

Product information

Roughness measuring station MarSurf XR 1

Product features

MarSurf XR 1. The ideal instrument for a low-cost introduction to user-friendly surface metrology.

The PC-based instrument delivers all common surface parameters and profiles in accordance with international standards, both in the measuring room and in production. MarSurf XR 1 from Mahr stands for innovative roughness evaluation software.



Application

Mechanical engineering

Bearings, shafts, racks, valves, various components from the engineering and precision engineering industry

Automotive

Steering, brake system, gearbox, crankshaft, camshaft, cylinder head, cylinder block, turbocharger

Medicine

Surface roughness measurement for hip and knee endoprostheses

Aerospace

Turbine components

Optics

Various optical components

Item no.: 6910070

Technical data

Measuring principle	Stylus method
Probe	BFW skidless system with MarSurf SD 26 drive unit and/or PHT skidded system with MarSurf RD 18 drive unit
Measuring range mm	+/- 250 μm (up to +/- 750 μm with 3x probe arm length) applies to BFW system 350 μm applies to PHT probe system
Filter according to ISO/JIS	filter as per ISO 16610-21(replaced Gaussian filter as per ISO 11562), robust Gaussian filter a per ISO 16610-31
Traversing lengths	MarSurf GD 26 / SD 26: Automatic; 0.56 mm*; 1.75 mm; 5.6 mm; 17.5 mm, 56 mm, Measurement up to stop, variable * Traversing length dependent on drive unit RD 18: Automatic; 1.75 mm; 5.6 mm; 17.5 mm
Number n of sampling length according to ISO/JIS	1 to 50 (default: 5)
Stylus	2 μm
Measuring force (N)	0.75 mN
Surface parameters	Over 80 surface parameters for R, P and W profiles according to current ISO/JIS or MOTIF standards (ISO 12085)
Weight (gross)	20 KG