

TESATRONIC TWIN-T20

Dual high-precision metrological display

The TWIN-T20 digital display allows two measured values to be displayed simultaneously, both on the production floor and in the test laboratory.

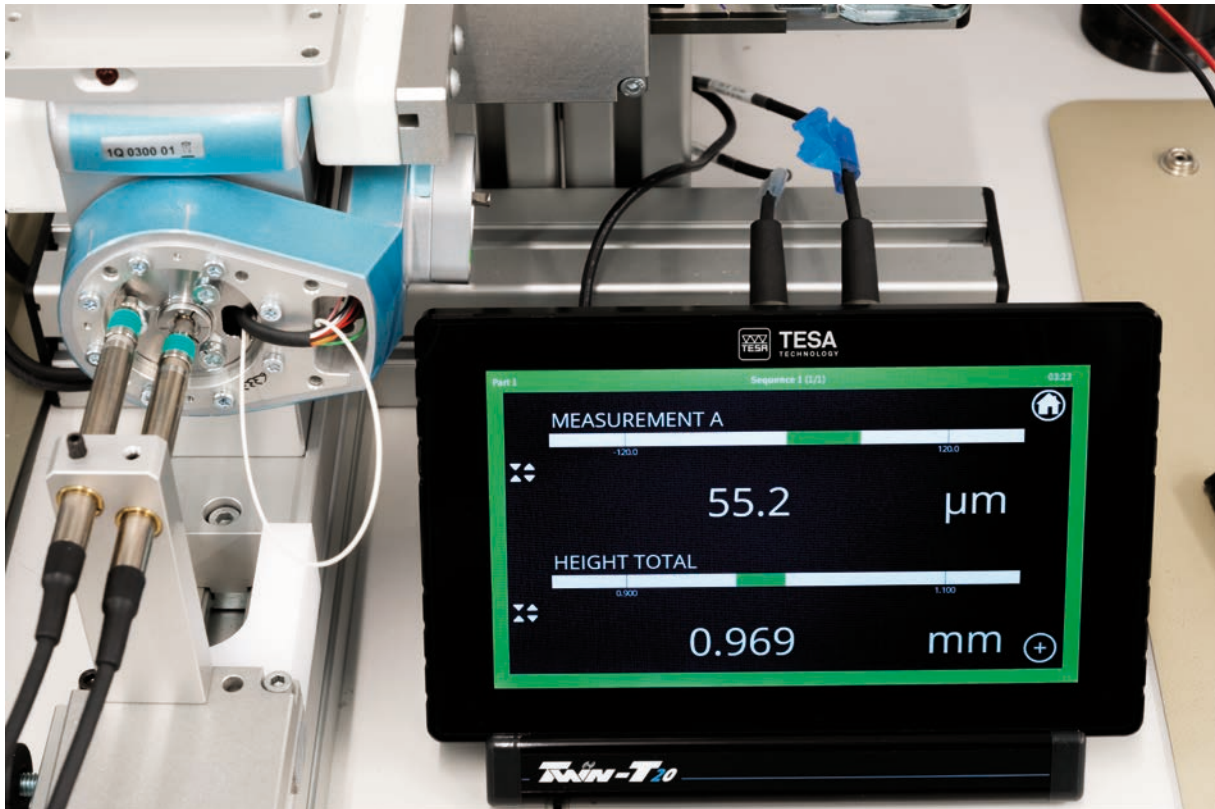
Multiple inputs allow you to connect TESA probes and a wide range of measuring devices via the integrated USB ports.

Intuitive navigation makes it easy to set measurement tolerances and choose the type of display to optimise reading for users.



Key features:

- Simultaneous display of 2 values
- Static or dynamic measurements
- Large 7" touch screen
- 4 integrated display styles
- Intuitive measurement setting
- Optimised sampling with 4300 acquisitions per second
- Equipped in the standard configuration for data collection and transfer

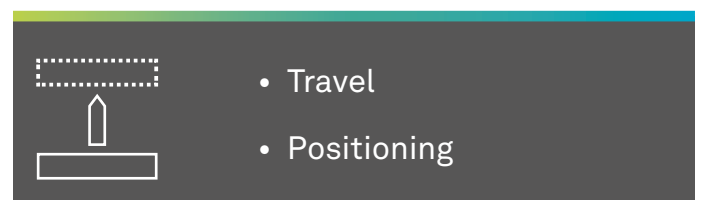
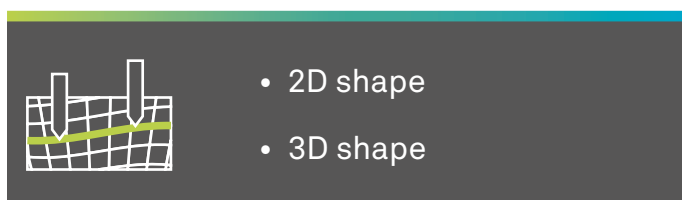
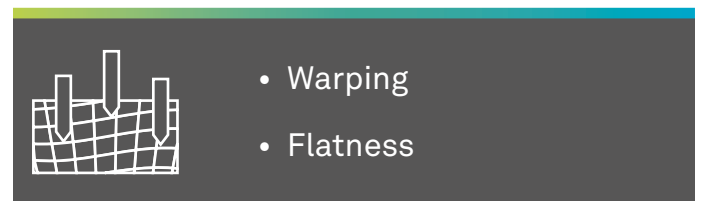
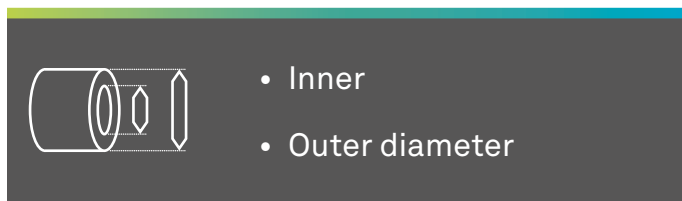
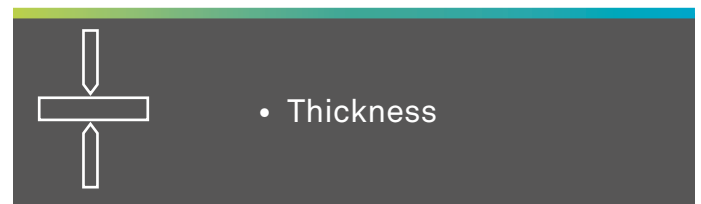
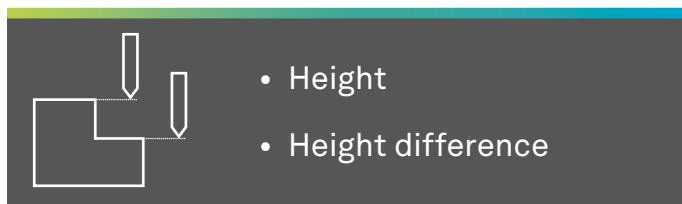


Fine-tuning of position during assembly operation.

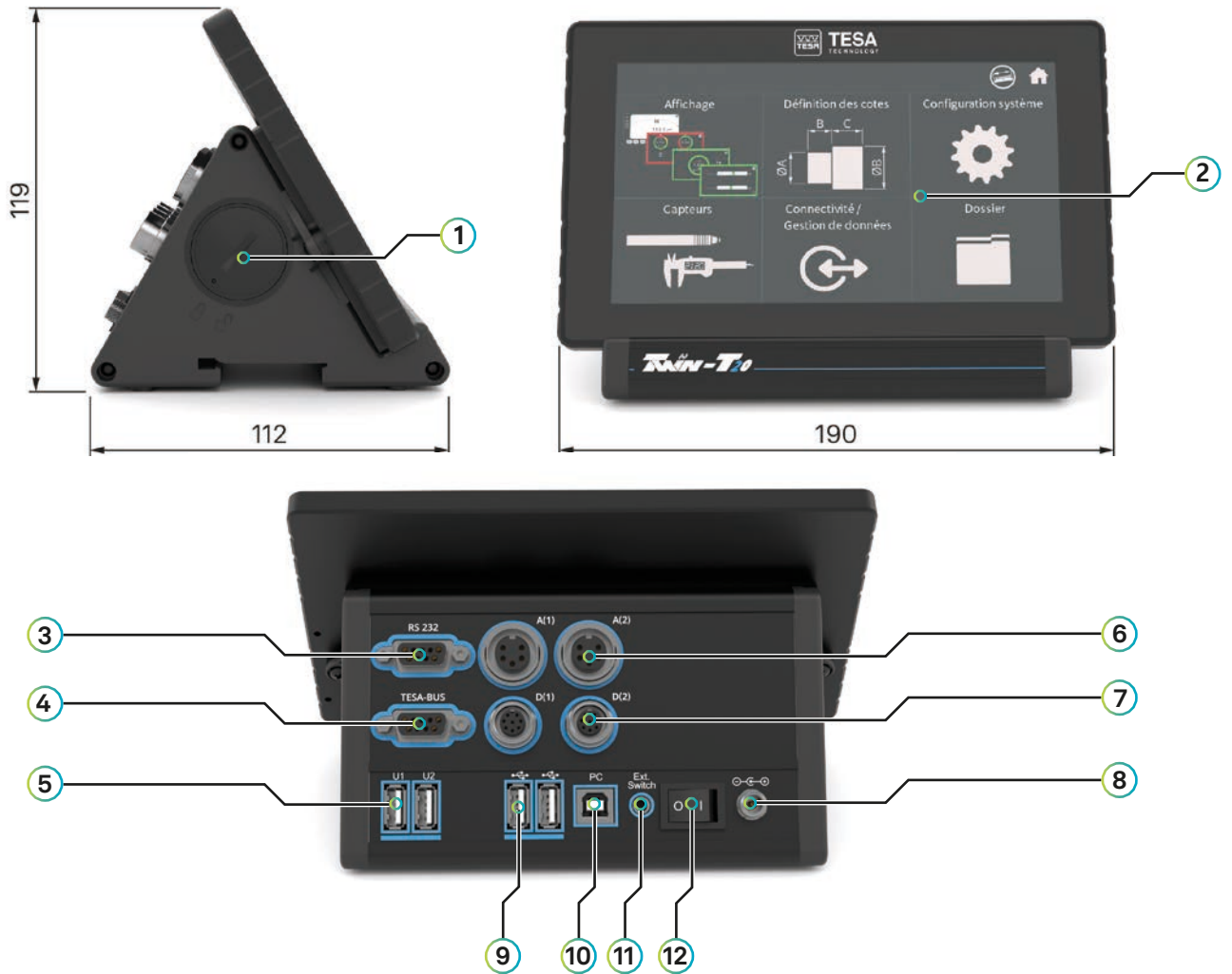
The TWIN-T20 display allows you to measure distance, diameter and to check shape or orientation tolerances (straightness, run-out, parallelism, perpendicularity, etc.)

This display is thus the perfect tool for dimensional inspection, adjustment or assembly of mechanical parts guaranteeing accuracy with a quick and instinctive user display.

Examples of possible measurements using the TWIN-T20 display:



Product description



No.	Description
1	TLC cap
2	7" touch screen
3	RS 232 serial port Sub-D 9S
4	TESA-BUS port Sub-D 9S
5	2 x USB-A host for measuring instruments
6	2 x DIN45322 connectors for TESA HB probes
7	2 x M12 connectors for TESA digital probes
8	Power supply connector 15-24 V
9	2 x USB-A host for peripherals (USB footswitch, keyboard, memory stick, QR code reader)
10	1 x USB-B device (HID keyboard output + firmware update)
11	Jack Ø 2.5 port for footswitch
12	ON/OFF switch



The spring blades installed in the display profile allow the unit to be mounted on a 35 x 7,5 mm DIN mounting rail

Specifications

TESATRONIC TWIN-T20

Order number	132207.0100
Description	TESA dual display for inductive probes
Number of inductive probe inputs	2
Number of digital probe inputs	2
Number of USB measuring device inputs	2
Resolution	0,1µm / 0.00001 in
Static measurement	Yes
Dynamic measurement	Min, Max, Max-Min, Median, (Max-Min)/2, Mean
Sampling frequency	4300/s
Integrated functions	<ul style="list-style-type: none">- Measurement tolerance- 8 classifications- Calibration- OK/NOK/ADJUST display- Data transfer (via RS232, TLC or HID keyboard device)- Setting lock- Footswitch/button programming- Storage of 2 measurement programs
Display types	<ul style="list-style-type: none">- Bar graph- Rotating indicators- Dial indicators- Galvanometer type
Standard working conditions	20 °C +/- 1 °C, humidity: 40 < HR < 65 %, no condensation
Limit working conditions	10 °C < T° < 40 °C, humidity < 80 %, no condensation
Storage conditions	-10 °C < T° < 60 °C, humidity < 80 %, no condensation
Indication error (at 20 °C, HR = 50 %, based on fictive probes)	± (0,2 % of the measured value + 0,3 µm)
Zero drift (at 20 °C and 50 % HR)	Max 0,15 µm/°C
IP level	IP65 for front side, IP20 others
Input voltage	100 to 240 V / 50-60 Hz, 0,6 A
Power consumption	4,2 W without device
Compatible standards	CE, UKCA
Weight	1,2 kg
Delivery contents	<ul style="list-style-type: none">- TWIN-T20- Power supply- Power cable- 4 x power cable connectors EU, UK, USA, CH- Auto-test report- Calibration certificate- Quick start manual- 2 x packaging foams

Optional accessories

Item no.	Description
132207.1300	Power supply + power cable + 4 x power cable connectors EU, UK, USA, CH
132207.1000	Stylus set + holder for TWIN-T20
132207.1100	TWIN-T20 screen
132207.1200	TWIN-T20 mounting base
137000.1910	Manual footswitch, jack, 1.8 m
137000.1900	Footswitch, jack, 1.8 m
109065.3300	Footswitch, USB, 2 m
109065.0100	TLC-USB PC cable 2 m
109065.3050	TLC-BLE <i>Bluetooth</i> ® transmitter
109065.2010	Opto-RS232 cable to USB, 2 m



132207.1300



132207.1000



132207.1100



132207.1200



137000.1910



137000.1900



109065.3300



109065.0100



109065.3050

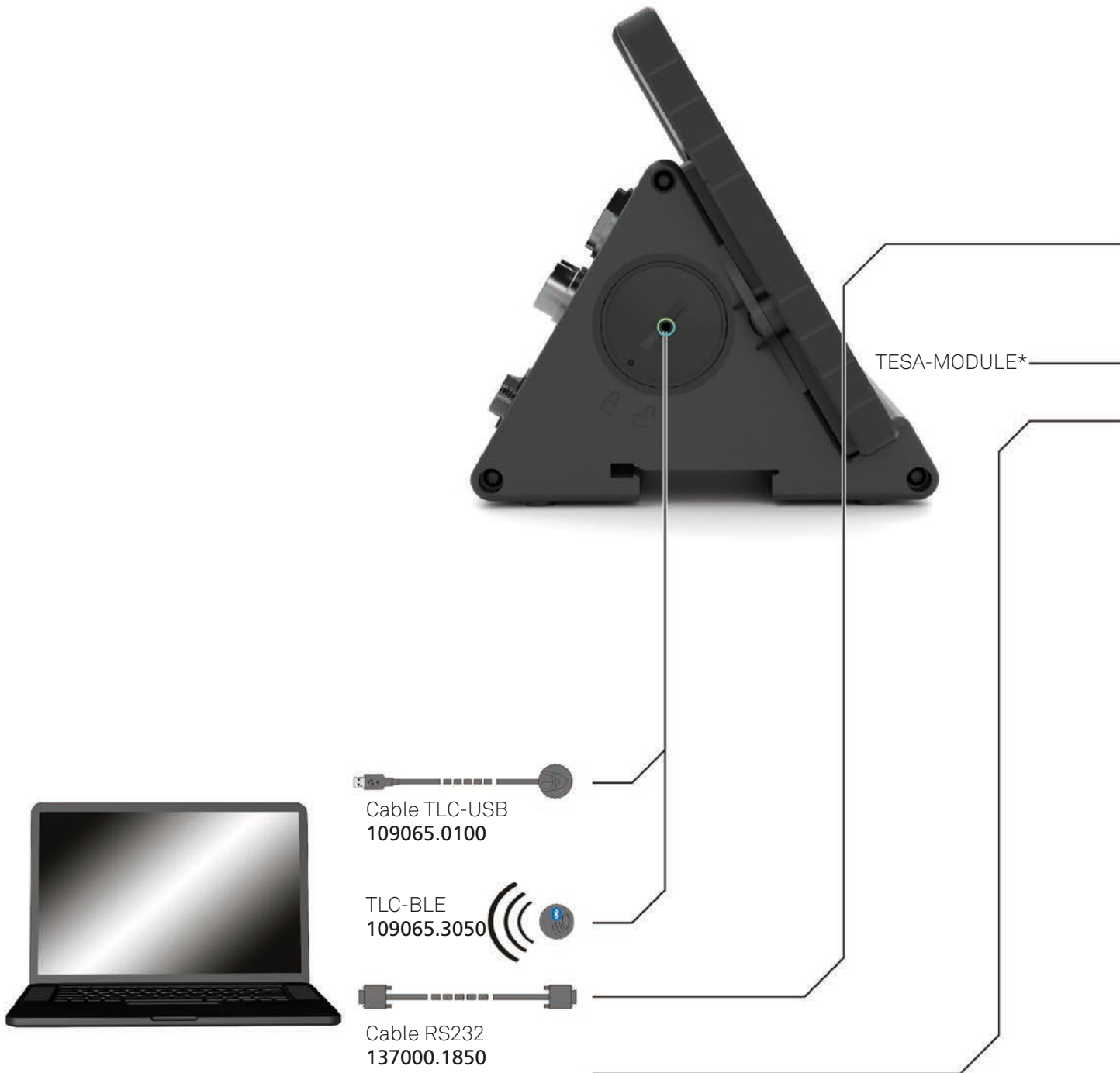


109065.2010

Connectivity

TESA device connectivity is essential to ensure the connection of as many measuring devices as possible in order to easily collect, analyse and store data thus ensuring perfect traceability.

The TWIN-T20 display is thus equipped with numerous ports in the standard configuration, allowing multiple measuring instruments to be connected to collect data or send data to a PC via a wide range of connections.



*Detailed information to come



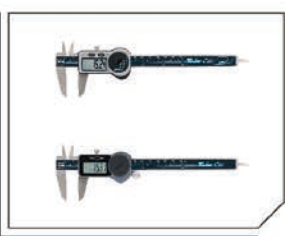
Digital probes*

Manual footswitch, 137000.1910

Footswitch, jack 137000.1900

Footswitch, USB 109065.3300

Memory stick



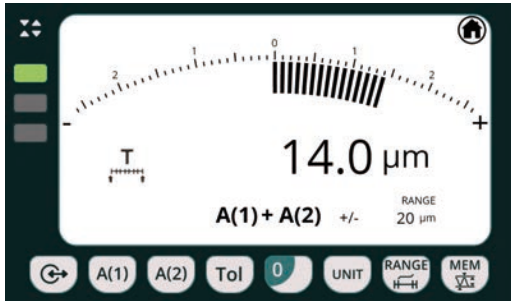
Cable TLC-USB 109065.0100



Cable OPTO RS232-USB 109065.2010

User interface

The TWIN-T20 metrological display allows you to choose your display type to optimise result readout with four different displays.



Galvanometer type display limited to one measurement:



Bar graph type display, 1 measurement



Bar graph type display, 2 measurements



Dial indicator type display, 1 measurement



Dial indicator type display, 2 measurements

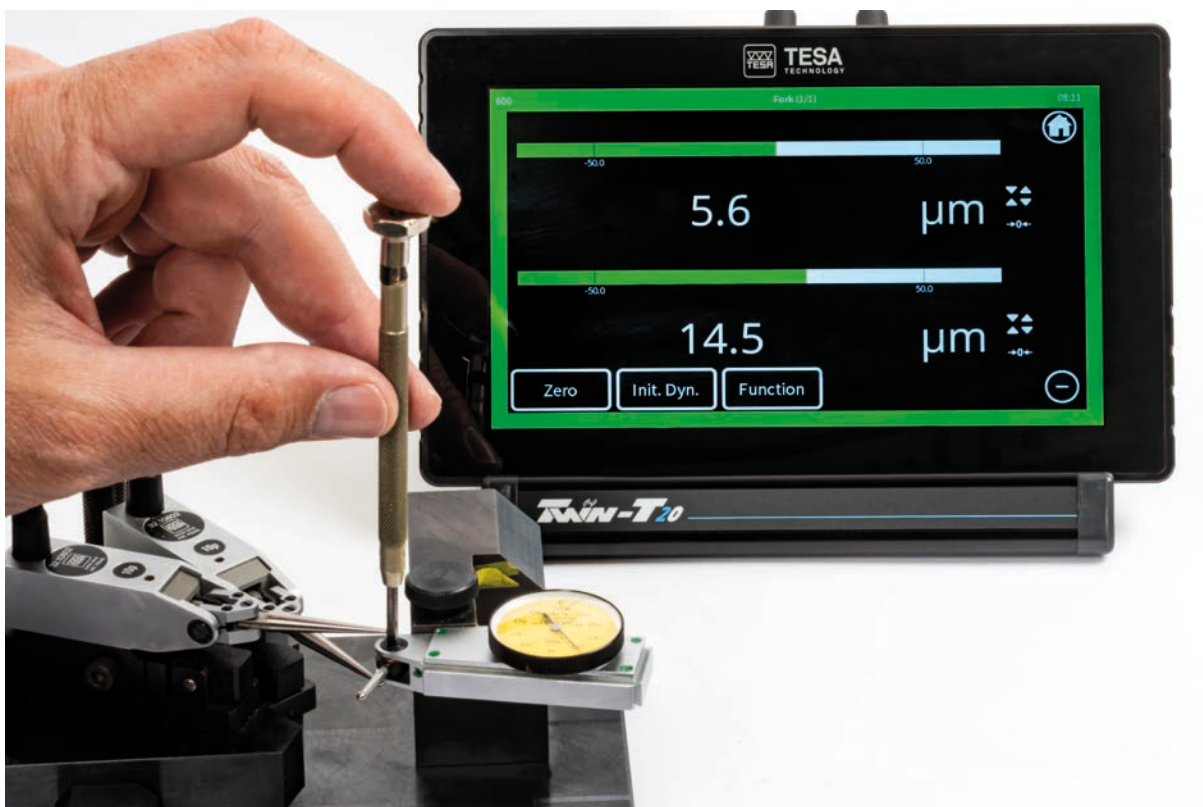


Rotating indicator type display, 1 measurement

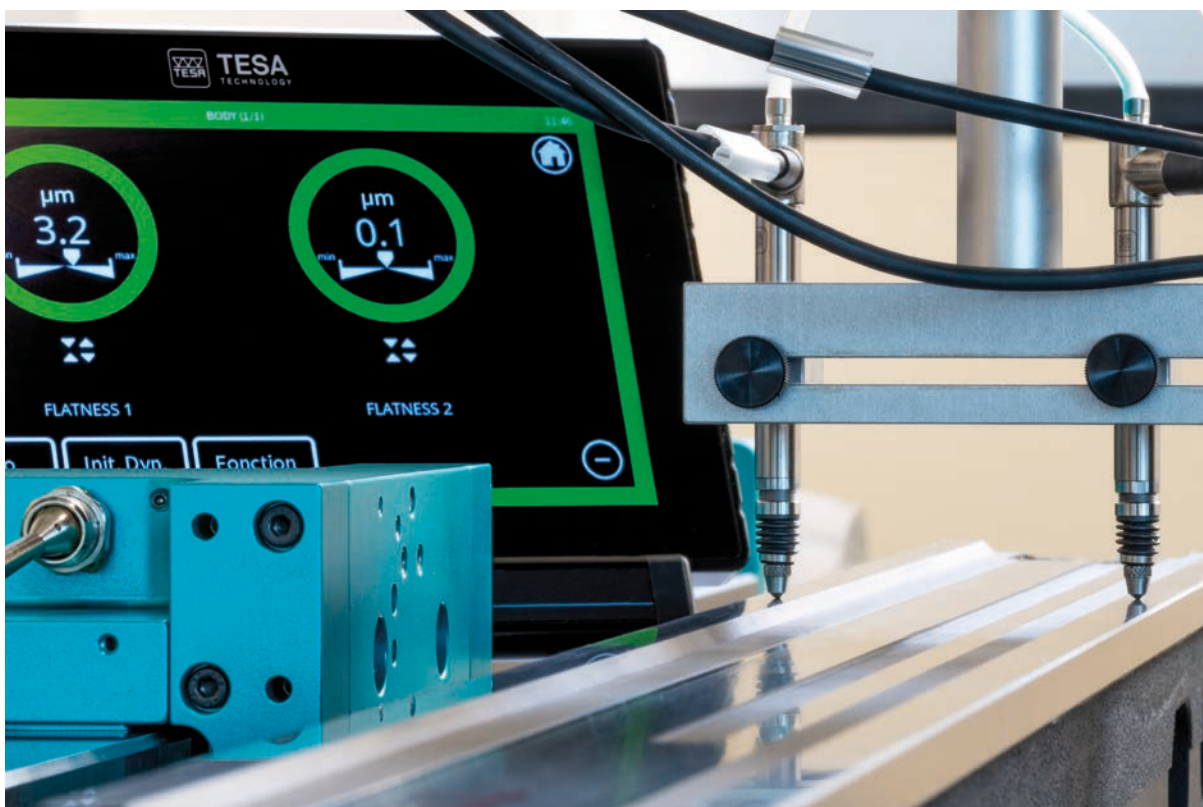


Rotating indicator type display, 2 measurements

① Note: This type of display allows direct display of the difference between the measured measurement and the centre of tolerance.



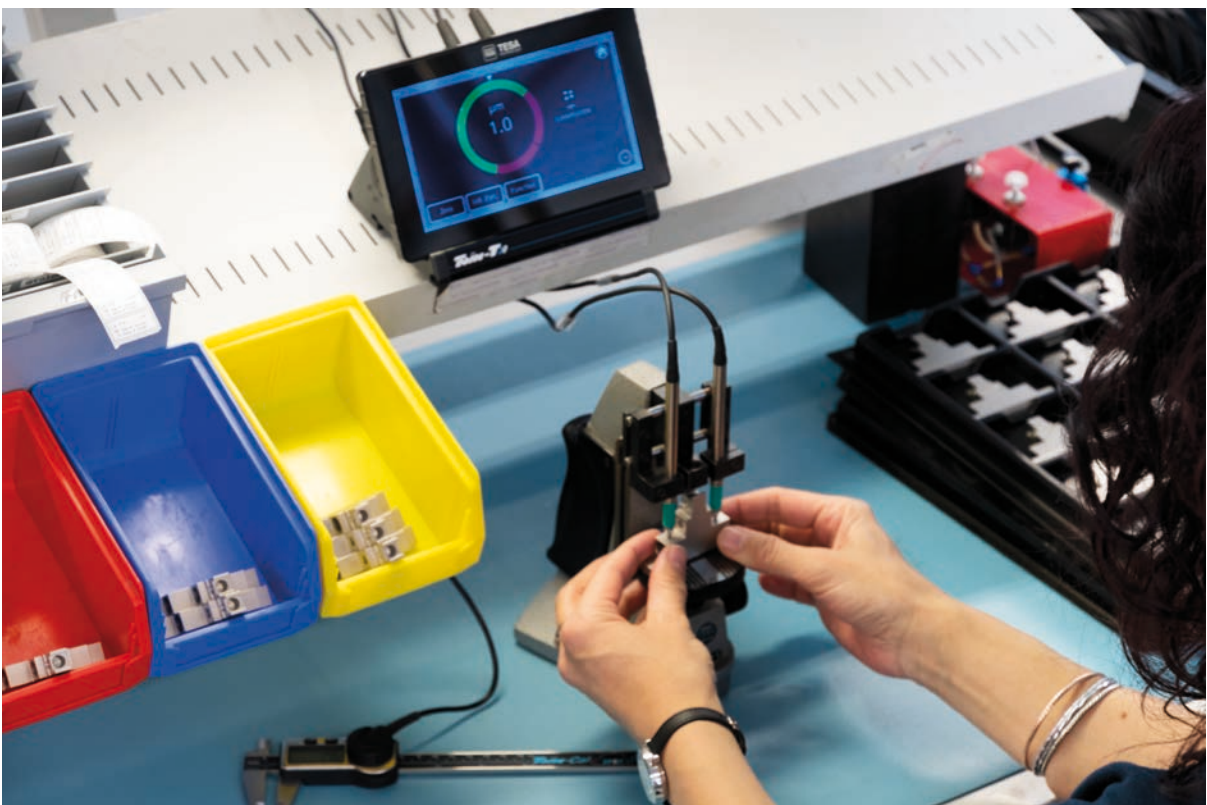
Position control during assembly operation



Simultaneous flatness measurement in two axes

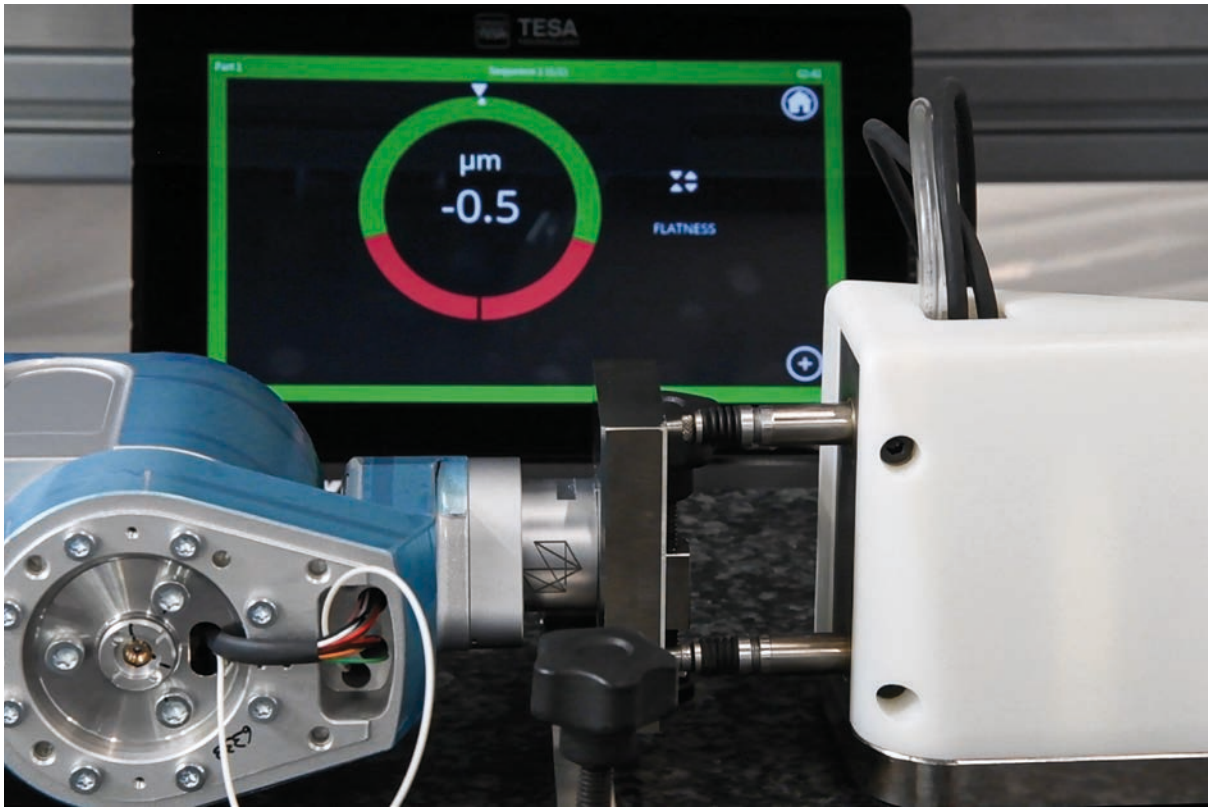


Concentricity measurement before assembly of cylindrical parts



Parts classification: the operator organises the parts in the container of the same colour as the screen outline.

Applications



Parallelism control during a precision assembly phase



Data storage on memory stick

Applications



Measurement of two run-outs in the same control operation



Control of 2 functional measurements, one with a TESA inductive probe and the other with a calliper connected to the display.

About Hexagon and TESA

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

TESA Technology, part of Hexagon's Manufacturing Intelligence division, is a leading innovator and manufacturer of precision measuring instruments, long-established in Switzerland. Learn more at tesatechnology.com.

Hexagon's Manufacturing Intelligence division provides solutions that utilize data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.