Advancing with Technology ElektroPhysik

Portable roughness tester

SurTest

- Small and handy
- External calibration
- selectable cut-off lengths

new: Ra and Rz in one gauge

Roughness measurement with SurTest

Application

The small electronic roughness tester SurTest is designed for quick and accurate measurements. The gauge is suitable for use on the production floor as well as for inspection departments and quality control.

Description

SurTest uses a piezoelectric stylus and allows:

- roughness measurement by the Ra and Rz method
- three cut-off lengths at choice

SurTest is simply placed on the surface to be measured and the micro stylus scans the surface within only a few seconds. Depending on the preset cut-off length, the value is immediately displayed in Ra or Rz.

Ra and Rz

Rz = mean surface roughness

The mean surface roughness Rz is the arithmetical mean of the highest single reading of several adjacent single measuring sections.

Ra = arithmetical average height

Ra is the generally acknowledged roughness parameter which is internationally used. This value is the arithmetical mean of the profile deviations from the mean value:
The numerical value Ra is always smaller than the Rz value taken from the roughness profile.
SurTest conforms to national and international standards (DIN 4768, ISO 4288).

Supply schedule:

Gauge, calibration standard, mains unit, leather case, plastic carrying case, operating instructions

Roughness measurement with SurTest

Technical data:	
Roughness parameter:	Ra (ISO), Rz (DIN)
Measuring range:	Ra: 0.05…15 microns
	Rz: 0.1…50 microns
Cut-off length:	λ_1 0.25 mm/λ_2 0.8 mm/λ_3 2.5 mm (Selection of a false cut-off length is indicated in the display)
Surface to be measured:	Flat or convexe; in grooves (min. width: 30 mm, min. length: 80 mm)
Tolerance:	± 6 % of reading
Pick-up:	Piezo-electric stylus with diamond tip, radius 10 microns
Tracing length:	6 mm
Tracing speed:	1 mm/sec.
Measuring unit:	µm – mils to choice
Operating temperature:	0 °C…40 °C
Power supply:	built-in rechargeable battery with indication of battery condition mains unit 220 V 50…60 Hz
Dimensions/Weight:	125 mm x 73 mm x 26 mm/200 g

CERTIFIED DIN EN ISO 9001 QUALITY SYSTEM Reg.-Nr. 4814

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