

StraDex Vp 300

Applications:

- Length, Angle, Radius
- Surface waviness
- Roughness
- Thin layers (< 30 µm)

Object materials:

- Metal
- Ceramic
- Polymer
- Diamond and other coatings

Features:

Complete system:

Max. x/y travel distance	100 mm
CCD Camera	optional
Dimensions	410 x 410 x 310 mm ³ (without Control Unit)
Weight	20 kg
Electrical power supply	100 -240 V

Specifications:

- Spot size: 7 µm
- Maximum acquisition rate: 16 kHz
- Working range: 20 mm
- Accuracy¹: 0.3 µm
- Repeatability¹: 0.15 µm (3 sigma)
- Max. layer thickness²: 30 µm
- Employed wavelength: 1300 nm

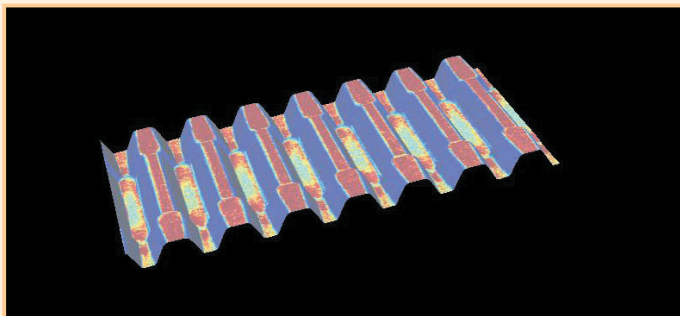
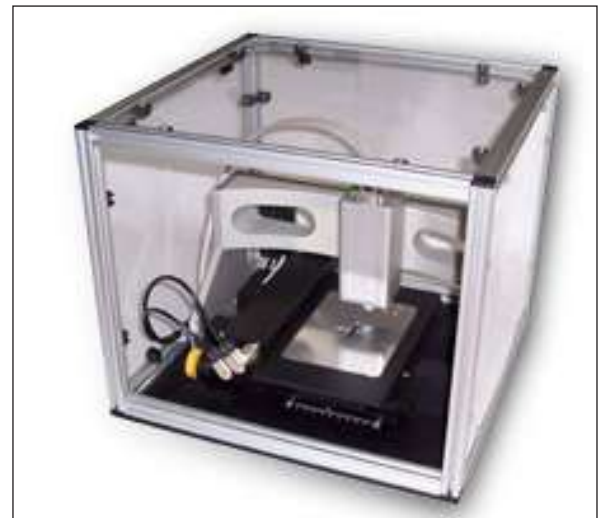
¹ BFor 1 kHz acquisition rate and vibration absorbing base (eg granite damped slab).

The accuracies and repeatabilities can be increased at lower acquisition rates

² For polymers, a refractive index of 1.5 is assumed.

Your benefits:

- Contactless measurements
- Highest accuracies (few 100 nm) over a large working range (20 mm)
- Very high acquisition rates of up to 16 kHz
- High lateral resolution by small spot size (> 5 µm)
- Surface topography, roughness, shapes, diameters within one scan
- Precise surface data even with (partly) transparent objects
- Steep slopes (sometimes > 60°)
- Negligible shadowing at very steep slopes
- Thin layers (coatings, oil film,...) without influence on the measurement
- Thin layers (up to 30 µm) can be measured in the same scan



3D topography of a toothed rack

Detail 3D topography from the surface of a toothed rack. Height and distance are 1 mm and 3 mm, respectively. The false colors correspond to reflected signal strengths (red means plenty of signal while blue is the opposite).