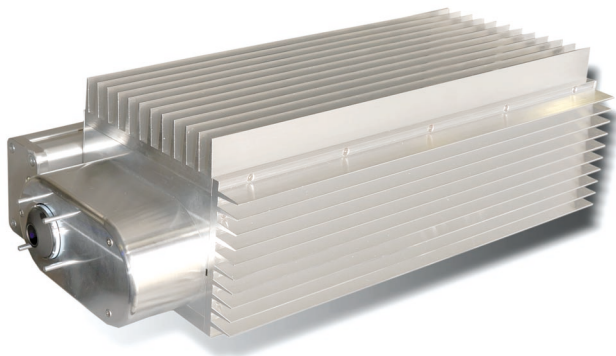


## *StraDex*<sup>a</sup>



*StraDex a3* sensor

### *The new sensor for highest resolution and robust 3D measuring technology*

The **StraDex a** series combines highest precision area measurements for nm 3D topography with the robustness which is needed under production conditions. It enables the determination of surface roughnesses down to the sub-nm range.

This is achieved by a fast interferometric recording technology and the corresponding efficient calculation algorithms. Usable as light reflection microscope as well. By the use of a xy-stage the stitching of surface details is possible.

#### **Your benefits:**

- ✓ Non-contact measurement
- ✓ Smooth and rough materials
- ✓ Fast and robust measurements within seconds
- ✓ Universally applicable
- ✓ Fully automatic focussing over 250 m height

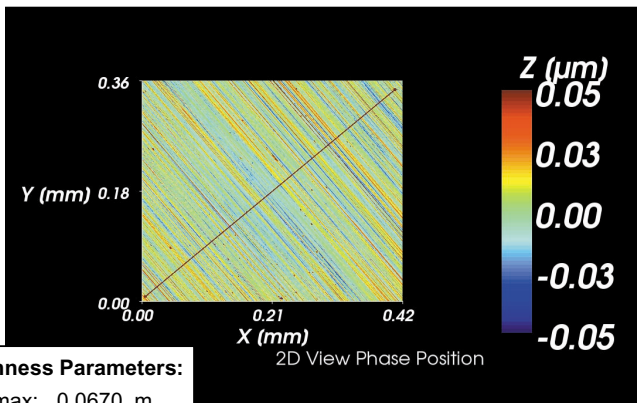
#### **Applications:**

- Inspection of grinding and polishing processes
- Quality control of high precision surfaces
- Determination of micro-radii
- Roughness- (Ra/Rq/Rz) measurements
- Wafer inspection

#### **Object materials:**

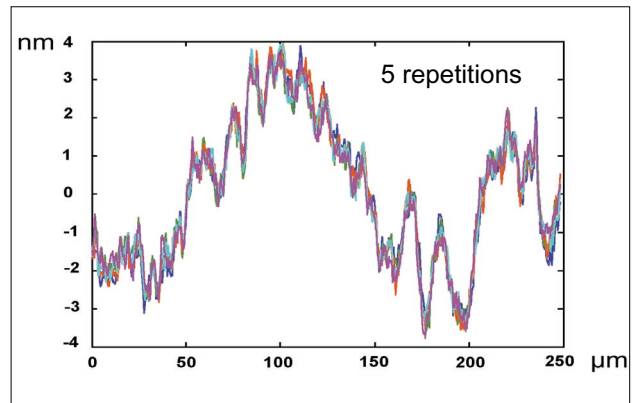
- Metals
- Semiconductors (Silicon, GaAs, )
- Plastics
- Ceramics
- Soft materials

## Roughness

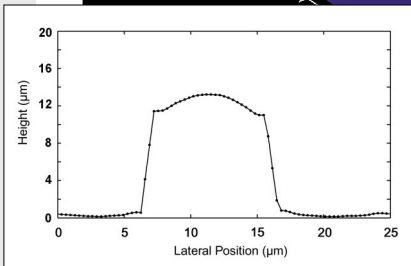
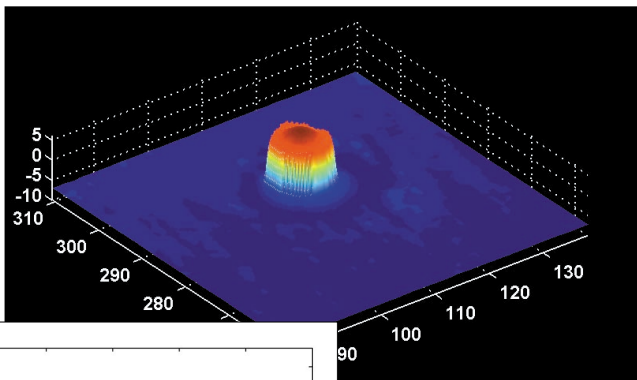


### Roughness Parameters:

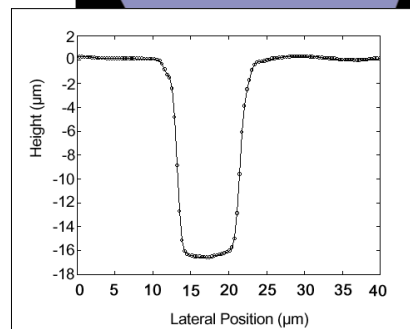
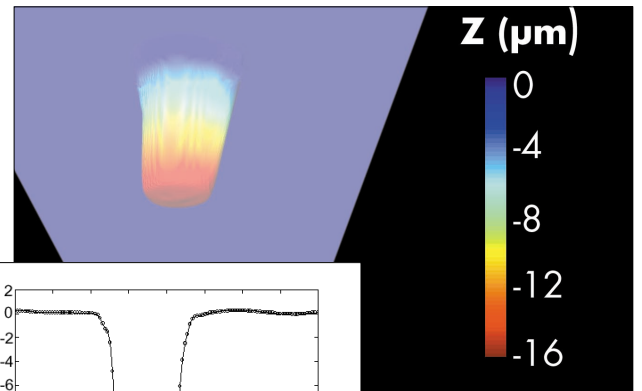
$R_z$  max: 0.0670 m  
 $R_z$ : 0.0499 m  
 $R_a$ : 0.0078 m  
 $R_q$ : 0.0097 m  
 $R_t$ : 0.0704 m



## Bump



## Via



	StraDex a3	StraDex a5
Working distance	3.5 mm	5 mm
Lateral pixel resolution	0.3 μm	0.75 μm
Typical measurement area	(0.35 mm) <sup>2</sup>	(0.8 mm) <sup>2</sup>
Maximum z-height	60 μm high res. / 120 μm low res.	
Repeatability in z-direction	< 0.5 nm (high res. mode)	
Typ. acquisition time	2 — 3 sec.	
Dimensions	136 x 360 x 107 mm <sup>3</sup>	

### ISIS sentronics GmbH

Innstrasse 28 • 68199 Mannheim • Germany  
 Tel.: + 49 (621) 84251-0 • Fax: + 49 (621) 84251-200  
 E-mail: info@isis-sentronics.de • Internet: www.isis-sentronics.com