

Application

































<div>P</div> <div></div>	<div>P</div> <div></div>	<div>P</div> <div></div>	Steel		Shoulder Milling		Face milling
<div>M</div> <div></div>	<div>M</div> <div></div>	<div>M</div> <div></div>	Stainless steel		Shoulder- / Slot Milling		Ramping
<div>K</div> <div></div>	<div>K</div> <div></div>	<div>K</div> <div></div>	Cast iron		Copy Milling		Pocket milling
<div>N</div> <div></div>	<div>N</div> <div></div>	<div>N</div> <div></div>	Non Ferros Materials		Profile Milling		Helical milling
<div>S</div> <div></div>	<div>S</div> <div></div>	<div>S</div> <div></div>	Superalloy		Dynamic Milling		Plunge milling
<div>H</div> <div></div>	<div>H</div> <div></div>	<div>H</div> <div></div>	Hardened steels		Circle Segment Milling		
<div>O</div> <div></div>	<div>O</div> <div></div>	<div>O</div> <div></div>	Plastic and others		Micro Milling		

- Main application
- Secondary application
- No recommendation



















Product characteristics

HSS-Co	VHM		Tool material		Unequal pitch
AlTiN	CrN	TiAlN	Coating		Cylindrical shank (without flat, HA) / shank tolerance
polished			Polished flutes		Weldon flat (HB) / shank tolerance
			Helix Angle / Uneven Helix Angle		Morse taper shank (MC) / shank tolerance
			Tolerance		Protection chamfer / sharp cutting edge
DIN 6535			DIN / Company standard		With corner radius
			Length		Axial / radial coolant
			Machining direction		Number of teeth
			240° cutting / centre cut	HSC	HPC










Application

<div>P</div> <div></div>	<div>P</div> <div></div>	<div>P</div> <div></div>	Steel		NC spotting drill
<div>M</div> <div></div>	<div>M</div> <div></div>	<div>M</div> <div></div>	Stainless steel	<div>A</div> <div>B</div> <div>D</div>	Centre drill Shape
<div>K</div> <div></div>	<div>K</div> <div></div>	<div>K</div> <div></div>	Cast iron		Drilling
<div>N</div> <div></div>	<div>N</div> <div></div>	<div>N</div> <div></div>	Non Ferros Materials		Drill for pre drilling conical
<div>S</div> <div></div>	<div>S</div> <div></div>	<div>S</div> <div></div>	Superalloy		Drill for pre drilling cylinder
<div>H</div> <div></div>	<div>H</div> <div></div>	<div>H</div> <div></div>	Hardened steels		Step drills
<div>O</div> <div></div>	<div>O</div> <div></div>	<div>O</div> <div></div>	Plastic and others		Inclined entrance
<div></div>					Drilling on a convex surface

Product characteristics


















<div>HSS</div>	<div>VHM</div>		Tool material		Cylindrical shank (without flat, HA) / shank tolerance
<div>AlCrN</div>	<div>TiAlN</div>	<div>Coated</div>	Coating		Weldon flat (HB) / shank tolerance
<div></div>	<div></div>		Helix angle		Morse taper shank (MC) / shank tolerance
<div></div>	<div></div>		Point angle		Offset shaft / Reduced shank
<div></div>			Countersink angle		Weldon Whistle-Notch / shank tolerance
<div></div>	<div></div>		Cutting tolerance		Whistle-Notch / shank tolerance
<div>DIN 340</div>	<div>DIN 1869</div>	<div>DIN 6537</div>	DIN		Internal coolant
<div></div>			Works standard	<div>1-3</div> <div>3-8</div> <div>8-10</div>	Number of teeth
<div>3xD</div>	<div>8xD</div>	<div>12xD</div>	Drilling depth		

Application

<div>P</div> <div>●●</div>	<div>P</div> <div>○</div>	<div>P</div>	Steel			Blind holes	
<div>M</div> <div>●●</div>	<div>M</div> <div>○</div>	<div>M</div>	Stainless steel			Through holes	
<div>K</div> <div>●●</div>	<div>K</div> <div>○</div>	<div>K</div>	Cast iron			Through holes and blind holes	
<div>N</div> <div>●●</div>	<div>N</div> <div>○</div>	<div>N</div>	Non Ferros Materials				
<div>S</div> <div>●●</div>	<div>S</div> <div>○</div>	<div>S</div>	Superalloy				Power class
<div>H</div> <div>●●</div>	<div>H</div> <div>○</div>	<div>H</div>	Hardened steels				
<div>0</div> <div>●●</div>	<div>0</div> <div>○</div>	<div>0</div>	Plastic and others				

- Main application
- Secondary application
- No recommendation

Product characteristics

HSS-Co	VHM		Tool material		Cylinder (without flat, HA)		
VS	VAP FeO	THL	Coating		Weldon flat (HB)		
M	UNC	TR	Thread norm		Morse taper shank (MC)		
RH 	LH 		Left hand thread Right hand thread		Cylinder shank with square piece		
			Tolerance field			Axial / radial coolant	
B 3.5-5.5 	D 3.5-5 	E 1.5-2 	Forme of taper lead				Number of teeth

Application

<div>P</div> <div>●●</div>	<div>P</div> <div>○</div>	<div>P</div> <div></div>	Steel
<div>M</div> <div>●●</div>	<div>M</div> <div>○</div>	<div>M</div> <div></div>	Stainless steel
<div>K</div> <div>●●</div>	<div>K</div> <div>○</div>	<div>K</div> <div></div>	Cast iron
<div>N</div> <div>●●</div>	<div>N</div> <div>○</div>	<div>N</div> <div></div>	Non Ferros Materials
<div>S</div> <div>●●</div>	<div>S</div> <div>○</div>	<div>S</div> <div></div>	Superalloy
<div>H</div> <div>●●</div>	<div>H</div> <div>○</div>	<div>H</div> <div></div>	Hardened steels
<div>O</div> <div>●●</div>	<div>O</div> <div>○</div>	<div>O</div> <div></div>	Plastic and others





















Blind holes



Through holes

- Main application
- Secondary application
- No recommendation

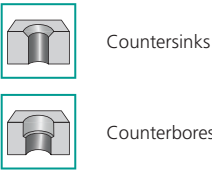
Product characteristics

<div>HSS</div>	<div>VHM</div>	Tool material	<div><div>+/- 0.003</div></div>	<div><div>+/- 0.005</div></div>	<div><div>H7</div></div>	Cutting tolerance
<div>TiN</div>	<div>TiAlN</div>	Coating	<div></div>			Cylindrical shank (without flat, HA)
<div></div>		Left-twist grooved	<div></div>			Weldon flat (HB)
<div></div>		Straight flutes	<div></div>			Morse taper shank (MC)
<div><div>1:10</div></div>	<div><div>1:16</div></div>	Taper	<div></div>			Cylinder shank with square piece
<div>DIN 204</div>	<div>DIN 212</div>	DIN	<div><div>1-3</div></div>	<div><div>3-8</div></div>	<div><div>8-10</div></div>	Number of teeth
<div></div>		Works standard	<div></div>	<div></div>	<div></div>	Axial / radial coolant














Application

<div>P</div> <div>●●</div>	<div>P</div> <div>○</div>	<div>P</div> <div></div>	Steel
<div>M</div> <div>●●</div>	<div>M</div> <div>○</div>	<div>M</div> <div></div>	Stainless steel
<div>K</div> <div>●●</div>	<div>K</div> <div>○</div>	<div>K</div> <div></div>	Cast iron
<div>N</div> <div>●●</div>	<div>N</div> <div>○</div>	<div>N</div> <div></div>	Non Ferros Materials
<div>S</div> <div>●●</div>	<div>S</div> <div>○</div>	<div>S</div> <div></div>	Superalloy
<div>H</div> <div>●●</div>	<div>H</div> <div>○</div>	<div>H</div> <div></div>	Hardened steels
<div>O</div> <div>●●</div>	<div>O</div> <div>○</div>	<div>O</div> <div></div>	Plastic and others

- Main application
- Secondary application
- No recommendation



Product characteristics

HSS	VHM	Tool material		Cylindrical shank (without flat, HA)		
TiN	TiAlN	Coated	Coating		Weldon flat (HB)	
		Unequal pitch		Morse taper shank (MC)		
DIN 334C	DIN 335C	DIN				Three-surface grind
			Countersink angle		with hexagon socket	
		Number of teeth				

