



Probe measuring position at 90° and adjustable in height

TESA RUGOSURF 90G

Small-size, versatile roughness gauge with tactile colour screen providing maximum ease of use. Ideally suited for high-precision measurements on the shop floor or in the inspection laboratory.

Special features of RUGOSURF 90G:

- Supplied with SB60/10 probe with removable pad: one single probe can be used to measure roughness or undulation!
- RUGOSURF 90G can measure a components with a height of up to 90 mm, thanks to a vertical positioning screw without any additional accessory!
- With the PROFILE SET 2 mm (06960100) RUGOSURF 90G becomes a profile measurement instrument with a width of 2000 µm measuring in the Z axis (optional)!

Tactile TFT 3,5" colour screen.

Direct display of all measured values and computed profiles.

Measuring span

$$Z = 1000 \mu\text{m} (0.039 \text{ in})$$

$$X = \text{up to } 50 \text{ mm}$$



RUGOSURF 90G with tactile colour screen
Measurement with or without skid

Special 2 in 1 probe can measure with contact skid (roughness measurement) or without contact skid (measure of undulation).

Vertical adjusting screw for probe positioning up to a height of 90 mm without the need of an accessory.





Tolerancing of all parameters possible.

USB digital output for transfer of measured values to a PC with TESA MEASUREMENT STUDIO software (optional).

Unique in its category, this instrument can also do profile measurement (Z = 2 mm) if used with PROFILE SET 2 mm (optional).

Measures roughness parameters according to standards:

- ISO 4287
- 12085 (CNOMO)
- ISO 13565
- DIN 4776
- JIS B0601:2001
- ASME B46-2002

-  ISO 3274 (cl. 1)
-  270 x 140 x 90 mm (without probe)
-  USB
-  3 kg



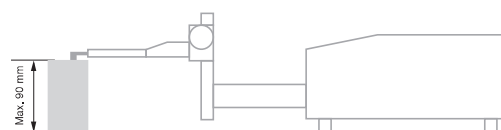
Roughness profile



Roughness parameters



Bearing area curve (BAC) and amplitude distribution curve (ADC)



Fine adjustment of vertical position up to 90 mm

	06930012	
	TESA RUGOSURF 90G portable table roughness tester Z = ± 500 µm (± 0.0197 in) X = 50 mm (1.968 in) probe with detachable skid	
	Measuring span, µm	Z Axis = 1000 µm (39370 µin); X Axis = 50 mm (1.969 in)
	Indication span, µm	Ra = 0 ÷ 400 µm; Rt = 0 ÷ 1000 µm
	Precision class	In accordance with ISO 3274 Class 1
	Measuring force, N	0,75 mN according to ISO 3274
	Resolution, µm	0,001 µm (0.01 µin)
	Display	Tactile graphic colour screen TFT 3,5" (320 x 240 pixels)
	Roughness parameters	DIN / ISO / JIS / ASME: Ra, Rq, Rt, Rp, Rc, Rv, RSm, Rδc, RPc Pa, Pq, Pt, Pp, Pc, Pv, PSm, Pδc, PPc Wa, Wq, Wt, Wp, Wc, Wv, WSm, Wδc, WPC Rmr, Rz, Rmax, Rsk, Rku, Wz Rk, Rpk, Rvk, Mr1, Mr2 DB N 31007: R3z, R3zm MOTIF ISO 12085 (CNOMO): Pt, R, Rx, AR, Wte, W, AW, Wx, Rke, Rpke, Rvke, Pdc, PPc, Mr1e, Mr2e
	Graphics	Profil-W, Profil-R, Profil-P, Bearing area curve
	Cut-off length, mm	0,08 – 0,25 – 0,80 – 2,50 – 8,00 mm
	Number of cut-off	1 to 19 for cut off up to 2,5 mm; 1 to 5 for cut off of 8,00 mm
	Diamond or stylus tip (R = µm; angle °)	R = 5 µm, 90°
	Memory capacity	Max. 60'000 measurements with parameters
	Dimensions (mm)	270 x 140 x 90 mm
	Degree of protection of keyboard (IP XX)	IP67 (membrane keyboard)
	Digital output (USB)	USB cable connector to PC
	Weight, kg	3 kg
	Included in delivery	<ul style="list-style-type: none"> – RUGOSURF 90G – Roughness standard Ra = 2,97 µm – Standard probe SB60/10 with or without skid – Probe holder – Guiding column, vertical setting range 90 mm – Integrated rechargeable battery, 12 V – Charger for battery
	Measuring response time	–
	Probing speed, mm/s	0,5 mm/s or 1,0 mm/s selection options
	Units	mm or inch
	Power supply	100 ÷ 240 VAC / 50 ÷ 60 Hz; 18 V, 2,2 Ah



OPTIONAL ACCESSORIES:

06960062	Cable RUGOSURF 10G and RUGOSURF 90G to PC (connector v3)
06960033	Printer for RUGOSURF + cables
06960048	MEASUREMENT STUDIO software + dongle for RUGOSURF 90G
06960055	Granite 630 x 400 mm with vertical support H250mm, 60 kg, Grade 0 for RUGOSURF 90G
06960064	Roughness standard Ra = 0,1 µm (4 µin)
06960065	Roughness standard Ra = 0,5 µm (20 µin)
06960066	Roughness standard Ra = 1,0 µm (40 µin)
06960100	PROFILE SET 2 mm for profile measurement with RUGOSURF 90G
06960056	100 mm extension for probe with skid for RUGOSURF 20, 10G, 90G
06960067	SB60/10 2µm probe for RUGOSURF 90G as SB60/10 but R = 2 µm
06960050	SB20P probe for RUGOSURF 90G for grooves of depth < 5 mm
06960051	SB30P probe for RUGOSURF 90G for small bores with Ø > 4 mm
06960052	SB40P probe for RUGOSURF 90G V-shape for cylinders with Ø > 1 mm
06960053	SB50P probe for RUGOSURF 90G for concave surfaces and for measuring at 90° with RUGOSURF 90G
06960054	SB120P probe for RUGOSURF 90G for grooves of depth < 20 mm
06960058	SB120S probe without skid for RUGOSURF 90G for grooves of depth < 15 mm
06960061	SB60-D2-L30 probe, L = 30 mm for RUGOSURF 90G for small bores of Ø > 2 mm

STANDARD ACCESSORIES:

06960049	SB60/10 standard probe for RUGOSURF 90G R = 5 µm, 90° detachable skid
06960041	Roughness standard Ra = 2,97 µm (117 µin)
056645	Transport case with internal protective foam for RUGOSURF 90G



N Roughness parameters according to: ISO 4287, ISO 13565-1, ISO 13565-2, ISO 12085, VDA 2007

Z = 2 mm
X = 50 mm

Z = 0,1 µm
X = 0,4 to 4,0 µm according to the length being measured

Z = 3,5 + 0,75*H microns, (H in the Z axis, in mm)
X = 3,5 + L/10 microns (L in the X axis, in mm)

0,3 mg (0,003 mN) with the SB2000 probe

1 mm/s

Maximum angle of 70° (upward position); maximum angle of 85° (downward position)

TESA PROFILE SET 2 mm

PROFILE SET 2 mm for profile measurement (compatible with RUGOSURF 90G). When equipped with the SB2000 probe and used with the PROFILE STUDIO software dedicated for profile measurement STUDIO PROFILE, the RUGOSURF 90G roughness gauge converts into a profile-measuring tool.

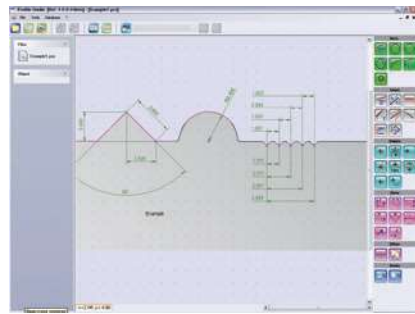
A simple, ingenious and accurate solution, this optional accessory measures lengths, radii and angles of parts which are sometimes impossible to verify by other means.

The setting up and the evaluation of measurements is simple and fast. Dimensions can be inserted into the measured profile after defining geometric elements (point, line, arc or intersection between two lines, for example). The tolerance values allow verification of the results at a glance. Rotation and symmetry of the profile also allows its orientation.

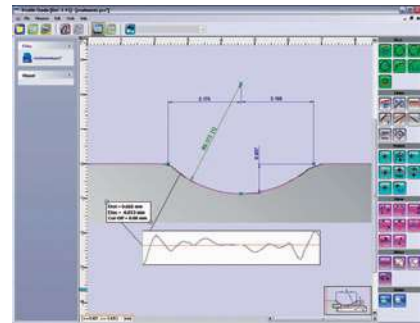
A previous measurement can be used as model for the repeated measurement of a part of identical geometry. This saves valuable time and facilitates operations as important manual measurements can be replicated automatically.

A standard profile with a measurement report is included in the PROFILE SET 2 mm set.

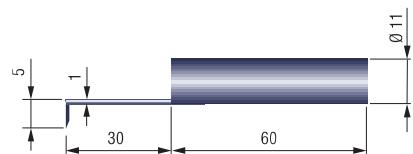
A detailed measurement report with customizable header can be generated from the PROFILE STUDIO software.



PROFILE STUDIO software



SB2000 probe



No

=

06960100 PROFILE SET 2 mm for profile measurement with RUGOSURF 90G

DELIVERED WITH THE FOLLOWING ACCESSORIES:

06960101 PROFILE STUDIO Software

06960102 SB2000 probe for PROFILE SET 2 mm, R= 15 µm, 20°

06960103 Setting master for PROFILE SET 2 mm

06960062 Cable RUGOSURF 10G and RUGOSURF 90G to PC (connector v3)

