



Confocal microscopy for surface metrology

What is the MarSurf CM?

- Optical (LED Confocal Microscope), non-contact, surface topography mapping instrument

What can the MarSurf CM measure?

- Roughness, waviness and flatness (profile and areal parameters according to ISO and ASME standards)
- Micro-contour (radius, angle, pitch, etc.)
- Micro-geometry and form (depth, height, width, volume, area, etc.)

Who uses the MarSurf CM?

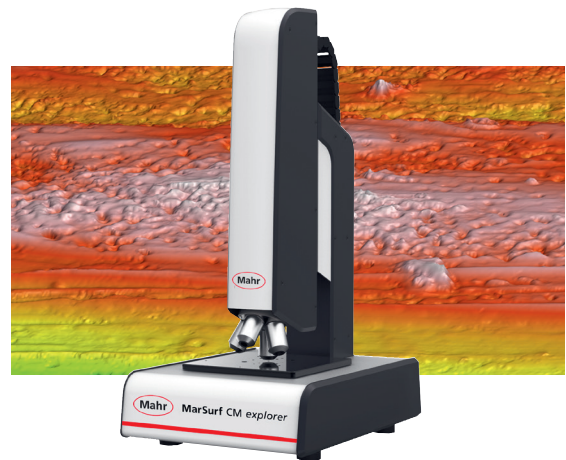
- Laboratories, QC/QA departments
- Process development and control
- Production

Why is the MarSurf CM used?

- Easy to acquire high speed digital data
- Material independent measurement performance
- Ceramic, fabric, glass, metal, paper, plastic, etc. are all measurable regardless of reflectivity

What are the advantages of the MarSurf CM?

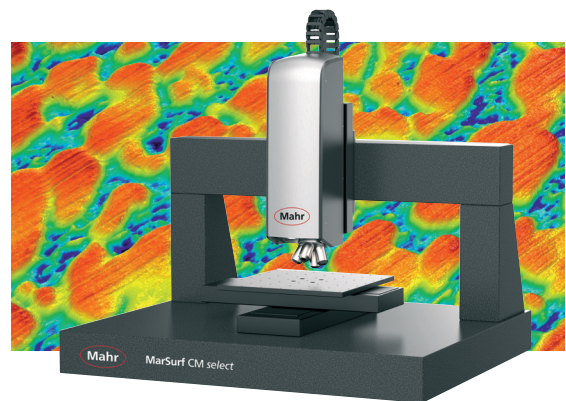
- Excellent measurement fidelity (ask for details about accuracy and precision)
- Transparent specifications (ask about the fair data sheet initiative)
- Documentation and traceability via certified artifacts
- Direct correlation to contact stylus roughness parameters
- Customizable and automatable to fit your exact needs
- Support and expertise from your trusted metrology partner - Mahr Inc.



MarSurf CM explorer - compact footprint all-round surface metrology instrument.



MarSurf CM mobile - laboratory performance on the shop floor and in the field.



MarSurf CM select - fully customizable for automatic measurements with multiple sensors.

Objective*	20x	50x	100x
Field of View (mm x mm)**	0.8 x 0.8	0.32 x 0.32	0.16 x 0.16
Rayleigh Lateral Resolution (µm)	0.48	0.36	0.32
Vertical Noise (nm)***	3	1	1
Vertical Resolution (nm)****	8	4	2

* 2.5, 5 & 10x objectives available. 10, 20 & 50x objectives available in short, standard and long working distances.

** Can be increased using standard automatic stitching function on all instruments.

*** Temporal noise of height values, determined during normal usage at ideal ambient conditions.

**** Smallest distinguishable step height calculated from the measurement noise, with a 95% probability of being detected.