Surface Roughness Testing



USB

ISO 3274 (cl. 1)

10°C to 40°C

-10°C to +50°C

₣ 270 x 140 x 90 mm (tester alone)

3 kg

Suited

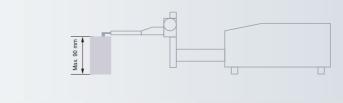
plastic case

Declaration

of conformity

Small-size, versatile roughness tester providing maximum ease of use – Ideally suited for high-precision measurements on the shop floor or in the inspection laboratory.

- Measures roughness parameters according to ISO 4287, 12085 (CNOMO), 13565, DIN 4776, JIS B0601:2001 and ASME B46-2002.
- Tactile TFT colour display with size to 3,5".
- Three function keys.
- Graphical interface.
- Direct displaying of all measured values and computed profiles.
- Measuring span to 50 mm/2 in (X-axis) or 1000 $\mu\text{m}/39370$ μin (Z-axis).
- Interchangeable probe, with or without contact skid.
- Possible input of tolerances.
- USB digital output for data transfer to a PC running TESA Measurement Studio (this software is available as an option).
- Measures up to 90 mm vertically without the need for a special support.
- Profile measurement up to 2 mm (optional accessory).



Visualiser. Ra		es 🚺 🔝 δc 18,793 μm	Graphique:	Rugosité	01/01 00:03	Visualiser	00 00 00 00 00	1007 o
Rg		ar1 0,0% Rmr2 100,0%			٨	Hauteur		
Rt	5,025 pm	Pc(1,00) 36 /cm			10µm	5,271		2
	10,100 pm			Ares		μm	1	
	13,102 µm		A ALA	M. A. M. A. MA	Ben III		A	4
Rp	7,681 µm	the second s			1111			
Rv	5,501 µm Pt		WY VY W	. W W .	WVV	Rmr		*
Rc	8,627 µm Pt					60,0		
RSm	249 µm P	v 13,246 µm	+0.4mm 1 1.5	2 25 5	0.5 4.4mm ⁺	%		
-	Po	c 10,464 µm	anno	montan	mal	70		um um
							-	
Menu		A A 00:07	Menu	X 279	. 00:09	Menu	Pmr Wmr	





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Surface Roughness Testing



echnical data	
	06930012
=	RUGOSURF 90 G
Display	Tactile TFT colour display, size 3,5" Resolution 320 x 240 pixels, 256 colours
Roughness parameters	according to ISO 4287:1997/JIS B0601:2001/ASME B46-2002 Ra - Rq - Rt - Rz - Rp - Rv - Rc - RSm - Rδc Pa - Pq - Pt - Pp - Pv - Pc - PSm - Pδc Wa - Wq - Wt - Wz - Wp - Wv - Wc - WSm - Wδc according to ISO 13565
	Rk – Rpk – Rvk – Mr1 – Mr2 according to PrEN 10049
	PPc - RPc- WPc according to DIN 4776 Rmax
	according to DB N31007 R3z – R3zm
	according to ISO 12085 (CNOMO) Pt – R – AR – Rx– Wte – AW – Wx – Rke – Rpke - Rvke – W – Mrle – Mr2e
Measuring span X-axis Z-axis	50 mm 1000 μm
System of units	mm / in
Resolution	0,001 μm (0.01 μin)
Cut-offs	0,08 - 0,25 - 0,8 - 2,5 - 8 mm
Numerical filter	Type Gaussian as per ISO 11562
Traversing length It	(number of cut-offs + 1) x λc
Cut-off I _c	number of cut-offs x λc
Probing speed	0,5 mm/s – 1 mm/s
Number of selectable cut-offs	1 up to 19 cut-offs of 0,08; 0,25; 0,8; 2,5 mm 1 up to 5 cut-offs of 8 mm
Keypad	Three-key, membrane-type keypad protected against dust particles and liquids
Probing system	inductive probe
Probe tip	90° diamond tip
Tip radius	5 μm
Measuring force	0,75 mN (ISO 3274)
Available languages	English, French, German, Spanish, Italian, Portuguese
Memory capacity	≈ 60 000 measurements
Autonomy	$\approx 2\ 000\ measurements\ / \approx 10\ hours$
Power supply	12V integrated Battery pack – Battery charger 100 to 240 Vac, 50/60 Hz
Power consumption	max. 20 VA at 220 V
Overall dimensions	270 x 140 x 90 mm (gauge unit alone)
Weight	3 kg







SURFACE ROUGHNESS TESTING

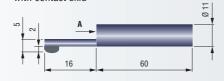
Optional probes (90° diamond tip with a tip radius to 5 µm, unless otherwise specified)

1)	
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<u></u>		
06960049	SB60/10	Probe with contact skid For surfaces and bores with external diameter over 10 mm or internal diameter smaller than 6 mm.
		Probe without contact skid For surfaces and small bores with diameter from Ø 4 mm.
06960067	SB60/10	Same as 06960049, but with a diamond tip, R=2 µm.
06960050	SB20 P	Probe for grooves, max. depth 5 mm.
06960051	SB30 P	Probe for small bores from Ø 4 mm.
06960052	SB40 P	Probe with V-skid for cables with external diameter over 1 mm.
06960053	SB50 P	Probe with contact skid for concave surfaces. Ideal for 90° measurement.
06960054	SB120P	Probe for grooves, max. depth 20 mm.
06960058	SB120S	Probe without skid for grooves, max. depth 15 mm
06960061	SB60-D2	Probe for small bores with diameter from 2 mm, $L = 30$ mm.

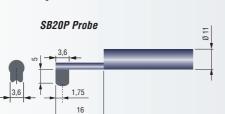
SB60/10 Probe

with contact skid



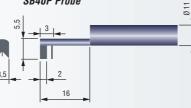
A Undo both screws on the front face to remove the skid. Once done, use the probe very carefully for any further measurement (see Fig. 1).



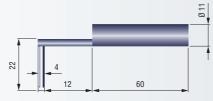


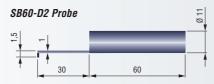


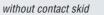




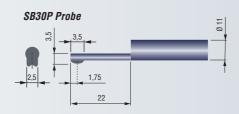


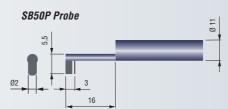


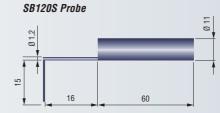










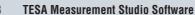


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Surface Roughness Testing







provided with:

Instructions for installation, 6 languages available on the CD Instruction manual plus Online Help (also available on the CD) USB connecting cable, L = 1,80 m



Additional Accessories



06960041	Roughness standard, Ra = 2,97 µm / 117 µin
06960064	Roughness standard, Ra = 0,1 μ m
06960065	Roughness standard, Ra = 0,5 μ m
06960066	Roughness standard, Ra = 1 μ m
06960055	Support with granite base, 630 x 400 mm. Height adjustment over 200 mm
For printer and a	compted control see both pages M. 6 and M. 7

For printer and remote control, see both pages M-6 and M-7.





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