# **Product information**

## Mobile roughness measuring instrument MarSurf PS 10

# Product features "SMAHRT Surf" – simple, smart and mobile

- Compact roughness measuring instrument for mobile use
- Simple and intuitive to use: as easy as using a smart phone
- Large, illuminated 4.3" TFT touch display
- Adjustable display
- Data backup as TXT, X3P, CSV or PDF file
- Create complete PDF measuring records directly in the measuring instrument
- Customized comments for the PDF measuring record can be entered directly into the MarSurf PS 10
- Mains-independent operation: Over 1200 measurements without having to recharge the instrument
- An all-in-one solution. Small and lightweight (approx. 500 g)
- Instrument flexibility: removable drive unit
- 31 surface parameters: offer the same range of functions as a laboratory instrument
- Roughness standard stored within housing aids in reducing errors
- Quick access to your frequently used functions via the Favorites list in the display
- Automatic cutoff selection, so even non-specialists can be sure of getting the correct measuring results
- NEW: Additional version with transverse drive unit available as MarSurf PS 10 C2 (item number 6910235)

### **Application**

- For shafts and housing components
- For large machines
- For large workpieces
- For milled and turned parts
- For ground and honed workpieces
- On the production line or directly on the machine; ideal for rapid testing of the surface roughness of a workpiece

## Introduction

sMAHRtSurf - Simple, smart and



Item no.: 6910230

### **Technical data**

| Positioning speed                                | 0.5; 1.0  |  |  |
|--|---|--|--|
| Measuring principle                              | Stylus method   |  |  |
| Probe  | Inductive skidded probe   |  |  |
| Parameters                                       | Ra, Rq, Rz (Ry (JIS) is equivalent to Rz), Rz (JIS), Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPc, Rmr (tp (JIS, ASME) is equivalent to Rmr), RSm, RSk, RS, CR, CF, CL, R, Ar, Rx, R3z |  |  |
| Measuring units                                  | metric/inches   |  |  |
| Measuring range mm                               | 0.350   |  |  |
| Profile resolution                               | 8 nm  |  |  |
| Filter according to ISO/JIS                      | Gaussian filter as per ISO 16610-21 (formerly ISO 11562), special filter as per DIN EN ISO 13565-1, Lambda s filter as per DIN EN ISO 3274 (can be switched off)  |  |  |
| Cutoff Ic according to ISO/JIS                   | 0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection   |  |  |
| Short stroke under ISO/JIS                       | Selectable  |  |  |
| Traversing length Lt according ISO/JIS           | 1.5 mm, 4.8 mm, 15 mm, N x Lc, variable, automatic  |  |  |
| Traversing length according ISO 12085 (MOTIF)    | 1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm  |  |  |
| Evaluation lenth In according to ISO/JIS         | 1.25 mm, 4.0 mm, 12.5 mm  |  |  |
| Number n of sampling length according to ISO/JIS | Selectable: 1 to 16   |  |  |
| Stylus   | 2 μm  |  |  |
| Measuring force (N)                              | 0,00075   |  |  |
| Calibration function                             | Dynamic; Ra, Rz, Rsm  |  |  |
| Storage capacity                                 | Min. 3900 profiles, min. 500,000 results, min. 1500 PDF records, expandable to 32 GB with Micro SD card   |  |  |
| Languages  | German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian   |  |  |
| Other  | Lock/password protected, date/time  |  |  |
| Data interface                                   | USB, MarConnect (RS-232), Micro SD slot for SD / SDHC cards up to 32 GB   |  |  |
| System of protection                             | IP 40   |  |  |
| Rechargeable batteries                           | Lithium-ion battery, min. 1200 measurements   |  |  |
| Wide range power supply                          | 100 to 264 V  |  |  |
| Dimensions in mm                                 | 160 mm x 77 mm x 50 mm  |  |  |
| Weight   | 1.92 KG   |  |  |
|  |   |  |  |

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### **Accessories**

| Designation   | Product type       | Order no             |
|---|--------------------|----------------------|
| <u> </u>  | -                  | Order no.<br>6850540 |
| PHT pick-up extension 80 mm   | PHT (80 mm)        |                      |
| Standard probe 2 µm   | PHT 6-350          | 6111520              |
| Standard probe 5 μm   | PHT 6-350/<br>5μm  | 6111526              |
| Standard probe 10 μm  | PHT 6-350/<br>10μm | 6111527              |
| Probe for bores with a dia. larger than 3 mm                                    | PHT 3-350          | 6111521              |
| Probe for grooves   | PHT 11-100         | 6111524              |
| Probe for concave and convex surfaces   | PHTR-100           | 6111525              |
| Probe for gear tooth flanks   | PHTF 0.5-100       | 6111522              |
| Probe for metal sheets  | PT 150             | 6111523              |
| Measuring stand 300 mm with cast iron base                                      | ST-D               | 6710803              |
| Measuring stand 300 mm with granite plate                                       | ST-F               | 6710806              |
| Measuring stand 300 mm with granite plate and T-slot                            | ST-G               | 6710807              |
| Adjustable mounting bracket to connect to 814 SR                                | 814 Sh             | 2247086              |
| Height measuring and scribing instrument  | 814 SR             | 4426100              |
| Height measuring and scribing instrument  | 814 SR             | 4426101              |
| Data connection cable USB   | 16 EXu             | 4102357              |
| Data cable USB bi-directional   | DK-U1              | 4102603              |
| V-block   | PP                 | 6710401              |
| Parallel vice   | PPS                | 6710604              |
| XY Table  | CT 120             | 6710529              |
| Set of miniature precision vises  | 109 PS             | 4246819              |
| Roughness standard with Mahr<br>calibration certificate, profile depth<br>10 µm | PRN 10             | 6820420              |
| Measuring tripod with triangular pedestal                                       | 815 GN             | 4413000              |
| Measuring tripod with triangular pedestal                                       | 815 GN             | 4413001              |
| Measuring tripod with triangular pedestal                                       | 815 GN             | 4413005              |
| Measuring tripod with magnetic base   | 815 MA             | 4416000              |