

# Product information

## Roughness measuring station MarSurf GD 140

### Product features

#### **MarSurf GD: The new reference measuring station for roughness and waviness measurements**

The new Mahr measuring stations from the MarSurf GD series are setting new standards. In addition to surface roughness evaluations, profile, and waviness evaluations can also be performed. The new MarSurf GD series is enabling production companies to achieve a new dimension to reliably ensure and improve the production quality of workpieces in the measuring room or close to the production area.

The new measuring station concept combines speed, security, and flexibility. The aim is to increase the cost-effectiveness of the system for your company.

The measuring stations are operated with the user-friendly MarWin software (MarWin EasyRoughness or MarWin ProfessionalRoughness).

### Application

#### **Mechanical Engineering**

Bearings, threads, threaded bars, ball screws, shafts, racks

#### **Production metrology**

Contour measurement in a semi-automatic process

#### **Automotive industry**

Steering, brake system, gearbox, crankshaft, camshaft, cylinder head

#### **Medical technology**

Contour of hip and knee endoprosthesis, contour of medical screws, contour of dental implants



Item no.: **6269010**

### Technical data

<b>Resolution</b>	Measuring range 1: 2.0 nm Measuring range 2: 0.2 nm
<b>Start of traversing length (in X)</b>	0.1 mm
<b>End of traversing length (in X)</b>	140.0 mm
<b>Traversing length (Lt)</b>	0.1 - 140 mm
<b>Guide deviation</b>	0.20 $\mu\text{m}$ / 60 mm 0.40 $\mu\text{m}$ / 140 mm
<b>Measuring force (N)</b>	0.7 mN
<b>Measuring speed</b>	0.02 mm/s to 10 mm/s
<b>Positioning speed X-axis min.</b>	0.02 mm/s
<b>positioning speed X-axis max.</b>	200 mm/s
<b>Positioning speed X axis</b>	0.02 - 200 mm/s
<b>Positioning speed Z-axis</b>	0.02 - 50 mm/s
<b>Positioning speed Z axis max.</b>	50 mm/s
<b>Positioning speed Z-axis min.</b>	0.02 mm/s
<b>Probe</b>	Roughness probe system (skidless)
<b>Probe arm length</b>	45 mm (x 1) 67.5 mm (x 1,5) 90 mm (x 2) 112.5 mm (x 2,5) 135 mm (x 3)
<b>Weight (gross)</b>	196 KG
<b>Workpiece weight max.</b>	90 kg
<b>Other functions</b>	manuelle TY
<b>Measuring range mm</b>	500 $\mu\text{m}$ ( $\pm 250 \mu\text{m}$ ) for probe arm length 45 mm 1500 $\mu\text{m}$ ( $\pm 750 \mu\text{m}$ ) for probe arm length 135 mm