

MicroProf® 100

ONE Surface Metrology Tool for ALL Applications

FRT
the art of metrology™

Medical Technology

Semiconductor

Solar

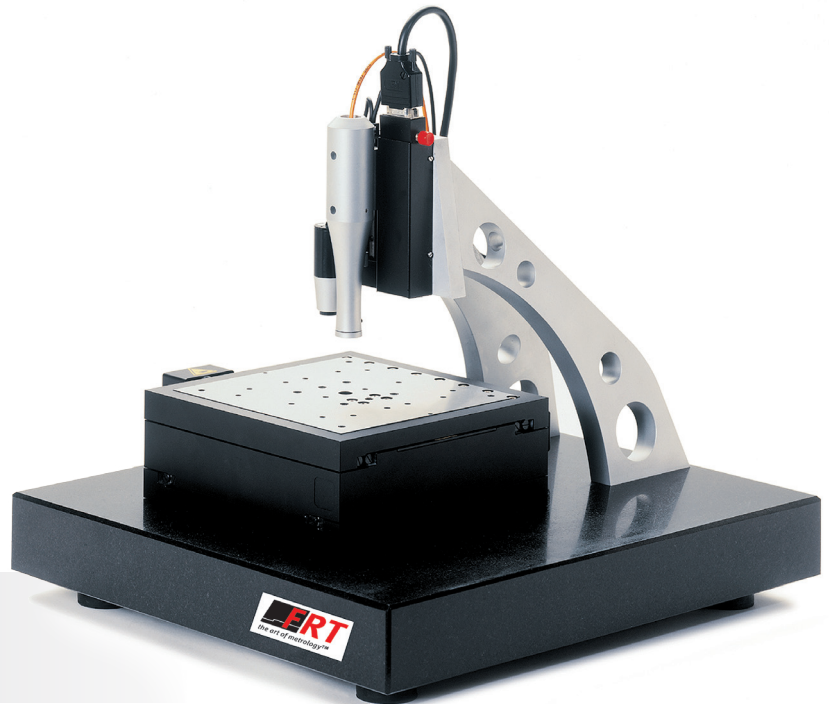
MEMS

LED

MST

Optic

Automotive



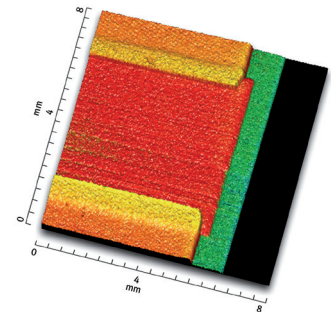
Profile Roughness 3D map TIR
Stress Film Thickness Step Height....

Features

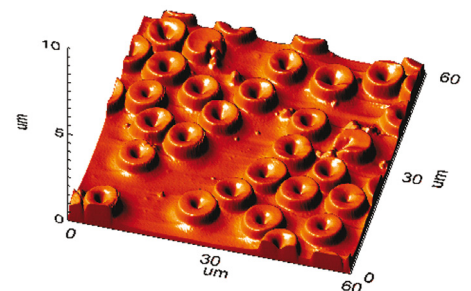
- established multi sensor metrology tool
- easy to use, very high reliability
- high-performance hard- and software
- non-destructive measuring
- additional point sensors upgradeable
- IR and film thickness measurement upgradeable
- several hundred tools in industrial use

Technology

- based on the successful FRT CWL sensor technology
- powerful and long-lasting LED light source
- measuring rate up to 4 kHz
- measuring area of 100 mm x 100 mm
- high measurement speed, max. 100 mm/sec
- measuring according DIN-ISO and SEMI standards



back side metallization of a standard wafer



Blood Cells

FRT MicroProf® 100

XY-Table

Travel Range (Measuring Area XY)	100 mm x 100 mm ¹
Bearing Type	cross roller bearing
Motor Type	direct current motor with recirculating ball screw
Position Encoder	rotation encoder
Encoder Resolution	0.5 µm
Position Repeatability	< ± 1 µm
Radial Runout Table (Per Axis) non-reproducible fraction	< 1 µm auf 100 mm < 0.5 µm
Measurement Speed	max. 100 mm /sec.

¹ depending on the sensor type it can be limited for technical reasons

Z-Axis

Travel Range	50 mm, 100 mm optional
Axis Type	precision-linear axis
Bearing Type	mechanical channel
Motor Type	stepper motor with screw drive

Measurement

Sample Size	max. 210 mm x 210 mm x 50 mm
Sample Weight	max. 1 kg (5 kg optional)

Total System

Total Weight	ca. 90 kg
Footprint	0.4 m x 0.45 m
Power Requirements	110 - 240V, 50-60Hz, 16A
Power Consumption	typ. 220W - 400W
Ambient Temperature	18-22 °C
Temperature Constancy	< 0.5 °C/h
Ambient Conditions	lab conditions



Questions? Talk to an expert!

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