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SP 15000 C5 with compact straightness measurement

SIOS III

Product information

Laser interferometer for high-precision simultaneous measurement and calibration of length, pitch angle, yaw angle and straightness on positioning axes

Laser interferometer measurement system

SP 15000 C5 WITH COMPACT STRAIGHTNESS MEASUREMENT

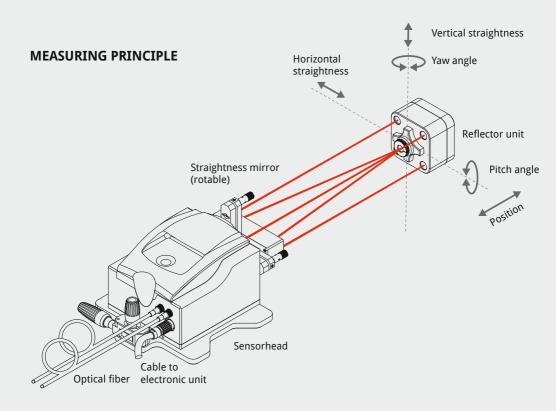
Taking high-precision, dynamic measurements of guide characteristics during the adjustment and alignment of machine axes is very labour-intensive and time-consuming, as is the calibration of the axes according to the relevant standards.

The SP 15000 C5 calibration laser interferometer was developed to meet the requirements of machine and equipment manufacturers. It allows synchronous, continuous 5 DOF measurements to be taken. All of the length, pitch angle, yaw angle and straightness variables are measured with high-precision laser interferometry, whereby the same highly stable laser frequency is used in all three length measurement channels. With the compact straightness option, the straightness mirror is mounted directly on the sensor head. This means that there are only two components that need to be assembled and aligned with each other. The measurement system can now be installed quickly and reliably, especially in tooling machines, and even where space is restricted. The fibre optic coupling of the sensor head together with the integrated beam direction detection system ensures easy handling and adjustment.

For large measurement ranges or calibration tasks, the use of wireless temperature sensors or the LCS climate station is recommended.

Ideal for

- Calibration
- Quality assurance
- Volumetric compensation
- Developement



Useful accessories expand the range of possible applications

- · Beam deflection with an optional adjustable deflection mirror
- Extensive accessories for fixing and adjustment
- InfasMTCAL calibration software for calibration, error analysis and error compensation
- Support for all commonly used CNC controls
- InfasAXIS calibration software for calibration in accordance with VDI/DGQ 3441, DIN ISO 230 or VDI 2617
- InfasALIGN calibration software for aligning and adjusting guides



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≤15 m (on demand up to 50 m)

20 pm

±5°

0.0004 arcsec

±4 mm over 3.5 m

10 nm

Accessories



Adjustment table

Deflection mirror







PRECISION & QUALITY MADE IN GERMANY

For customer-specific versions, OEM applications or integration in special measurement stations, please contact us.

We will be happy to personally assist you in finding solutions for your measuring tasks.

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