Product information

Optical-tactile devices with CNC table Mar4D PLQ 4200-T3

Product features • Speed:

- Extremely fast, mechanicaloptical workpiece alignment by means of a fully automatic centering and tilting table in combination with the matrix camera
- Axis movements with a unique speed of up to 200 mm/s
- Very fast and high-resolution matrix camera with a large field of view of 15x10 mm (WxH) in effective combination with innovative probe systems
- Mahr T7W with motorized axis of rotation and thus fastest stylus change on the market or RENISHAW SP25M 3D scanning probe system
- Joint evaluation of all collected measurement data via MarWin

• Productivity:

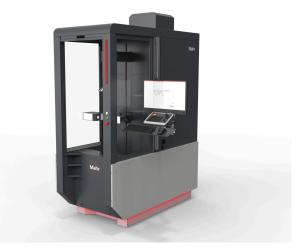
- Workpieces that were not manufactured between tips are simply clamped in the chuck
- Many different measuring functions combined in one device
- Flexible workpieces with up to D=210 mm, L=730 mm and 50 kg measured directly in production next to the production machines
- Increased measuring capacities and reduced waiting time

· Precision:

- Compensation of eccentrics of several millimeters to 1 µm in less than 30 seconds
- Integrated environmental controls, such as active temperature compensation of the device, ensure consistent measurement quality and significantly reduce waste

• User-friendliness:

- The ergonomic housing and interior design enables convenient and gentle operation for many hours
- Light curtains and interior monitoring protect people and measuring devices
- All devices are "robot-ready" and automation solutions, such as robot loading, can be implemented quickly and directly via our specialized MES department



Item no.: 5554253

Technical data

Travel/measuring path X1 axis	200 mm
Travel/measuring path X2 axis	200 mm
Travel/measuring path Y-axis	40 mm
Pos/Meas. path Z-axis	730 mm
Positioning speed C-axis	0.2 - 15 1/min
Positioning speed X1 axis	0.5 - 200 mm/s
Positioning speed X2 axis	0.5 - 200 mm/s
Positioning speed Y-axis	0.5 - 50 mm/s
Positioning speed Z-axis	0.5 - 200 mm/s
Workpiece length max.	730 mm
Workpiece diameter max.	210 mm
Table load max.	50 kg
Error limit Length	MPE ≤ (2.4 + I/200) μm; 'l' in mm
Error limit diameter	MPE ≤ (1.3 + d/150) µm; 'd' in mm
Measured value resolution Length	0.01 - 0.0001 mm
Measured value resolution diameter	0.01 - 0.0001 mm
Angular resolution	0.01 - 0.0001 °
Reference temperature	20 °C
Sensors	optical tactile
Optical system	telecentric precision optics, image field approx. 15 x 10 mm (W x H)
Camera system	CMOS matrix camera
Probe system	Mahr T7W and/or RENISHAW SP25M
Special equipment	CNC table
Measuring computer	AIO PC or industrial AIO PC with UPS (each incl. Microsoft Windows 10 IoT LTSC)
Operating temperature	10 °C to 35 °C
Storage and transport temperature	5 °C to 60 °C
Sound pressure level	<75 dB(A)
Permissible humidity	max. 70 %; non-condensing
Mains voltage	90 - 240 V
Mains frequency	50/60 Hz
Power consumption max.	850 W

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Transportation optionssuScope of deliveryPC

suitable for air freight PC holder