

VC-05

optacom



***Small, compact, mobile.***

***But it's a real optacom!***

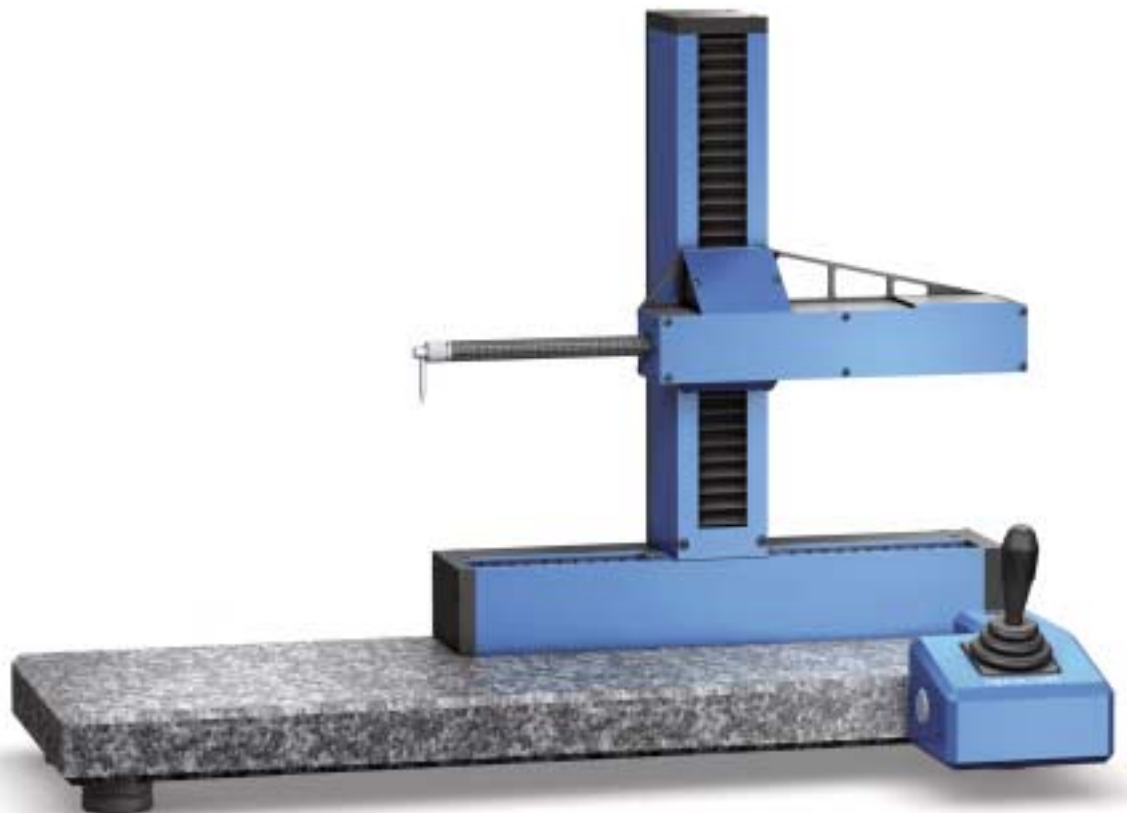
Our smallest measuring system has everything you need for contour- and roughness measurement. With only 40 kg weight this machine is ideal if you want to set up a mobile working place. This machine can measure contour and (with the optional software module optacom rough) roughness in one pass.

The PC with 19" flat screen monitor, ink jet printer, software optacom contour, a calibration setting block, mouse and keyboard are included as standard equipment.

It's all ready to go. And like all optacom measurement systems, the VC-05 delivers powerful optical, incremental measurements.

High performance, small dimensions:

This is what characterizes the VC-05.



Resolution X- and Z-axis	0.02 µm
Measuring range (Z-axis)	100 mm
Measuring range (X-axis)	100 mm
Measuring system	optical, incremental in all axes (X, Z, T)
Accuracy	+/- (1.5 + L/100) µm
Accuracy acc. to DIN ISO Standard	10 % class 2
Resolution of the stylus	< 30 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 (WxDxH)	595 x 220 x 400 mm
Weight	40 kg

**Technical data**

### **At a glance**

- ▶ Compact and light-weight, thus ideal for mobile use
- ▶ Contour and roughness in one measurement with the optional roughness module
- ▶ High resolution of < 30 nm at the tip of the stylus
- ▶ 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-05
- ▶ 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): This module allows for contour and roughness measurements 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
- ▶ Fully automated system for CNC measurements
- ▶ Y-table manual or motorized with material measure

### **Exklusivvertrieb:**

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**optacom is certified**

**in accordance with DIN EN ISO 9001: 2000**

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**Subject to technical changes without prior notice.**

**No liabilities for errors / errata - Rev. 04/07**