

#### SURFACE ROUGHNESS TESTING



# TESA RUGOSURF Roughness Tester 90G

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.















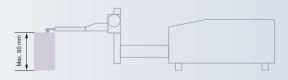




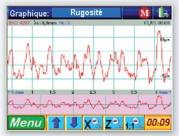


Declaration of conformity

- 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 µm/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).











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|--------------|--|--|--|
| 06930012     | TESA RUGOSURF roughness (                            | gauge 90G  |  |
| Supplied wit | th the following standard accesso                    | ries:  |  |
|              | Roughness standard, Ra = 2,9                         | 7 μm / 117 μin   |  |
|              | Rechargeable built-in battery, 12 V                  |  |  |
|              | SB60/10 standard probe, with or without contact skid |  |  |
|              | Two-position probe holder                            | <ul><li>Locked for probe without skid</li><li>Unlocked for probe with skid</li></ul> |  |
|              | Guiding column, setting range up to 90 mm            |  |  |
|              | Battery charger, 100 to 240V, 5                      | 50/60 Hz   |  |

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## Technical data

| الم                                | 06930012  |
|------------------------------------|---|
|                                    | RUGOSURF 90 G   |
| Display                            | Tactile TFT colour display, size 3,5"<br>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<br>according to DIN 4776<br>Rmax   |
|                                    | according to DB N31007<br>R3z – R3zm  |
|                                    | according to ISO 12085 (CNOMO) Pt - R - AR - Rx- Wte - AW - Wx - Rke - Rpke - Rvke - W - Mrle - Mr2e  |
| Measuring span<br>X-axis<br>Z-axis | 50 mm<br>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 Ic                         | 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<br>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                           | ≈ 2 000 measurements / ≈ 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  |





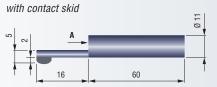


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### Optional probes (90° diamond tip with a tip radius to 5 $\mu$ m, unless otherwise specified)

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|----------|---------|---|
| 06960049 | SB60/10 | <b>Probe with contact skid</b> 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.<br>Ideal for 90° measurement.   |
| 06960054 | SB120P  | Probe for grooves, max. depth 20 mm.  |
| 06960058 | SB120S  | Probe without skid for grooves,<br>max. depth 15 mm   |
| 06960061 | SB60-D2 | Probe for small bores with diameter from 2 mm, $L = 30$ mm.   |

#### SB60/10 Probe

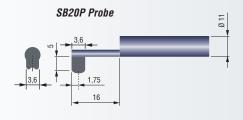


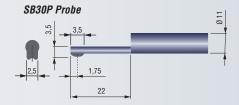
without contact skid

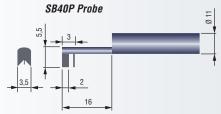
A Undo both screws on the front face to remove the skid.
Once done, use the probe very carefully for any further measurement (see Fig. 1).

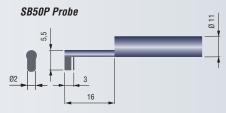












11 g

