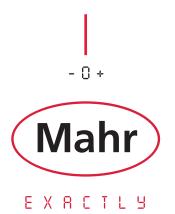
# MarSurf





# MarSurf M 400

The best of the "mobiles"! Easy. Fast. Innovative. With free tracing and automatic zeroing.



MarSurf. Mobile Surface Measuring Stations

# MarSurf M 400. The best of the "mobiles"

High performance with high mobility

Mahr

#### **Evaluation Unit MarSurf M 400**



#### Easy. Fast. Innovative

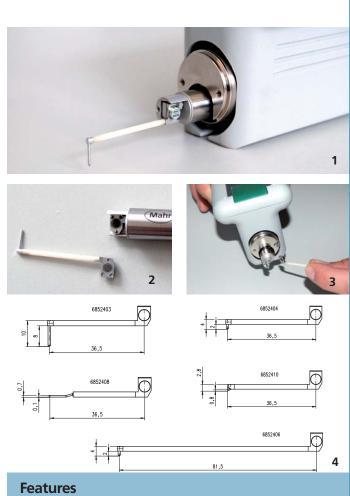
Not only needed in the measuring room but also more and more often in the production area: Surface evaluation that requires free tracing.

This generally means higher demands of the operator qualification, more time, more adjustments.

MarSurf M 400 offers this required performance scope in its line of mobile surface metrology - with easy and fast operation.

#### **Drive-Unit SD 26**





- Free tracing with high precision probe system (1)
- Fast probe arm change due to magnetic probe arm holder (2, 3, 4)
- Protection from damage
- Only a few seconds of setting time required due to motorized height adjustment of the drive unit with auto-
- matic zero positioning
- Flexible movement due to cable-free Bluetooth connection
- Concise, clear and easy due to brilliant color display for the depiction of results and operator guidance
- Mobile use due to operation with power supply or storage battery r
- Internationally up to date due to all common parameters as per ISO, JIS, ASME, many integrated languages
- Documentation with quality due to integrated thermo printer for printout of profile and results
- High measuring speed with same measuring point density 1mm/s
- 26 mm tracing length

# Pick-Up System BFW 250



### MarSurf. Mobile Surface Measuring Stations

#### MarSurf M 400. The best of the "mobiles"

#### **Applications MarSurf M 400**



Upside down measurement with prisma Automatic zeroing of the BFW 250





Measurement in production

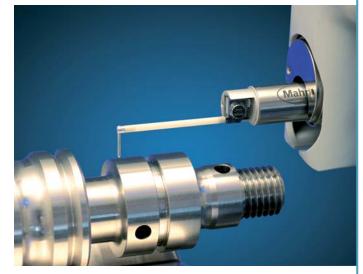


MarSurf measuring station with measuring stand ST-G

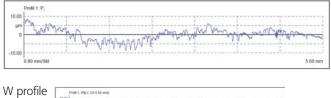
The possibility to expand the mobile surface measuring unit to a small stationary work station can be easily and quickly realized by adding only a few components from the line of MarSurf accessories.

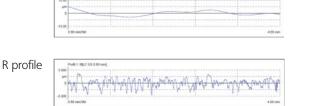
All applications depicted here are supported with the assistant for inclination setting

The MarSurf M 400 enables the evaluation of parameters from the P, W and R profiles.









# MarSurf M 400. The best of the "mobiles"

#### MarSurf M 400 Set



#### **Delivery scope**

- Evaluation unit MarSurf M 400
- Drive unit MarSurf SD 26 incl. probe system BFW 250
- Standard probe arm (6852403)
- 1 thermo paper roll
- Wide-range power supply mit 3 adapters
- 2 x USB cables (to connect to PC and for use with cable)
- Operation manual

MarSurf M 400 Set:

All items are delivered in a practical carrying case.

Order no. 6910404

#### **Technical Data**

#### MarSurf M 400 Set Profile determination

Profile determination	Primary, waviness and roughness profile
Probes	inductive free-tracing systems with ex-
	changeable probe inserts, 2 µm probe
	tips, measuring force approx. 0.7 mN
	(standard)
Filters (as per DIN/JIS)	Gaussian filter, Ls filter
Standards	DIN/ISO/JIS/ASME/MOTIF
Parameters	DIN/ISO: Ra, Rq, Rz, Rmax, Rp, Rv, Rpk, Rk,
	Rvk,Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPc,
	Rmr (3x), HSC, RSm, Rsk, Rdc, Rdq,
	Pa, Pt, PMr (3x), Pdc,
	Wa, Wt, WSm, Wsk,
	JIS: Ra, Rz, RzJIS94, Sm, S,
	ASME: RpA, Rpm
	MOTIF: R, Ar, Rx, W, Wx, Wte, CR, CL, CF,
	NR, NCRx, NW
Cutoff <i>lc</i> (as per ISO/JIS):	0.25 mm, 0.8 mm, 2.5 mm, automatic,
Tracing lengths <i>Lt</i>	1.75 mm, 5.6 mm, 17.5 mm,
(as per ISO/JIS)	automatic, free entry
Tracing lengths	1 mm, 4 mm, 8 mm, 12 mm, 16 mm
(as per MOTIF)	
Total lengths <i>Im</i>	
(as per ISO/JIS)	1.25 mm, 4.0 mm, 12.5 mm
Number <i>n</i> of sampling lengt	
(as per ISO/JIS):	selectable: 1 to 5
Shortened cutoff (as per ISO/JIS	
Tracing speed	0.2mm/s; 1mm/s
Profile resolution	Measuring range: $\pm 250 \mu m = 8 nm$ ,
	$\pm 25 \mu\text{m} = 0.8 \text{nm},$
	Languages 15, 3 of them Asian
Memory	Max. 30 profiles, max. 40,000 results
Other	lock/code word protection, date/time,
outer	integrated printer, calibration function,
	dynamic
	aynarnic

#### Tracing length Measuring speed Positioning speed in X Height adjustment Z Positioning speed in Z

Drive Unit SD 26

Zero setting of probe system

Inclination adjustment

Temperature (storage) Temperature (operation) Rel. humidity Weight

Interfaces Wide-range power supply 26 mm 0.2 mm/s; 1 mm/s

5 mm/s 7.5 mm, motorized

2 mm/s Automatically to zero value or specification in the probe measuring range ±1.5° (levelling function with user guidance in the evaluation unit) -15° C to +55° C +5° C to +40° C 30% to 85%, non-condensing M 400: approx. 1.0 kg SD 26: approx. 0.9 kg USB Slave, MarConnect (RS232) 90 – 264 V

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