elcometer 7061 MarSurf PS1 Tester Roughness Tester

Can be used in accordance with :
ISO 4287, ISO 4287/1
ASTM D4417, ASME B46, DIN 4768, EN 10049, JIS B 0601

In protective coating applications there is a requirement to measure surface roughness.

Measurements of Surface Roughness are expressed in terms of Ra, Rz or Tp. These values include peak-to-valley profile measurement in combination with an assessment of the frequency of peaks within the sample area.

The Elcometer 7061 is a light weight and portable measuring solution for the range of surface roughness measurements required for compliance to International Standards.

The unit is also suitable for assessing surface roughness conditions in a wide range of general industrial applications; particularly where the sample is too large to bring to the laboratory.

- **Multi-Lingual Display:** All the required information is displayed on screen in a choice of 14 languages.
- **Flexible:** Can be used in virtually any position; horizontally, vertically, upside down. A height adjustment accessory to accommodate various sample sizes is supplied with each gauge as standard.
- **Integrated Calibration Standard:** No external calibration standard is required; provides greater ease of use.
- **Drive Unit:** Can be rotated and moved longitudinally; enables the stylus pick-up to be moved to the calibrating position. The stylus pick-up is also protected for transport in this position.
- **Stylus pick-up with removable protection:** 2µm (80µin) diamond stylus tip with a measuring force of 0.7 mN. Different stylus' are available for various applications.

Elcometer 7061 MarSurf PS1 Explorer Evaluation Software
Available as an optional accessory PS1 Explorer Evaluation Software allows the Elcometer 7061 to be connected to a PC or laptop; using the USB cable supplied to document protocol profiles, results, statistics and to print out all your measurement results.

Part Numbers

Unit of Measurement	Metric, inch
Measuring Principle	Stylus Method
Stylus Pick-Up Supplied (Other stylus pick-ups are available)	Inductive skidded stylus pick-up, 2µm stylus tip, measuring force approx. 0.7 mN
Parameters	24 (with tolerance limits): Ra, Rq, Rz equiv. to Ry (JIS), Rz (JIS), Rmax, Rp, Rp (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPc, Rmr equiv. to Tp (JIS, ASME), RSm, R, Ar, Rx
Measuring range	350µm, 180µm, 90µm (changes automatically)
Profile resolution	32nm, 16nm, 8nm (changes automatically)
Filter*	Phase-correct profile filter (Gaussian filter) according to DIN EN ISO 11562, special filter according to DIN EN ISO 13565-1, ls filter according to DIN EN ISO 3274 (can be disabled)
Cutoff lc*	0.25mm, 0.8mm, 2.5mm; automatic (0.010", 0.030", 0.100")
Traversing length Lt*	1.75mm, 5.6mm, 17.5mm; automatic (0.069", 0.22", 0.69")
Traversing length (acc. to MOTIF)	1mm, 2mm,4mm,8mm,12mm,16mm (0.040",0.080",0.160",0.320",0.480",0.640")
Short cutoff*	Selectable
Evaluation length In*	1.25mm, 4.0mm, 12.50mm (0.050", 0.15", 0.50")
Number n of sampling lengths*	Selectable: 1 to 5
	Dynamic

Calibration function

Memory capacity	Max. 15 profiles, max. 20,000 results
Other functions	Blocking of settings (code-protected), date/time
Battery	Li-ion battery
Interfaces	USB, MarConnect (RS232)
Dimensions	140mm x 50mm x 70mm
Weight	400g
Long-range power supply	100V to 264V
Packing List	Elcometer 7061 MarSurf PS1 base unit, drive unit, 1 x standard stylus pick-up, built-in battery, roughness standard integrated into casing, height adjustment accessory, stylus pick-up protection, universal charger / mains adapter, USB cable, carry case with shoulder strap and belt loop, calibration certificate and operating instructions
Part Number	**K7061M001**

* According to ISO/JIS

Elcometer 7061 Stylus Pick-Ups

Description	Part Number
Stylus pick-up Extension; 80mm (3.15"); Ideal for measuring points located deep within cylinders	KT007061P001
Stylus pick-up PHT 3-350; For measurements in bores from 3mm diameter	KT007061P002
Stylus pick-up PHT 11-100; For measurements at recessed measuring points, e.g. in grooves from 2.5mm wide and up to 7.5mm deep	KT007061P003
Stylus pick-up PHTR 100; For measurements on concave and convex surfaces	KT007061P004
Stylus pick-up PHTF 0.5-100; For measurements on tooth flanks	KT007061P005
Stylus pick-up PT 150; Dual-skid stylus pick-up for measurements on metal sheets and roller surfaces according to DIN EN 10049 (SEP)	KT007061P006
Stylus pick-up PHT 6-350	KT007061P007
Stylus pick-up PHT 6-350, 5µm Probe Tip	KT007061P008
For measurements on flat planes, in bores from 6mm, 17mm deep and in grooves from 3mm wide	
Stylus pick-up Set; Comprising of Stylus pick-up PHT 3-350 & Stylus pick-up PHT 11-100	KT007061P009

Miscellaneous Accessories

Description	Part Number
Stylus pick-up Extension; 80mm (3.15"); Ideal for measuring points located deep within cylinders	KT007061P001
Stylus pick-up PHT 3-350; For measurements in bores from 3mm (0.12") diameter	KT007061P002
Stylus pick-up PHT 11-100; For measurements at recessed measuring points, e.g. in grooves from 2.5mm (0.10") wide and up to 7.5mm (0.30") deep	KT007061P003
Stylus pick-up PHTR 100; For measurements on concave and convex surfaces	KT007061P004
Stylus pick-up PHTF 0.5-100; For measurements on tooth flanks	KT007061P005
Stylus pick-up PT 150; Dual-skid stylus pick-up for measurements on metal sheets and roller surfaces according to DIN EN 10049 (SEP)	KT007061P006
Stylus pick-up PHT 6-350	KT007061P007
Stylus pick-up PHT 6-350, 5µm Probe Tip	KT007061P008
For measurements on flat planes, in bores from 6mm (0.24"), 17mm (0.67") deep and in grooves from 3mm (0.12") wide	
Stylus pick-up Set; Comprising of Stylus pick-up PHT 3-350 & Stylus pick-up PHT 11-100	KT007061P009