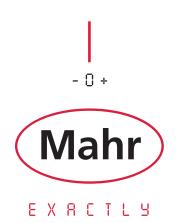


New Option: "Roughness Measurement" According to Standards with MarForm MMQ 200!



Roughness Measurement with MarForm MMQ 200



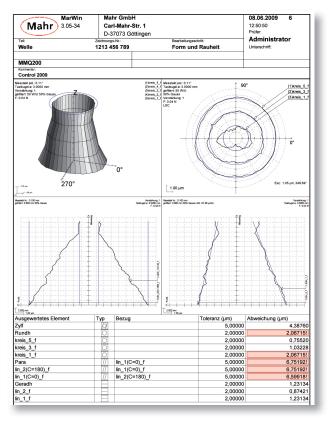
What is more obvious than assessing and documenting the surface roughness parameters of your work-piece while checking it for form and position tolerances?

Why not assess e.g. the Ra and Rz values with a MarForm form measuring instrument?

If you do so, you can be sure of uncompromisingly high quality for the pick-up or probe required for the relevant measuring task is always in optimum measuring position.

Profit from:

- Reduced testing times and costs due to complete work-piece assessment in a single set up and in just one run
- Higher accuracies due to the automatic selection and position ning of the probe or pick-up for each measuring task
- Simple operation due to a software which is equally well suited for surface roughness as well as form and position measurements
- Detailed and telling measuring records
- Well-proven surface roughness metrology combined with equally well-proven form metrology

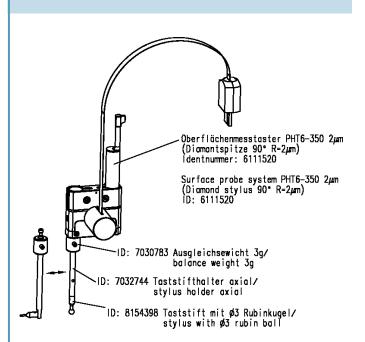


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lonmontar.					
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µm 0 -0.50 Rauheil Ra Ra Rz Rmax Kemrat Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra	0.80 mmSat iskennwerte - 0.059 µm 0.497 µm 0.057 µm 0.057 µm 0.057 µm 0.095 µm 0.095 µm 0.179 µm 0.095 µm 0.095 µm 0.095 µm 0.483 µm 0.610 µm 0.463 µm 0.616 µm 0.616 µm 0.074 µm	Profil 2: R[0,000 0,000 0,000 0,000 0,000 0,000 10,00 80,00 9rofil 3: R[0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000	2: R[LC ISO 13565 0.80 mm]; LC GS 0.80 mm];	4.00 mm	109% 0,300 1,000 1,000 1,000 0,500 0,500 0,90,00 90,00 90,00 1,000
um 0 -0.50 Rauhei Ra Ra Ra Ra Ryk Mr1 Mr2 Rauhei Ra Ra Ra Rz Rmax	0.89 mm/škt tskennwerte - 0.059 µm 0.497 µm 0.597 µm 0.957 µm 0.054 µm 0.064 µm 0.064 µm 0.064 µm 0.064 µm 0.064 µm 0.064 µm 0.064 µm 0.064 µm 0.010 µm 0.059 µm 0.010 µm 0.059 µm 0.010 µm 0.020 µm 0.010 µm 0.010µm 0.010 µm 0.010 µm	Profil 2: R(0,000 0,000 0,000 0,000 10,00 0,000 10,00 80,00 Profil 3: R(0,000 0,000 0,000 0,000 0,000 0,000 0,000 0,000	2: R[LC ISO 13565 0.80 mm]; LC GS 0.80 mm];	4.00 mm	100% 0,300 1,000 1,400 0,500 0,500 0,000 0,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 0,0

Roughness Measurement MarForm MMQ 200

Mahr as the market leader in the field of form metrology offers form measuring machines of utmost precision and for many customers Mahr measuring machines are the standard in mechanical form metrology. And the very well proven stylus method has been perfected at Mahr

Mahr, the specialist for inductive probes, combines the advantages of its universal motorized T7W probe with the precision of its PHT 6-350 pick-up. Probe and pick-up grow together. The MarForm MMQ 200 automatically swivels the probe or pick-up required for the measuring task to the optimum measuring position! Combine the monitoring of form and position tolerances with the assessment of surface roughness parameters.



Record and file typical surface roughness parameters such as Ra and Rz while checking the dimensional stability of your workpieces on a MarForm MMQ 200 in one go. Don't bother with clamping it again on a surface roughness measuring station.

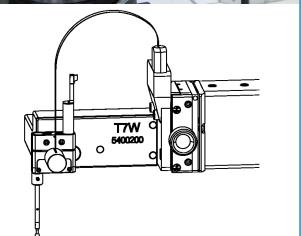
Yes, it is possible due to the fully-automatic and program-controlled change between the form probe with ruby ball and the PHT 6-350 pick-up with diamond tip. Changing from vertical to horizontal measuring positions is also fully automatic. Owing to the rotary axis of the T7W probe which positions any probe arm in steps of less than 1° with utmost precision, operator interventions are completely superfluous.

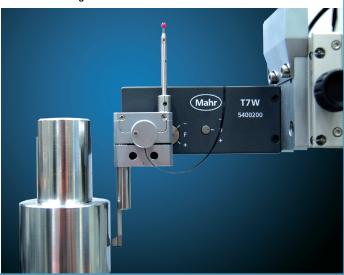
Detail A. Pick-up parallel to the generating line of a cylinder Detail B. Pick-up parallel to the end face of a cylinder

Drawing from quote: set and details



(Mahr)





MMQ 200 with T7W and Roughness Measuring Head. The Details.

Scope of delivery for the new option "Roughness measurement with MMQ 200" Order No. 5400235

Combined hardware und software package for roughness measurement and evaluation with MarForm MMQ 200 and motorized T7W probe including:

Hardware package

- \bullet PHT 6-350 pick-up with a 90° stylus tip of radius 2 μm
- Probe arm holder for PHT 6-350 pick-up and form measuring probe arm
- Adapter for connecting the pick-up to a MarForm MMQ 200

Software package

- Software license for evaluating surface roughness with AdvancedForm
- AdvancedForm software for use with MMQ 200 form measuring stations



PHT 6-350 Pick-up

Probe PHT 6-350

Order No. 6111520

Custom	One skilded probe
System	One-skildded probe
Skid radius	In tracing direction 25 mm, laterally 2.9 mm
Contact point	0.8 mm in front of the probe tip
Measuring range	350 μm
Specification	For level surfaces,
	For bores from 6 mm Ø to 17 mm depth
	Grooves from 3 mm width,
	min. workpiece length = tracing length
	+ 1 mm
Probe tip geometry	2 μm/90° diamond

Motorized T7W Probe

Probe T7W

Order No. 5400200

Motorized probe T7W ± 360° adjustable Contacting angle freely selectable in 1° steps Probe arms easily exchangeable (magnetic mount) Two-way measuring directions Mechanical and electrical overload protection

Mahr GmbH Göttingen

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