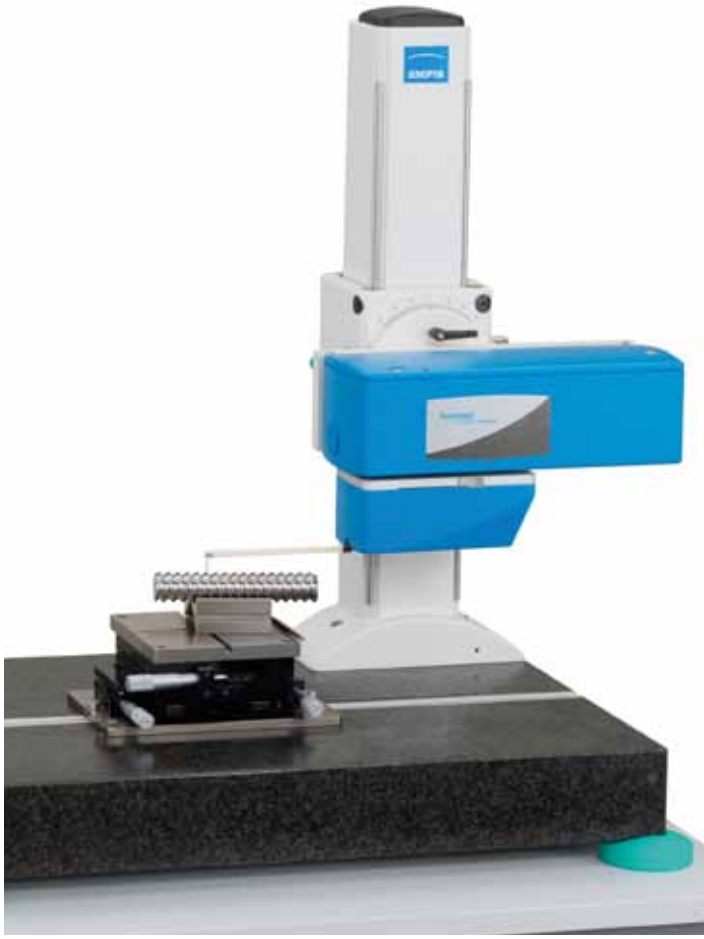
JENOPTIK

HOMMEL-ETAMIC surfscan
All good things come in twos.

Want to measure roughness at high resolution?

And capture contours over a high measuring range at the same time ?

The new hommel etamic surfscan roughness and contour measurement rolled into one.



Roughness and contour measurement rolled into one

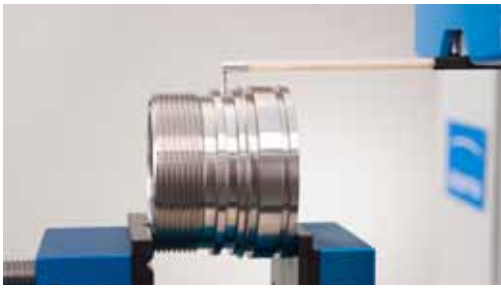
- Consistently high resolution over the entire measuring range using a high-resolution digital scale
- Also possible to measure surface roughness on curved and sloped surfaces
- Time-consuming alignment of the reference plane is no longer necessary when measuring roughness
- With a vertical measuring range of 6/12 mm (depending on probe arm length), a variety of contour measuring tasks can be performed simultaneously

Electronic probe arm detection

Thanks to the „chip in the arm" technology, probe arms are detected automatically and the correct measuring parameters (e.g. calibration, measurement force) are set automatically. Precision probe arm positioning allows automatic measurement runs to be performed even on small parts and in small bore holes.

Magnetic probe arm coupling and expandability

Probe arms can be replaced quickly and easily thanks to the magnetic coupling. The measuring station can also be combined with other probing systems to offer a flexible range of applications, such as expanding the contour measuring range or applications for specific roughness measuring tasks.



Automatic measurement runs

Modular axes allow automated measurement runs, such as Y axis for automatic zenith searching or surface topography measurement, to be performed.

Combined evaluation of roughness and contour

The EVOVIS software permits an integrated analysis of roughness and contour characteristics in a customizable measurement log.

Technical data probing system

Digital probing system	
Measuring range	6 mm (12 mm with double-length probe arm)
Resolution	6 nm (12nm with double-length probe arm)
Measurement force	±1 mN to 50 mN, programmable
Probing direction	single-sided, downward
Stylus tip protection	lowering speed is electronically limited
Stylus tip positioning accuracy in Z	±25 µm
Probe arm	
Probe arm length (standard)	90 mm
Stylus tip	diamond tip 2 µm/60°; ruby ball Ø 1 mm
Probe arm holder	magnetic with collision protection
Probe arm detection	electronic, RFID
Traverse unit	
Measuring range (traverse length)	120 mm
Resolution	0.1µm to 10 µm
Measurement speed	0.1-3 mm/sec
Positioning speed	max. 3 mm/sec
Straightness guide	≤0.4 µm / 120 mm

Measuring column	
Vertical travel	wavelift 400: 400 mm wavelift 800: 800 mm
Tracing speed	wavelift 400: 0.1 - 12 mm/sec wavelift 800: 0.1 - 50 mm/sec
Repetitive accuracy of positioning	≤10 µm
Measuring station	
Granite plate (L x W x H)	780 x 500 x 100 mm or 1000 x 500 x 140 mm
Damping	in GTR4/GTR5 instrument table or table top via optional damping set

JENOPTIK I Industrial Metrology
JENOPTIK Industrial Metrology Germany GmbH I Alte Tuttlinger Straße 20
78056 VS-Schwenningen I Germany I Phone +49 7720 602-0 I Fax +49 7720 602-123
E-Mail: info.im@jenoptik.com I www.jenoptik.com/metrology

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