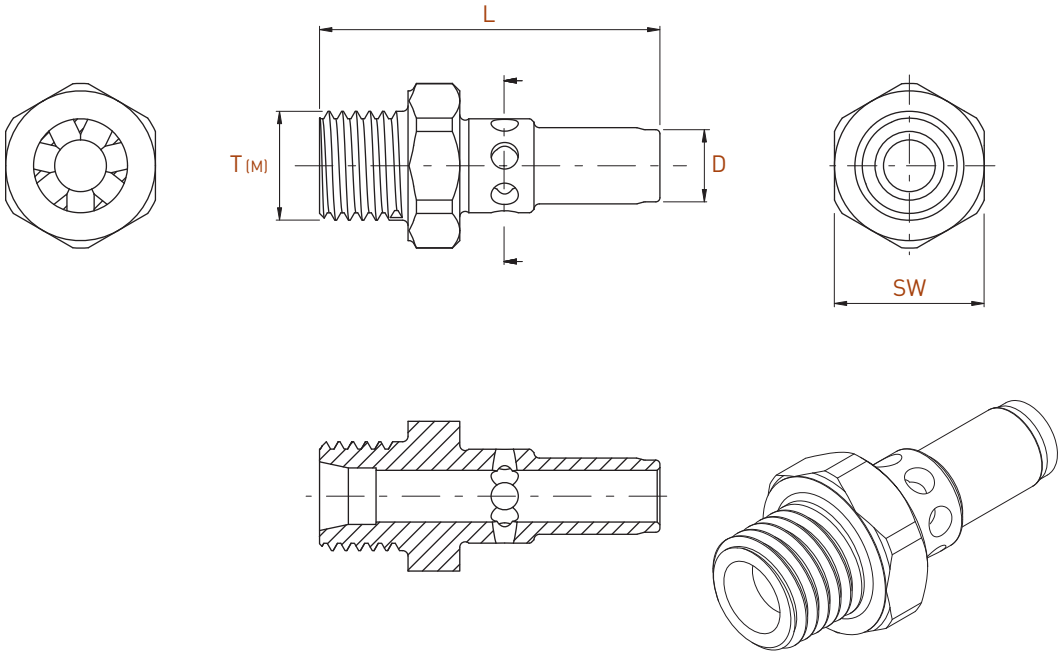
JWF



D	T (F)	L	SW	Art. N°
4	M6	18.3	8	**JWF-M6-D4**
6	M8X1	24	11	**JWF-M8X1-D6**

Fiches de connexion fixes mâle
Aussengewindestecker mit Verdrehsicherung
Male positionning connection plugs

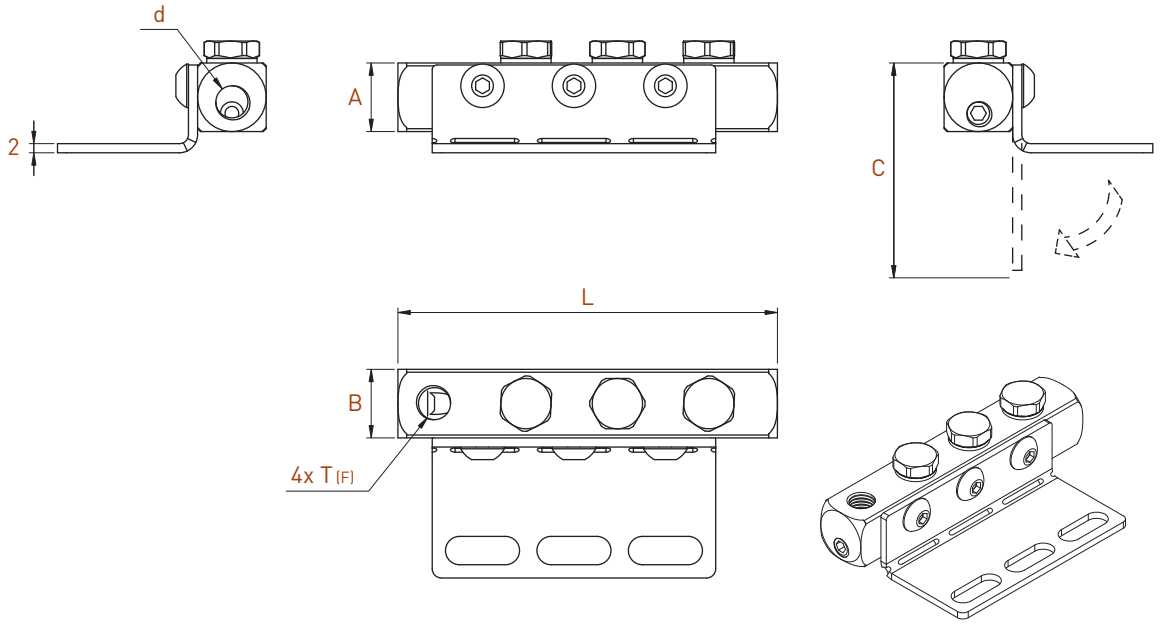
JWM



D	T (M)	L	SW	Art. N°
4	M6	18.3	8	**JWM-M6-D4**
6	M8X1	25	11	**JWM-M8X1-D6**

Blocs de distribution
Kühlmittelverteiler
Distribution blocks

JK

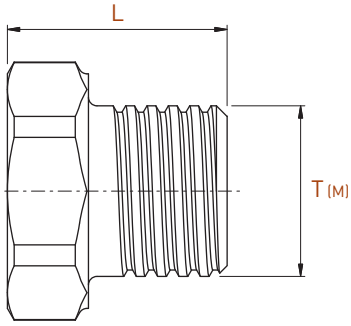


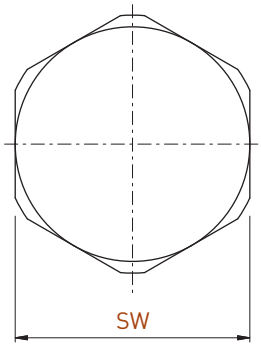
T (F)	A	B	C	d	L	Art. N°
M5	10	10	37	M5	62	**JK-M5-1010-4T**
M6	10	10	37	M6	62	**JK-M6-1010-4T**
M8X1	15	15	47	M8X1	83	**JK-M8X1-1515-4T**
BSP1/8	15	15	47	BSP1/8	83	**JK-BSP1/8-1515-4T**

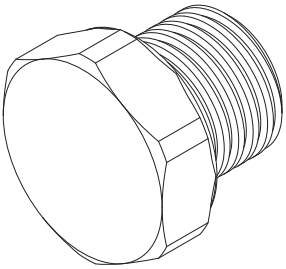
Qty	Livré avec	Mitgeliefert	Supplied with
1	Plaque de serrage pliable	Faltbare Klemmplatte	Foldable clamping plate
3	Vis bombée	Linsenkopfschraube	Domed clamping Screw
3	Vis sans tête bouchon	Verschlußstopfen	Sealing screw
3	Joint d'étanchéité en cuivre	Kupferdichtungsringe	Copper sealing basket
1	Vis sans tête bouchon	Madenschraube	Grub screw

Bouchons d'étanchéité
Verschlußstopfen
Sealing plugs

JBB





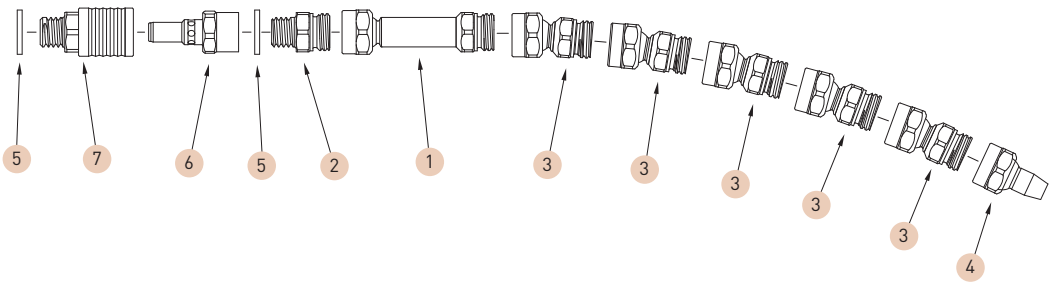


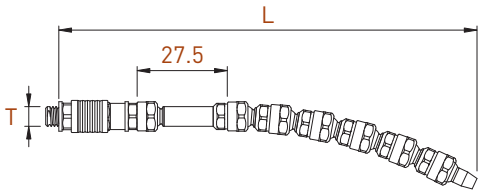
SW	T (M)	L	Art. N°
8	M5	7.3	**JBB-M5-L7.0**
8	M6	7.8	**JBB-M6-L8.0**
11	M8X1	10.3	**JBB-M8X1-L10.0**
11	BSP1/8	10.3	**JBB-BSP1/8-L10.0**

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle

JKIT-AR3

new





Ref	Qty	Kit composition
1	1	JAR3-L27.5
2	1	JRMM-AR3-M6-L3.0
3	5	JAR3-L12.5
4	1	JJ-AR3-D3-L9
5	2	JO-M6
6	1	JWF-M6-D4
7	1	JS-M6-D4

T (M)	L	Art. N°
M6	130	**JKIT-AR3-M6-D3-130**

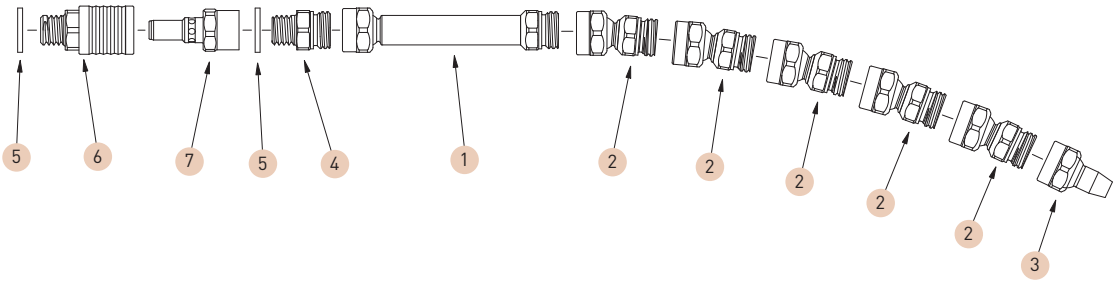
Pression max	Couple de serrage Anzugsmoment Torque setting
150 bar (2.175psi)	**1.8 Nm**

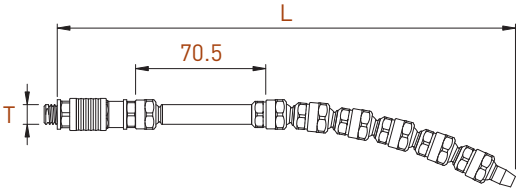
Option recommandée Empfohlene Option Recommended option	Page Seite Page
C-AR3	16.45

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle

JKIT-AR6

new





Ref	Qty	Kit composition
1	1	JAR6-L70.5
2	5	JAR6-L20.5
3	1	JJ-AR6-D6-L16
4	1	JRMM-AR6-M8X1-L4
5	2	JO-M8X1
6	1	JS-M8X1-D6
7	1	JWF-M8X1-D6

T (M)	L	**Art. N°**
M8X1	225	**JKIT-AR6-M8X1-D6-225**

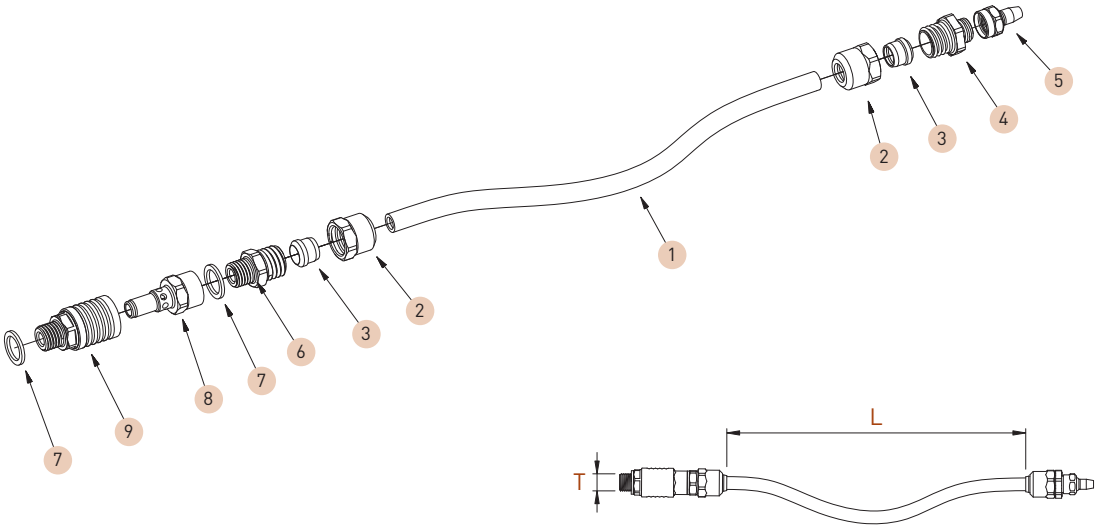
Pression max	Couple de serrage Anzugsmoment Torque setting
100 bar (1.450 psi)	**6 Nm**

Option recommandée Empfohlene Option Recommended option	Page Seite Page
C-AR6	16.45

Kit tube en cuivre avec buse d'arrosage
Kit Kupferrohr mit Kühlungsdüse
Kit copper tube with coolant nozzle

JKIT-CU

new



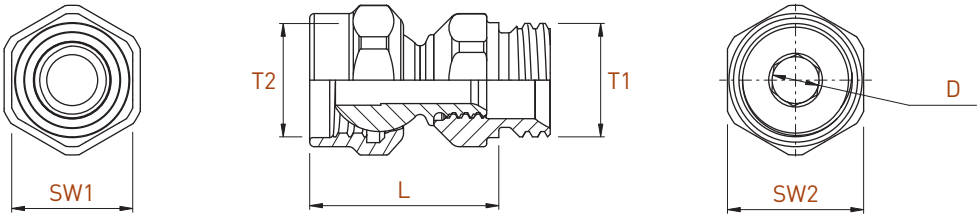
Ref	Qty	Kit composition
1	1	JT-CU
2	2	JN-M10-D6
3	2	JNG-D6
4	1	JRMM-AR3-M10-L3.0
5	1	JJ-AR3-D3-L9
6	1	JRMM-M10-M8X1-L3.5
7	2	JO-M8X1-D6
8	1	JWF-M8X1-D6
9	1	JS-M8X1-D6

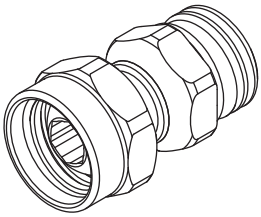
T (M)	L	**Art. N°**
M8X1	305	**JKIT-CU-AR3-D3-M8X1-305**

Système articulé
Gelenksystem
Articulated system

JAR

new



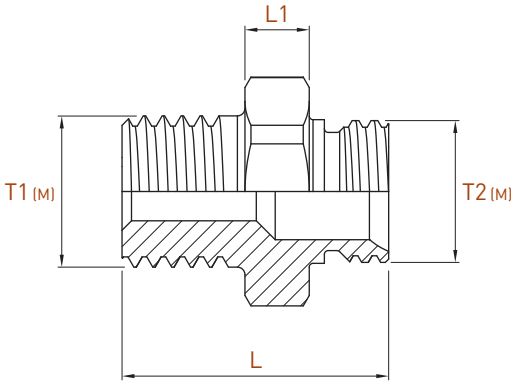


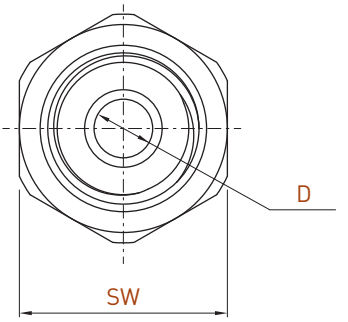
T1 (M)	T2 (F)	L	D	SW1	SW2	Art. N°
M7.5	M7.5	12.5	3	8	9	**JAR3-L12.5**
		27.5	3			**JAR3-L27.5**
		42.5	3			**JAR3-L42.5**
M13	M13	20.5	6	13	15	**JAR6-L20.5**
		45.5	6			**JAR6-L45.5**
		70.5	6			**JAR6-L70.5**

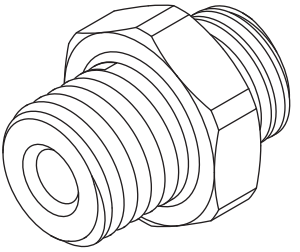
Connecteurs mâle/mâle
Anschlüsse Aussengewinde
Male connectors

JRMM-AR

new





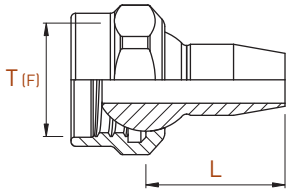


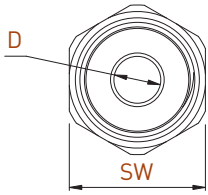
T1 (M)	T2 (M)	L	L1	D	SW	Art. N°
M6	M7.5	12	3	3	8	**JRMM-AR3-M6-L3.0**
M8X1	M7.5	14	3.5	3	11	**JRMM-AR3-M8X1-L3.5**
M10	M7.5	15	3	3	11	**JRMM-AR3-M10-L3.0**
M8X1	M13	4	17	6	13	**JRMM-AR6-M8X1-L4.0**
M10X1	M13	4	18	6	13	**JRMM-AR6-M10X1-L4.0**
BSP 1/8"	M13	4	18	6	13	**JRMM-AR6-BSP1/8-L4.0**

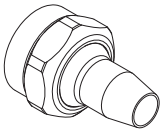
Buses
Düse
Nozzle

JJ-AR

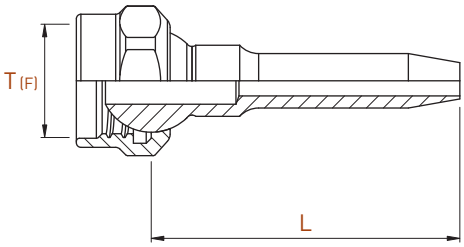
new

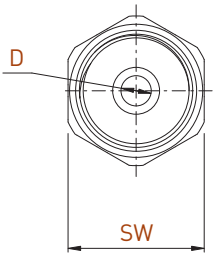


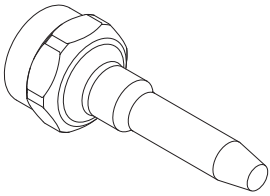




T (F)	L	D	SW	Art. N°
M7.5	9	3	9	**JJ-AR3-D3-L9**
M13	16	6	15	**JJ-AR6-D6-L16**





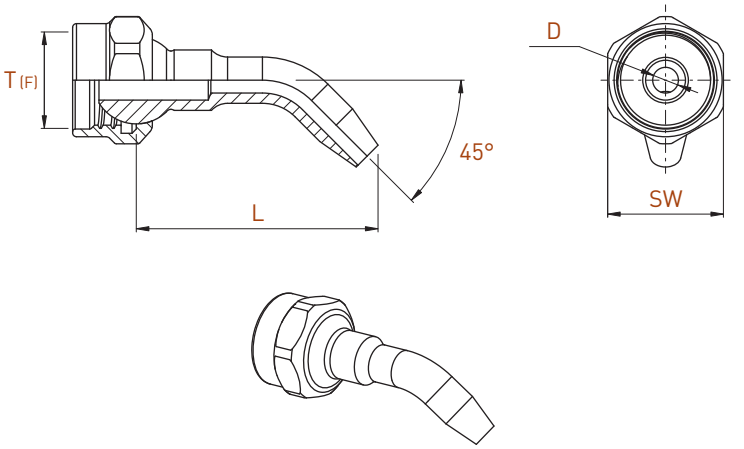


T (F)	L	D	SW	Art. N°
M7.5	20	2	9	**JJ-AR3-D2-L20**
M13	35	3	15	**JJ-AR6-D3-L35**

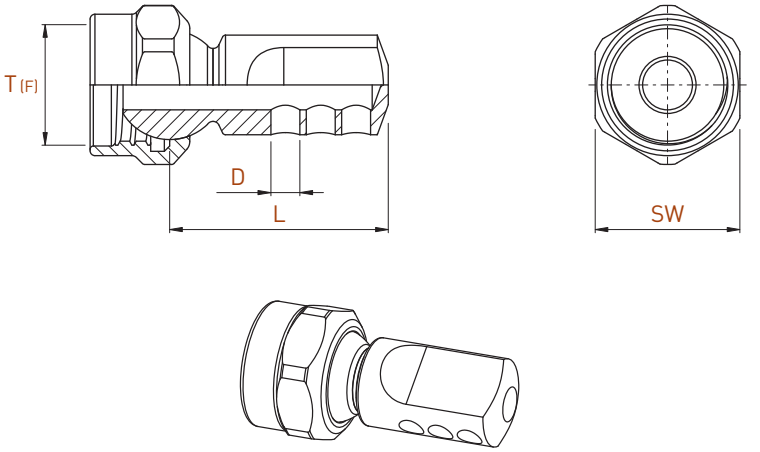
Buses
Düse
Nozzle

JJ-AR

new



T (F)	L	D	SW	Art. N°
M7.5	19	2	9	**JJ-AR3-D2-L19-45°**
M13	23,5	6	15	**JJ-AR6-D6-L23.5-45°**

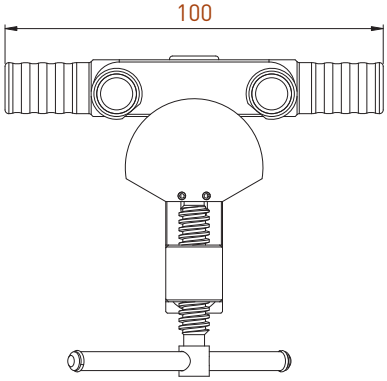


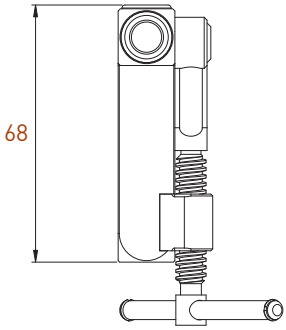
T (F)	L	D	SW	Art. N°
M7.5	15	1.8	9	**JJ-AR3-3XD1.8-L13.5**
M13	24	3.4	15	**JJ-AR6-3XD3.4-L24**

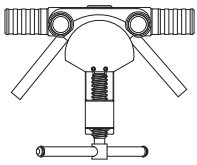
Appareil de cintrage
Biegegerät
Bending tool

JTB

new







Art. N°
JTB-D6

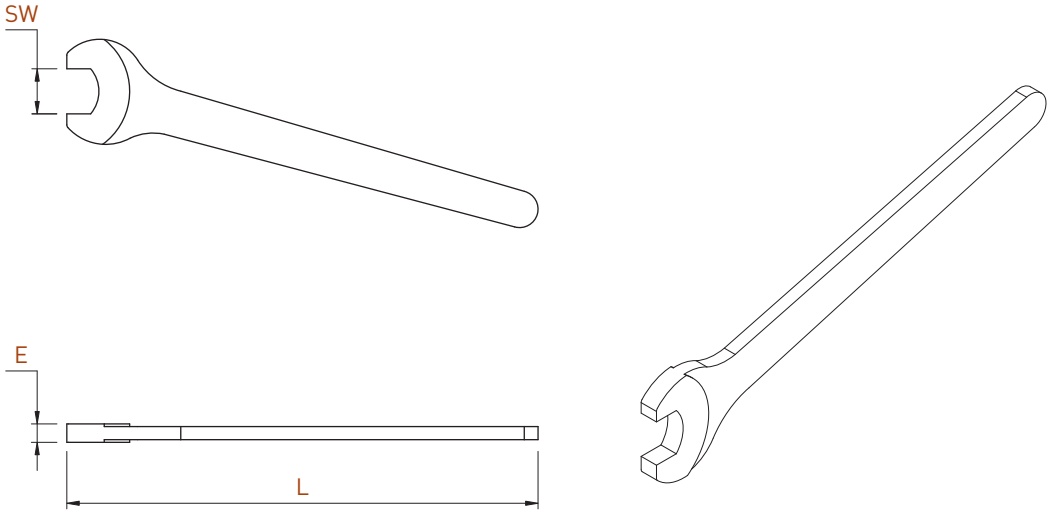
Rubans d'étanchéité pour filetage
Gewindedichtbänder
Thread sealing tapes

TEF

Largeur Breite Width	Épaisseur Dicke Thickness	Longueur Länge Length	**Art. N°**
6 mm	0.1 mm	12 m	**TEF-6010**

Clés de serrage
Gabelschlüssel
Clamping keys

C



SW	E	L	Art. N°
8	2.5	90	**C-SW8-E2.5**
11	3.7	110	**C-SW11-E3.7**
13	5.8	130	**C-SW13-E5.8**
8	2.5	55	**C-AR3** new
9	3		
13	3	65	**C-AR6** new
15	4		

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