PRODUCT INFO

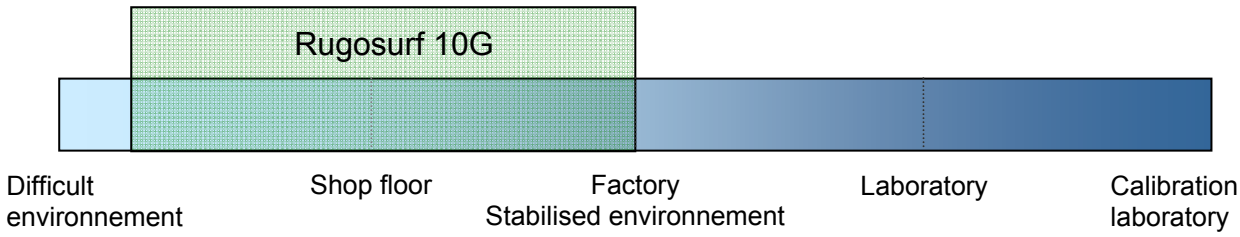
TESA Rugosurf 10G nr: 06930011

Rugosurf 10G

Portable, versatile gauge unit with compact design well suited for receiving inspection or for use in the production area or measurement laboratory. Quick overview of results considering tolerances and graphics on colour screen. One unit, strong and handy running on battery with data interface.

Main characteristics	*- compact unit* *- easy measuring → 4 keys, direct measure key* *- colour display for quick result analysis using tolerances* *- 31 roughness parameter with tolerances* *- battery use and internal memory for free displacement* *- USB interface to connect with PC or direct to printer* *- large range of accessories* *- optional probes, easy to exchange* *- two probe position for measures at 90°*

Environnement



Features

X axis	Z axis	Parameters	Display	Measuring process	Accuracy
16 mm	300 µm	31	2" color TFT	With skid	ISO 3274

Rugosurf 10G

The Rugosurf 10G is a compact instrument made for versatile application, from strongest production area to complete measures considering until 31 roughness parameters. Measures on the production machine or incoming materials, all applications on production side with quick results, tolerances on parameter and graphic display for profile and roughness curves.
Internal memory and battery running makes it very handy and allow measures also on big parts.

Characteristics

Name	Rugosurf 10G
Product number	06930011
Display	TFT 2" color display
Roughness parameter	According to ISO 4287-1997/JIS B0601/ASME B46-2002 Ra - Rq (RMS) - Rt - Rz – Rp - Rc – Rv - Rsm – Rdc – Pa – Pq – Pt – Pp – Pc – Pv – Psm – Pdc * According to PrEN 10049 RPc – PPc * According to ISO 13565 Rk – Rpk – Pvk – Mr1 – Mr2 According to DIN 4776 Rmax According to DB N31007 R3z – R3zm According to ISO 12085 (CNOMO) Pt - R - Rx - AR * using the graphics
Measuring range	
X axis	16 mm
Z axis	300 µm
Measure units	mm & inches
Display range	Ra 0 ÷ 75 µm
	Rt 0,05 ÷ 300 µm
Resolution	0,001 µm
Cut-off length	0,25-0,8-2,5 mm
Filter	Gaussian according to ISO 11562
Travelling length lt	(nbr of cut-offs + 1) x λc
Measuring length lc	Nbr of cut-offs x λc
Speed	1mm /s
Cut offs amount	1 to 10 (cut off 0.25 & 0.8) 1 to 5 (cut off 2.5)
Accuracy	ISO 4287-1997
Keypad	Protected with 4 keys.
Measure system	Inductive
Stylus	Diamond
Stylus radius	5 µm, 90° (2 µm and 60° optional)
Measuring force	0,75 mN (ISO 3274)
Languages	German, French, English, Italian, Spanish, Portuguese
Memory capacity	Until 999 measures
Power supply	Battery, 7.2 V – 300 mAh
Power needs	3 VA, 220 V
Autonomy	~ 2000 measures // 10 hours continuous use
Dimensions	120 x 55 x 80 mm
Weight	590 g

Delivery content

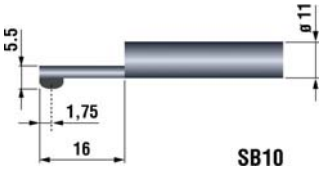
The Rugosurf 10G is delivered in a plastic case that contains also following parts.

Roughness standard, Ra = 2,97µm (117µin)	Universal stand shaft, Ø 8 mm	Positioning supports
(06960041)		

Standard probe SB10	(06960036)
Rechargeable battery, 7.2 V, 300 mAh, NiMH PP3-Format	(06960045)
Battery charger unit	(06960046)

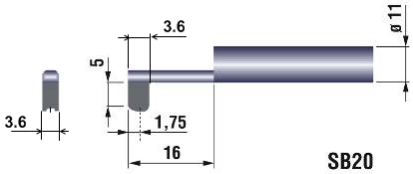
Optional probes

SB 10 **06960036**



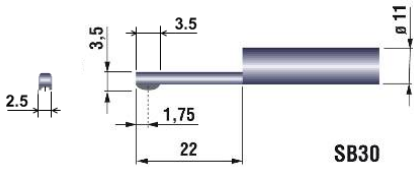
Standard probe **SB10** suitable for main applications, inside holes Ø >10 mm and shafts Ø > 10 mm

SB 20 **06960037**



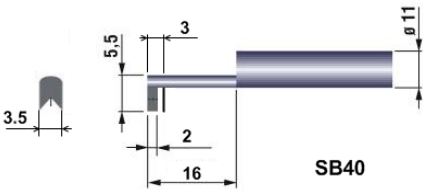
Probe **SB20** groove measuring, depth 5 mm.

SB 30 **06960038**



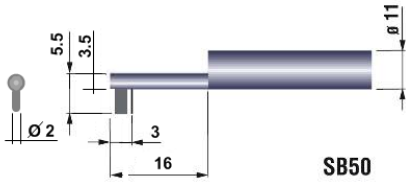
Probe **SB30** for holes minimum Ø 4 mm.

SB 40 **06960039**



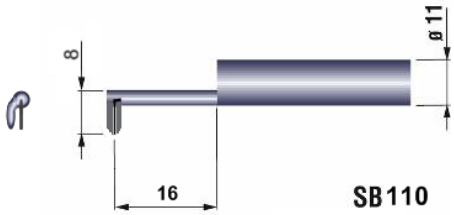
Probe **SB 40** with V skid for cables diameter to Ø >1 mm.

SB 50 **06960040**



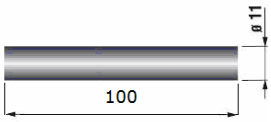
Probe **SB50** with front mounted contact skid for concave surfaces Ideal for measures at 90°

SB110 **06960057**



Probe **SB110** for concave or convex surfaces, minimum radius to 5 mm.

06960056



Extension 100 mm.

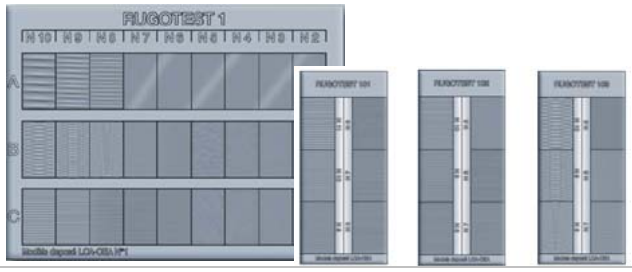
Optional roughness standards

In case of low Ra we advise to use a standard closer to the expected value.

	Product nr.	Description:
Ra = 2.97µm	06960041	Default roughness standard Suitable for most application (expected Ra > 1.5µm)
Ra = 0.1 µm	06960064	
Ra =0.5 µm	06960065	
Ra = 1 µm	06960066	

Optional roughness specimens

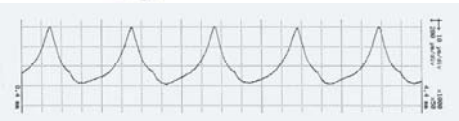
Made by Rust-resistant nickel, delivered in a leather case



Product nr.	Rugotest nr.	Description	Nomber of specimens	ISO roughness parameters	Dimensions	Weight [g]
081112053	1	Metal working	27	N2 – N10	135x105	160
081112054	2	Hand grinding	6	N6 – N11	120x90	160
081112055	3	Shot blasting	18	N6 – N11	120x90	190
081112056	4	Hand filing	6	N6 – N8	120x90	160
081112057	5	Hand polishing	8	N0 – N4	120x90	200
081112058	101	Planning	6	N6 – N11	110x50	110
081112059	102	Turning	6	N5 – N10	110x50	105
081112060	103	Face milling	6	N5 – N10	110x50	10
081112061	104	Surface grinding	8	N1 – N8	130x50	125
081112062	105	Circular grinding	8	N1 – N8	130x50	130
081112063	107	Spark ersosion	6	N5 – N10	110x50	110
081112345	A6	N° 101 to 107			330x250	780
081112346	A4	N° 1 to 4			330x250	710
081112344		Spark erosion	12	Charmille roughness parameters (VDI 3400) 12 / 15 / 18 / 21 / 24 / 27 / 30 / 33 / 36 / 39 / 42 / 45		

Accessories for Rugosurf 10 & 10G

Printer



Product nr: 06960033

Little printer direct to connect on the instrument. It's printing not only the list of parameters but also the graphics.

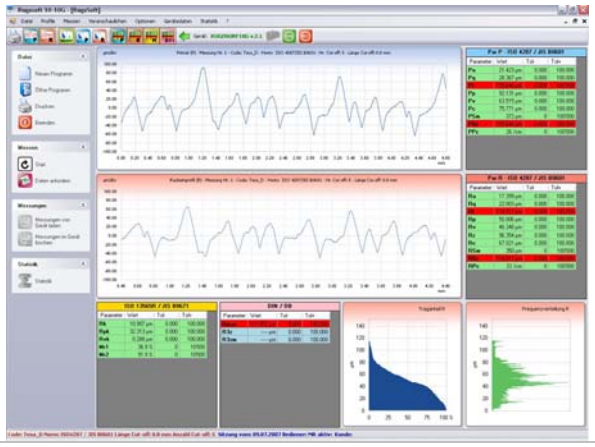
Deliver content:

- Battery block

connection cable for 10 / 10G / 90G

06960043	Inked ribbon (3 items)
06960044	Paper roll, 57mm wide (10 units)

Rugosoft



Product nr: 06960034

Program that considerably increase features of the Rugosurf 10. It allows to set, execute and display measurements. Everything is automatically save and available as various saved protocols.
Export of parameter results or complete graphics also as coordinates

Deliver content:

- installation CD 6 languages
- USB connection cable

Rugosurf 10G

Cable for DataDirect

Product nr: 06960062

USB cable to connect the Rugosurf 10 / 10G / 90G to TESA DataDirect (04981001).

This solution transfers the selected roughness parameters directly to any other open program on the computer. This feature needs TESA DataDirect software (to order separately).

Stand with granite base

Product nr: 06960035

Massive granite stand for Rugosurf 10 and 10G. Fine adjustment on Z axis, rotation of the instrument along length axis.

Granite surface 400 x 250mm
Z setting height 150mm
Z fine adjustment 5mm

Many other compatible stands (using standard 8mm shaft) in the TESA main catalogue, chapter H.

Flexible stand with fine adjustment

Magnetic base nr: 01639023
Length of the arm: 280mm

V basis for diameter 30 to 150 mm

Vacuum base nr: 01639024
Length of the arm: 280mm

Mounting the instrument on a stand use the standard 8mm shaft

Hand switch

Product nr: 06960042

Hand switch to start and stop the measure. Useful if the instrument is positioned on a stand.

Y connector for printer and hand switch

Product nr: 06960059

Accessory to connect simultaneously hand switch and printer or PC to one instrument. (Rugosurf 10 / 10G and 90G)

Battery 7.2 V, 300 mAh NiMH, — **Product nr: 06960045**

Power adapter 100 to 240 Vac / 50 to 60 Hz — **Product nr: 06960046**

Case for Rugosurf — **Product nr: 06960047**
Default plastic case for transport and secure storing

WHEN YOU NEED TO BE SURE

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