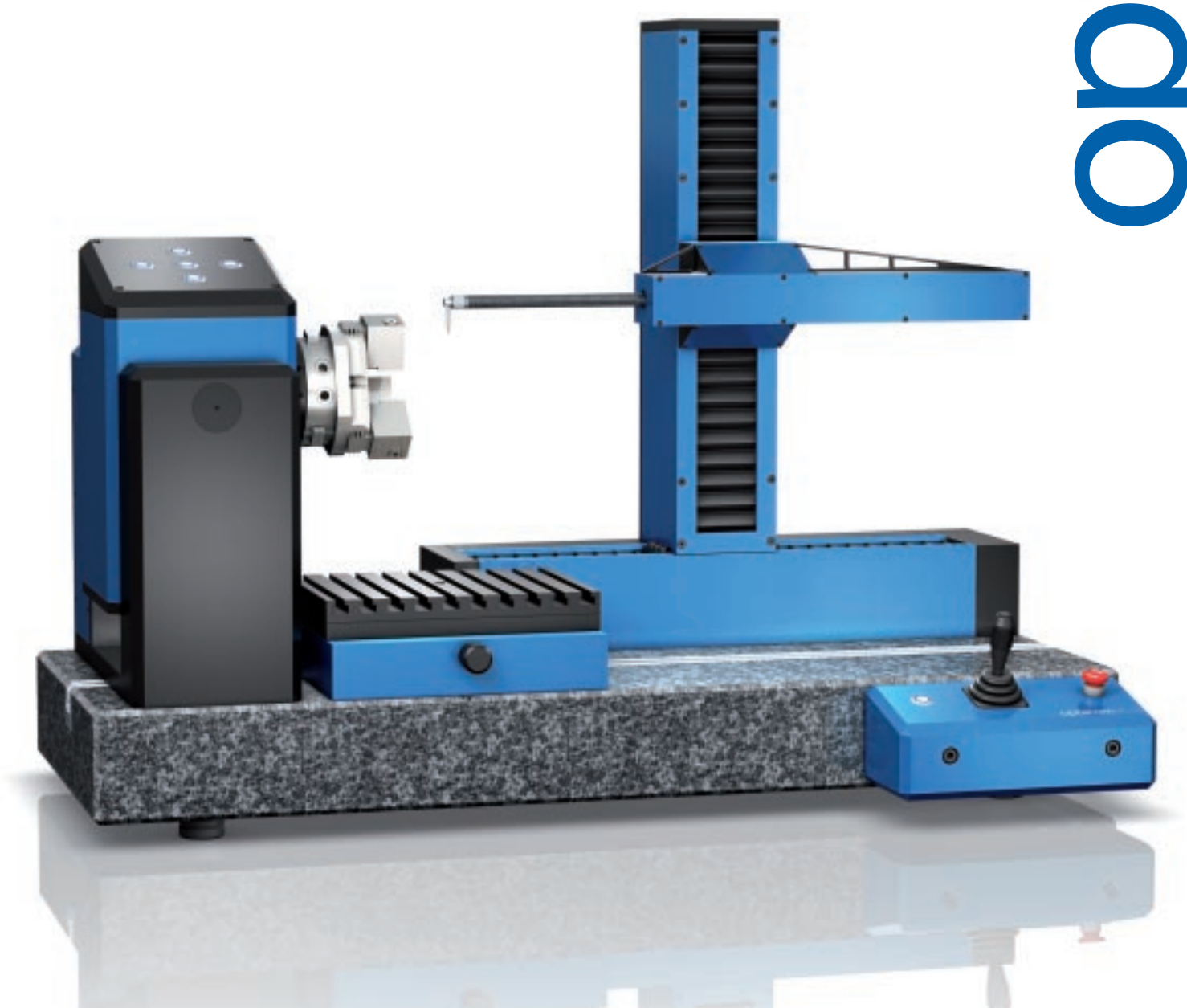
VC-10

Contour measuring:Made in Germany

optacom



The benchmark in measurement technology: Our allrounder for high precision-measurement

Are you looking for an allround system that can cope with the diversity of contour measurement tasks with impressive precision?

If so, the optacom VC-10 is just what you need. You can make contour measurements or additional roughness measurements* with the same perfection as roundness and composite measurements* (e.g. with the new circular swivel table). This means that even complicated measurements of complex objects are as easy as pie.

You will find the VC-10 is not only simple to operate, but also outstandingly precise. The resolution on the probe tip is less than 3 mm for the whole measuring range – and that is the real measured value, not only a mathematical best fit approximation. You can extend this range by another 100 mm with an axis extension for measuring larger objects.

* optional

Technical data

Resolution X- and Z-axis	0.002 µm
Measuring range (Z-axis)	225 mm
Measuring range (X-axis)	225 mm
Measuring system	optical, incremental in all axes (X, Z, T)
Accuracy	+/- (0.5 + L/100) µm
Accuracy acc. to DIN ISO Standard	5 % class 1
Resolution of the stylus	< 3 nm
Maximal measuring force	150 mN
Measuring speed	0.1 – 2 mm/sec (automatically optimized)
Cut-off lengths [mm]	0.08/0.25/0.80/2.50/8.00 and user adjustable
Number of cut-offs	1 – 10 (arbitrary)
Filter	Gaussian; 2RC; λs-filter
Resolution	scale 1:1 bis 5000:1
Stylus tip radius	0.002 – 1 mm
Angle measurement	up gradient 78°; down gradient 87°
Roughness parameters DIN EN ISO 4287	Rz; Rzmax; Rp; Rv; Ra; Rt; Rq
Ripple parameters DIN EN ISO 4287	Wp; Wv; Wz; Wa; Wt; Wq
Profile parameters DIN EN ISO 4287	Pp; Pv; Pz; Pa; Pt; Pq; Psk
Material parameters DIN EN ISO 13565	Rk; Rpk; Rvk; Mr1; Mr2
Roughness values JIS B-0601	Rz; Ra
Calibration setting block	is provided with instrument and certificate
Dimensions (W x D x H)	950 x 380 x 725 mm
Weight	150 kg

At a glance

- The powerful allround system for the diversity of contour measurement tasks
- Contour and roughness in one measurement with the optional roughness module
- Roundness measurements and composite measurements with optional circular or circular swivel table
- High true resolution of < 3 nm at the tip of the stylus
- Axle guide and head made of one piece, integrated
- X-axis permanently fixed and connected with absolutely no play to the Z-axis
- High precision linear axes with integr. drive
- Body made of high-performance aircraft aluminum
- Contactless, linear incremental measurement systems, absolutely wear-free
- Machine calibration (including probe tip calibration) in less than 3 minutes
- Speedy probe tip change with the optacom quick-release device – no tools needed, no precision loss
- Fully equipped basic system including calibration setting block, PC, monitor, printer and the software module optacom contour

Package includes

- Measuring machine optacom VC-10
- PC with 19" flat screen monitor, mouse and keyboard
- Operating system Windows XP
- Inkjet printer
- Software optacom contour
- Calibration setting block

Options

- Software optacom rough (roughness module): With this module you can measure contour and roughness in one pass. Roughness measurements up to Rz3 are possible with standard stylus according to optacom working standards
- Software optacom topdown (bidirectional measuring module): With this module you can measure a component in one operation in both directions and reassemble the measurements in absolute coordinates automatically and precisely to a multidimensional map
- Software optacom round (roundness module): This module allows for measuring contour, roundness and (if necessary) roughness in one pass
- Circular measuring table for determining roundness
- Circular swivel table for composite measurements
- Fully automated system for CNC measurements
- Y-table manual or motorized with material measurements
- Maximum traverse length 275 x 270 mm

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optacom is certified

in accordance with DIN EN ISO 9001: 2000