

## TESA RUGOSURF 10 Roughness Gauge

Robust, versatile and compact gauge unit designed for inspecting any work piece surface finish and capturing roughness parameter values – Wide variety of probes for the most varied applications – Possible tolerancing of each parameter available.

- Interchangeable probe, swivelling through to 90° to let you measure even in hard-to-reach recesses.
- Extended autonomy. Can equally be connected to the mains adapter or the battery pack for direct use on a machine-tool.
- Value storage, output or transfer to a PC (up to 30 values).
- RS 232 data output for full use and further storage of the measurement results.
- Automatic switch over to idle mode if left unused for 40 seconds. Preserve the battery pack.
- Fast and easy analysis of the results obtained from the measured parameters with assigned tolerances.



RS 232

10°C to 40°C

-10°C to +50°C

120 x 55 x 80 mm  
(gauge unit alone)

590 g



Suited plastic case

Declaration of conformity



06930010



TESA RUGOSURF 10 roughness gauge

delivered with the following standard accessories:

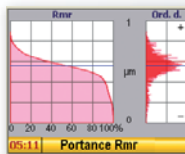
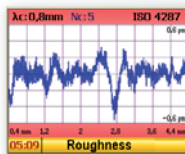
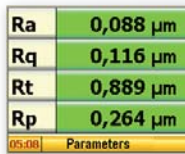
- Roughness standard, nominal value Ra = 2,97 µm / 117 µin
- Rechargeable battery, 8,4 V, 120/250 mAh, NiCd or NiMH, PP3 format
- Standard probe, type **SB10**
- Battery charger
- Adaptor for universal stand, 8 mm diameter
- Positioning support



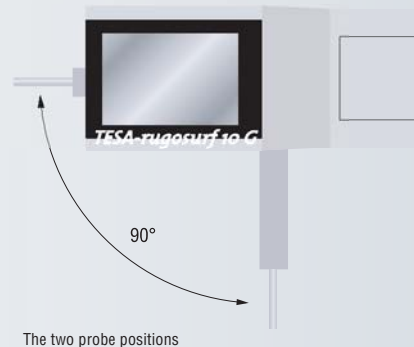
## TESA RUGOSURF 10G Roughness Gauge

Portable, versatile gauge unit with compact design well suited for receiving inspection or for use in the production area or the measurement laboratory.

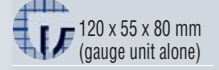
Measure roughness parameters according to ISO 4287:1997/ JIS B0601:2001, DIN and ISO 12085:1998 (MOTIF or CNOMO).



- TFT graphic colour display for optimum visual representation, of the measured parameters and work piece profiles, size 2".
- Direct displaying of the measured values and computed profiles.
- 33 roughness parameters available.
- Wide autonomy through mains adapter or battery pack.
- Possible storage, output or transfer to a PC of the results obtained from at least 1000 measurements.
- Possible tolerancing of all parameter values.
- Multilingual function menus.
- RS 232 data output enabling a direct connection to the printer unit or a conventional PC equipped with the RUGOSOFT 10 software (optional for both).



The two probe positions



**06930011 TESA RUGOSURF 10G roughness gauge**

*Delivered with the following standard accessories:*

Roughness standard, nominal value Ra = 2,97 µm / 117 µin

Rechargeable battery, 7,2 V, 300 mAh, NiMH PP3 format



Standard probe, type **SB10**

Battery charger

Adaptor for universal stand, 8 mm diameter

Positioning support

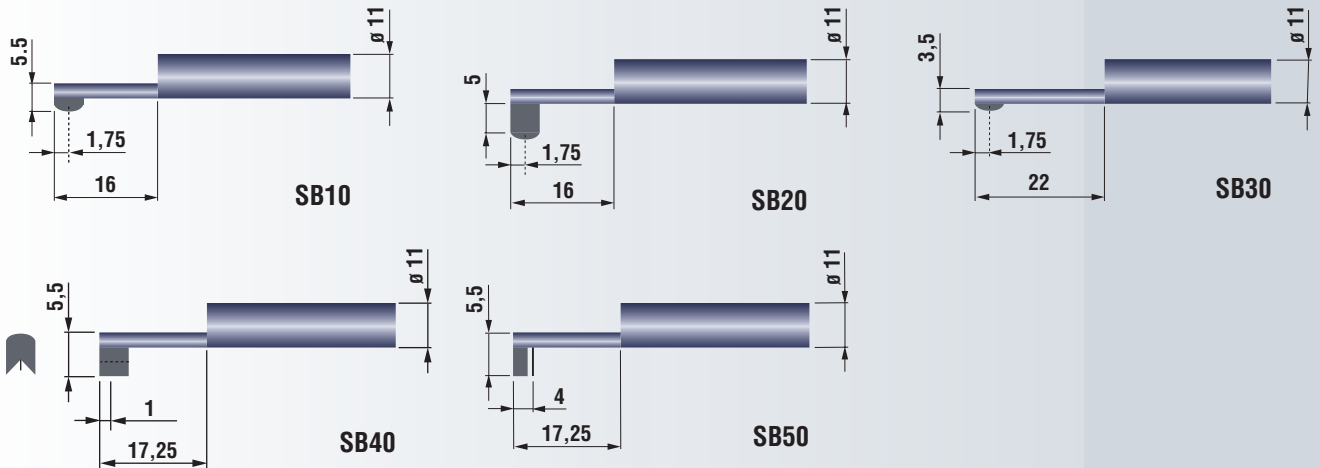
**Technical Data**

	 <b>06930010</b>	<b>06930011</b>
	 <b>RUGOSURF 10</b>	<b>RUGOSURF 10G</b>
Display	LCD, 2 lines of 16 characters	TFT colour display, 2" in size
Roughness parameters	according to ISO 4287-1997/JIS B0601 Ra - Rq (RMS) - Rt - Rz - Rc - Rsm - Rmr according to ISO 12085 (CNOMO) Pt - R - Rx - AR	according to ISO 4287-1997/JIS B0601:2001 Ra - Rq (RMS) - Rt - Rz - Rp - Rc - Rv - Rsm - Rδc - Rmr - Pa - Pq - Pt - Pp - Pc - Pv - Psm - Pδc according to PrEN 10049 RPc - PpC according to ISO 13565 Rk - Rpk - Rvk - Mr1 - Mr2 according to DIN 4776 Rmax according to DB N31007 R3z - R3zm according to ISO 12085 (CNOMO) Pt - R - Rx - AR
Measuring span		
X-axis	16 mm	16 mm (0.63 in)
Z-axis	160 μm	300 μm (11810 μin)
Unit system	mm	mm / in
Range of indication	Ra 0 ÷ 40 μm Rt 0,05 ÷ 160 μm	Ra 0 ÷ 75 μm (0 ÷ 2952 μin) Rt 0,05 ÷ 300 μm (0 ÷ 11810 μin)
Resolution	0,01 μm	0,001 μm (0.01 μin)
Cut-off length	0,25-0,8-2,5 mm	0,25-0,8-2,5 mm (0.01-0.03-0.1 inch)
Numerical filter	Gaussian as per ISO 11562	Gauss as per ISO 11562
Traversing length l <sub>t</sub>	(number of cut-offs + 1) x λ <sub>c</sub>	(number of cut-offs + 1) x λ <sub>c</sub>
Cut-off l <sub>c</sub>	number of cut-offs x λ <sub>c</sub>	number of cut-offs x λ <sub>c</sub>
Number of selectable cut-offs	2 to 5	1 to 10 = 0,25 and 0,8 mm 1 to 5 = 2,5 mm
Probing speed	1 mm/s	1 mm/s
Reverse speed	2 mm/s	2 mm/s
Keypad	4-key pad, membrane-type, protected against dust particles and liquids	4-key version, membrane-type, protected against dust particles and liquids
Probe type	Inductive probe	Inductive probe
Stylus tip	Diamond tip	Diamond tip
Tip radius	5 μm, 90°	5 μm, 90°
Measuring force	0,75 mN (ISO 3274)	0,75 mN (ISO 3274)
Languages	English, French, German, Spanish, Italian, Portuguese	English, French, German, Spanish, Italian, Portuguese
Autonomy	up to 200 measurements	up to 999 measurements
Power supply	Battery pack, 8,4 V – 170 mAh	Battery pack, 7,2V – 300 mAh
Power consumption	3 VA max. at 220 V	6,5 VA max. at 220 V
Overall dimensions	120 x 55 x 80 mm	120 x 55 x 80 mm
Weight	590 g	590 g

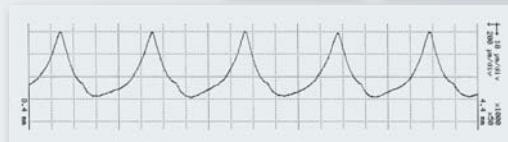
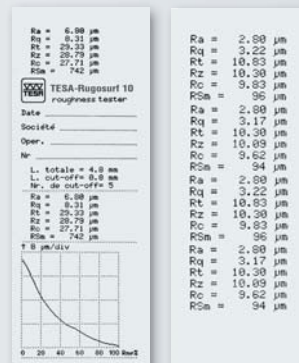


## Optional Probes

N°	Icon	Description
06960036	SB10	Standard probe for surfaces and bores with diameters to >10 mm (external) or > 6 mm (internal).
06960037	SB20	Probe for grooves, max depth 5 mm.
06960038	SB30	Probe for small bores from 4 mm dia.
06960039	SB40	Probe with V-skid for cables with external diameter to >1 mm.
06960040	SB50	Probe with front mounted contact skid for concave surfaces. Ideal for 90° measurement.
06960056		Extension, 100 mm long.
06960057	SP110	Probe for concave or convex surfaces, min. tip radius to 5 mm.



## Matrix Printer



N°	Icon	Description
06960033	Matrix printer, 24 columns	
<i>Provided along with:</i>		
		Rechargeable battery pack
		Connecting cable for Printer to RUGOSURF 10/10G / 90G
06960043		Inked ribbon (3 items)
06960044		Paper roll, 57 mm wide (10 units)

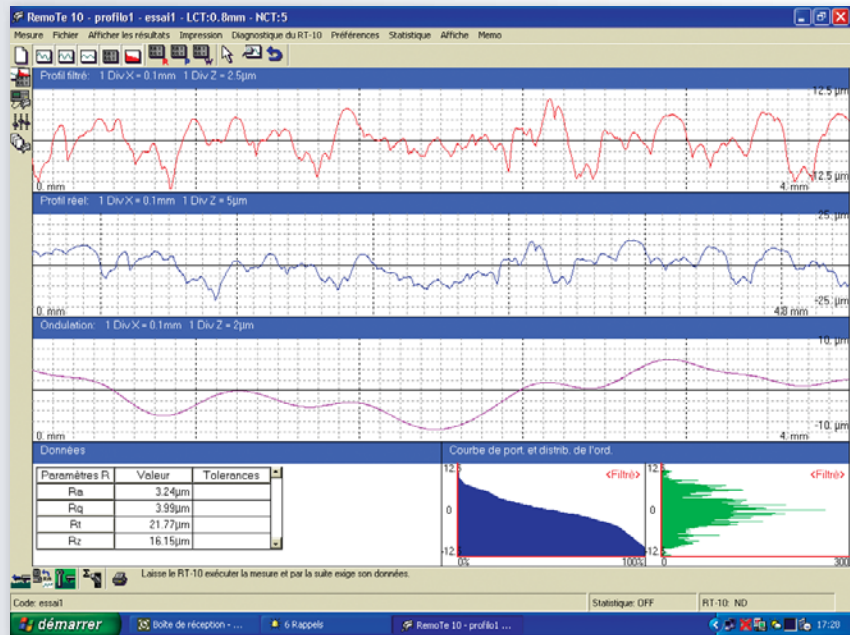
## RUGOSOFT 10 Software



**06960034** Rugosoft 10 software

Provided along with:

- CD with all instructions for installation, 6 languages available
- Instruction manual plus on-line help (included on the CD)
- RS 232 connecting cable



### Additional Accessories



**06960035** Support with granite base, 400 x 250 mm

**06960041** Roughness standard, nominal value Ra = 2,97 µm / 117 µin

**06960042** Foot switch

**06960045** Battery pack for powering Rugosurf 10G

**06960046** Mains adapter, 100 to 240 Vac / 50 to 60 Hz

**06960047** Suited plastic case for both Rugosurf 10 and 10G

