

# MicroProf® 200

ONE Surface Metrology Tool for ALL Applications

**FRT**  
the art of metrology™

Medical Technology

Semiconductor

Solar

MEMS

LED

MST

Optik

Automotive



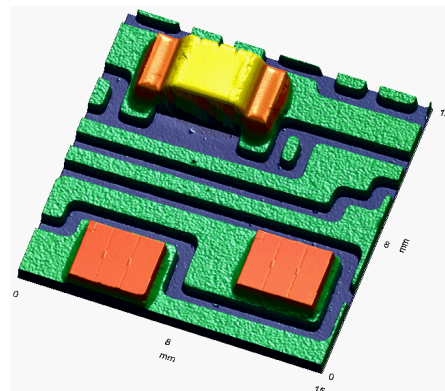
<b>Bow</b>	Warp	<b>TTV</b>	SBID	
SORI	<b>SFQR</b>	Sag	<b>Profile</b>	
<b>Roughness</b>	3D map	<b>LTV</b>	Thickness	TIR
FPD	<b>Stress</b>	ROA	<b>Film Thickness</b>	Step Height....

## Features

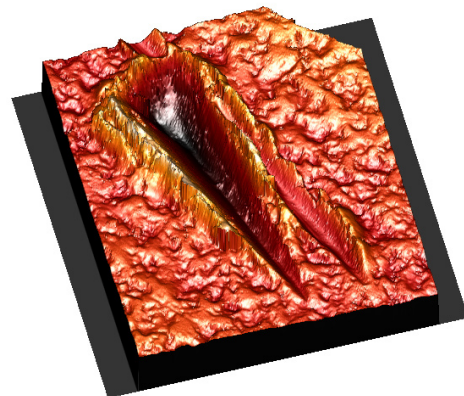
- established multi sensor metrology tool
- easy to use, very high reliability
- high-performance hard- and software
- fully automated wafer handling option for on site retrofit (MHU)
- non-destructive measuring
- additional point sensors and field of view sensor upgradeable
- IR and film thickness measurement 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
- large measuring area of 250 mm x 200 mm
- high measurement speed, max. 300 mm/sec
- measurement according DIN-ISO and SEMI standards



source: Danfoss Silicon Power GmbH



source: FRT, Fries Research & Technology GmbH

the art of metrology™

## FRT MicroProf® 200

### XY-Table

Travel Range (Measuring Area XY)	250 mm x 200 mm <sup>1</sup>
Bearing Type	cross roller bearing
Motor Type	linear motor-direct drive
Position Encoder	linear encoder with reference mark
Encoder Resolution	0.05 µm
Position Repeatability	± 1 µm
Planarity XY-Axis non-reproducible fraction	< 2 µm/100 mm < 0.5 µm
Measurement Speed	max. 300 mm /sec.

<sup>1</sup> 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	cross roller bearing
Motor Type	stepper motor with screw drive

### Measurement

Sample Size	max. 360 mm x 410 mm x 50 mm
Sample Weight	max. 5 kg (10 kg optional)

### Total System

Total Weight	ca. 500 kg
Footprint (excl. Monitor Stand)	1.1 m x 0.85 m
Power Requirements	110 / 230 V, 50-60 Hz, 10 A, FI 30 mA
Power Consumption	Typ. 230 W - 500 W
Ambient Temperature	18-22 °C
Temperature Constancy	< 0.2 °C/h
Ambient Conditions	lab conditions



### Questions? Talk to an expert!

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