

## ROUGHNESS TESTER

### Description of Roughness Tester 5 or 50 nm:

Light and compact, these two roughness testers are portable or fixed.  
Their use is very simple and the results can be edited on PC.

Models	Roughness tester 50 nm	Roughness tester re 5 nm
Measuring range:		
Ra :	0.050-10 $\mu\text{m}$	0.005-16 $\mu\text{m}$
Rq :	0.005-16 $\mu\text{m}$	0.005-16 $\mu\text{m}$
Rz :	0.020-100.0 $\mu\text{m}$	0.020-160 $\mu\text{m}$
Rt :	0.020-160 $\mu\text{m}$	0.020-160 $\mu\text{m}$
Accuracy:	< 10 %	< 10 %
Resolution:	0.001 $\mu\text{m}$ (lecture < 10 $\mu\text{m}$ ) 0.01 $\mu\text{m}$ (10 $\mu\text{m}$ < Lecture < 100 $\mu\text{m}$ ) 0.1 $\mu\text{m}$ (lecture >100 $\mu\text{m}$ )	0.001 $\mu\text{m}$ (lecture < 10 $\mu\text{m}$ ) 0.01 $\mu\text{m}$ (10 $\mu\text{m}$ < Lecture < 100 $\mu\text{m}$ ) 0.1 $\mu\text{m}$ (lecture >100 $\mu\text{m}$ )
Display:	LCD	LCD
Fluctuation of display value:	< 6 %	< 6 %
Profile digital filter:		
Filter contour:	RC, PC, RC, GAUSS	RC, PC, RC, GAUSS
Non-filter contour:	D-P	D-P
Sensor:		
Radius	10 $\mu\text{m}$	5 $\mu\text{m}$
Material	Diamond	Diamond
Measuring force	16 mN (1.6 gf)	4 mN (0.49 gf)
Probe angle	90 °	90 °
Vertical radius of guiding head:	48 mm	48 mm
Maximum driving stroke:	17.5 mm	17.5 mm
Sampling length:	0.25 mm, 0.8 mm, 2.5 mm	0.25 mm, 0.8 mm, 2.5 mm
Driving speed:		
When measuring:	Vt=0.135 mm/s (sampling length=0.25 mm) Vt=0.5 mm/s (sampling length =0.8 mm) Vt=1 mm/s (sampling length =2.5 mm) Vt=1 mm/s	Vt=0.135 mm/s (sampling length =0.25 mm) Vt=0.5mm/s (sampling length =0.8 mm) Vt=1 mm/s (sampling length =2.5 mm). Vt=1 mm/s
Return :		
Probe measuring range :	+ - 80 $\mu\text{m}$	+ - 80 $\mu\text{m}$
PC Interface :	RS-232C	RS-232C
Memory function :	7 groups	7 groups
Working environment :		
Temperature :	0-50 °C	0-50 °C
Humidity :	< 85 % RH	< 85% RH
Power supply :	4x1.5 V	4x1.5 V
Dimension :	145x65x27 mm	145x65x27 mm
Net weight :	220 g (batteries not included)	220 g (batteries not included)



### ABC SwissTech

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