

ROUGHNESS TESTER

PCE-RT 2200



- » **Selection of 21 parameters**
- » **Large graphic OLED display**
- » **Fast and accurate measurement**
- » **3 different cut-off wavelengths**
- » **Micro-USB interface for PC connection**
- » **Storage of 20 measurement curves**

The portable and easy-to-use roughness tester with its large OLED display is particularly suitable for quick and precise measurements in the workshop or laboratory. This roughness meter uses a DSP chip for control and data processing at high speed and with low energy consumption. In addition, you have a large selection of measurement parameters for the roughness measuring device: Ra, Rq, Rsm, Rsk, Rz, Rt, Rp, Rv, Rc, Rmax, Ry (JIS), Rz (JIS), RP (ASME), Rpm (ASME), Rv (ASME), R3z, R3zmax, Rz1max, Rmr (c), Rdc, Rmr.

The measurements are automatically stored in the internal memory of the roughness meter. The stored data can then be transferred to a PC via the micro-USB interface on the roughness measuring device and analyzed using the software. It is also possible to have the data displayed on the OLED display of the roughness measuring device after a measurement. Even the wave course can be shown on the display of the roughness meter.

It often happens that the contact surface of the test piece is too small for a roughness measuring device to position the roughness measuring device appropriately for a measurement. For such cases, a positioning adapter is included with this roughness measuring device. Thus, the roughness measuring device also enables measurements on small samples.

Specification

Roughness	
Roughness value	Ra, Rq, Rc
Measuring range	0,005 ... 16 µm
Resolution	0,001 µm
Accuracy	<±10 %
Roughness	
Roughness value	Rz, Rt, Rp, Rv, Rmax, Ry(IIS), Rz(IIS), Rp(ASME), Rpm(ASME), Rv(ASME), R3z, R3zmax, Rz1max, Rdc
Measuring range	0,02 ... 200 µm
Resolution	0,01 µm
Accuracy	<±10 %
Roughness	
Roughness value	Rsm
Measuring range	5 ... 1000 µm
Accuracy	<±10 %
Roughness	
Roughness value	Rsk
Measuring range	-1 ... +1
Roughness	
Roughness value	Rmr(c), Rmr
Measuring range	0 ... 100 %
Accuracy	<±10 %

General technical data	
Repeat accuracy	<6 %
Measuring functions	Ra, Rz, Rq, Rt, Rsm, Rsk, Rp, Rv, Rc
Measuring functions (additional information)	Rmax, Ry(IIS), Rz(IIS), RP(ASME), Rpm(ASME), Rv(ASME), R3z, R3zmax, Rz1max, Rmr(c), Rdc, Rmr
Units	µm, µinch
Display type	OLED
Storage medium	Internal memory
Storage capacity	20 Values
Interface	Micro-USB
Standard(s)	ANSI B46.1/ASME B46.1, DIN EN ISO 4287, ASME B46.1
Sensor	inductive
Automatic power-off from...to	1 ... 30 min.
Cut-off wavelength	0.25 mm / 0.8 mm / 2.5 mm
Key	- Probe tip radius - 5 µm - Probe tip material - diamond, angled at 90° - Probing speed: 0.135 mm/s at: 0.25 mm 0.5 mm/s at: 0.8 mm 1 mm/s at: 2.5 mm
Maximum traverse distance	15 mm
Menu language	English, English (GB)
Protection class (device)	IP31
Power supply	3.7 V
Connector type	Device-europlug
(Rechargeable) battery	1 x 3,7 V internal , Lithium-ion polymer battery
Capacity	1500 mAh
Operating conditions	0 ... 50 °C , 10 ... 90 % RH
Storage conditions	0 ... 50 °C , 10 ... 90 % RH
Dimensions (L x W x H)	150 x 60 x 43 mm
Weight	370 g