

Wide Range of Applications



The scope of delivery for the **MarSurf PS1** includes a simple mount for **height adjustment**.

This enables measurements to be performed on e.g. cones.



Perfect upside down measurement with the **MarSurf PS1**. All you have to do is position the part and start measurement.

This enables small workpieces to be measured without additional mounts.



Measurement on measuring stand.

The **MarSurf PS1** can easily be mounted on measuring stands **ST-D / ST-F** or **ST-G**.



The **MarSurf PS1** is the perfect entry-level measuring instrument for a wide range of standards-compliant roughness measurements.

There should be one on every shop floor!

Technical Data

| | |
|--|---|
| Unit of measurement | Metric, inch |
| Measuring principle | Stylus method |
| Pick-up | Inductive skidded pick-up, 2 µm (80 µin) stylus tip, measuring force approx. 0.7 mN |
| Parameters (24, with tolerance limits) | Ra, Rq, Rz corr. to Ry (JIS), Rz (JIS), Rmax, Rp, Rp (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPl, Rmr corr. to tp (JIS, ASME), RSm, R, Ar, Rx |
| Languages | 14 including 3 Asian languages |
| Measuring range* | 350 µm, 180 µm, 90 µm (0.014 in, 0.007 in, 0.004 in) |
| Profile resolution* | 32 nm, 16 nm, 8 nm (1.3 µin, 0.6 µin, 0.3 µin) |
| Filter** | Phase-correct profile filter (Gaussian filter) acc. to DIN EN ISO 11562, special filter acc. to DIN EN ISO 13565-1, ls filter acc. to DIN EN ISO 3274 (can be disabled) |
| Cutoff lc** | 0.25 mm, 0.8 mm, 2.5 mm; automatic (0.010 in, 0.030 in, 0.100 in) |
| Traversing length Lt** | 1.75 mm, 5.6 mm, 17.5 mm; automatic (0.069 in, 0.22 in, 0.69 in) |
| Traversing length (MOTIF) | 1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm (0.04 in, 0.08 in, 0.16 in, 0.32 in, 0.48 in, 0.64 in) |
| Short cutoff** | Selectable |
| Evaluation length ln** | 1.25 mm, 4.0 mm, 12.50 mm (0.050 in, 0.15 in, 0.50 in) |
| Sampling lengths** | Number n selectable: 1 to 5 |
| Calibration function | Dynamic |
| Memory capacity | Max. 15 profiles, max. 20,000 results |
| Other functions | Blocking of settings (code-protected), date/time |
| Dimensions | 140 mm × 50 mm × 70 mm (5.51 in × 1.97 in × 2.76 in) |
| Weight | 400 g (0.88 lbs) |
| Battery | Li-ion battery |
| Interfaces | USB, MarConnect (RS232) |
| Long-range power supply | 100 V to 264 V |

* changes automatically

** acc. to ISO/JIS



ABSOLUTE MOBILITY
FOR SURFACE ROUGHNESS MEASUREMENTS

MarSurf PS1

- 0 +

Mahr

EXACTLY

Mahr GmbH Göttingen | www.mahr.com

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MarSurf PS1. The Portable Surface Roughness Measuring Instrument

Large display

All the information you need at a glance

Directly selectable parameters

Ra, Rz

Freely programmable button

Direct access to one parameter of your choice out of 24

Integrated calibration standard

No external calibration standard required (patent pending)

USB interface

PS1 is detected without a driver (such as a memory stick)

Pick-up with removable pick-up protection

Measurement in compliance with standards
Measuring force 0.7 mN

Drive unit

can be rotated and moved in longitudinal direction

Flexibility thanks to 4 internally threaded bores

For clamping your own special accessories

Start button, on the right and on the left

Easy operation no matter whether you are left- or right-handed

Your Benefits

Saves you time and money

Ease of operation means:

- No training: Save time
- Switch on and measure
- 3 parameters directly at the press of a button

Reliable measurement

- With integrated calibration standard
- Error-free operation thanks to **standards-compliant settings**
- Automatic cutoff selection
- Evaluation possible using **MarSurf XR 20** evaluation software or **MarSurf XR 20** unit

Housed in a carrying case attached to your belt, this compact, handy roughness measuring instrument is always there when you need it!



MarSurf PS1 - Standard Set

- **MarSurf PS1** base unit
- Drive unit
- 1 standard pick-up, conforms to standards
- Integrated battery
- Roughness standard integrated into casing
- Height adjustment
- Pick-up protection
- Charger / mains adapter
- Operating instructions
- Carrying case with shoulder strap and belt attachment
- USB cable



Optional accessories

80 mm (3.15 in) pick-up extension, pick-ups from dia. 3 mm (0.118 in) for measurements in bores, cranked pick-up, groove pick-up, tooth flank pick-up, adapter for transverse tracing, **MSP2** printer with connection cable (**MarConnect**), vee-block for measurements on end faces, mounting device for measuring stand **ST-D / ST-F / ST-G**.