

Roughness tester KR-110



KR-110

Product No. 11244

Roughness testing according to Ra, Rz, Rq and Rt

The PHYNIX roughness tester KR - 110 is characterized by high accuracy, a wide range of applications with large measuring range, easy operation and a stable construction. It is used to determine the surface roughness according to Ra, Rz , Rq and Rt and can be used for measurements on all types of metals and non-metals.

During the measuring process the sensor moves linearly along the traverse length. At the same time, the probe tip is slowly moved up and down according to the roughness profile. These movements are converted into electric signals, amplified, filtered and digitized. With the help of a digital signal processor, the digital voltage values are converted into the desired parameters Ra, Rz, Rq and Rt and finally displayed.

Application areas

- Evaluation of wear and damage
- Measurement of roughness on metals or other hard surfaces
- Suitable for test rooms, laboratories, workshops and many more

Advantages at a glance

- Modern, innovative design. The sturdy aluminum casing prevents the influence of electromagnetic interference
- Digital Signal Processor (DSP) for fast data logging and analysis
- Bright OLED display
- Li-Ion battery with long operation time and short charging time. During charging, measurements can be performed.
- USB interface for data transfer and battery charging
- The linear movement of the probe ensures a high degree of uniformity of flow and thus a high repeatability
- Practical information on the display (device status, measurement parameters, battery indicator)
- Integrated slide to protect the diamant tip during non-use
- Automatic shutdown

Technical specifications

Roughness parameter:	Ra, Rz, Rq, Rt
Scanning length:	6 mm
Cut-off wavelengths:	0,25 mm, 0,8 mm, 2,5 mm
Measuring range:	Ra/Rq: 0,05 – 15,0 μm Rz/Rt: 0,1 – 50 μm
Measurement accuracy:	+/- 15 %
Repeatability:	< 12%
Radius of the probe tip:	10 μm
Angle of the stylus:	90°
Scanning principle:	Piezoelectric
Display:	OLED-Display
Power supply:	3,7 V Li-Ion-Akku
Operating temperature:	-20 °C ... +40 °C
Dimensions:	106 mm x 70 mm x 24 mm
Weight:	200 g

Scope of delivery

- Gauge with integrated probe
- Built-in Li - Ion battery
- USB - AC adapter with USB cable
- (Glass-) roughness standard (Ra)
- Carrying case
- Operating instructions German / English
- Manufacturer - Test certificate

