

NEW

Five Axis 3D optical profiler



SENSOFAR[®]
METROLOGY



Full 3D measurement solution

The Five Axis 3D optical profiler combines a high-accuracy rotational module with advanced inspection and analysis capabilities. This enables automatic 3D surface measurements at defined positions which combine to create full 3D volumetric measurements. Three measurement technologies cover a wide range of scales, including form (focus variation), subnanometric roughness (interferometry) or critical dimensions that require high lateral as well as vertical resolution (confocal).

Features overview

- Motorized 2 axis rotational module, high accuracy positioning
- Dedicated solution designed to measure a sample in different perspectives
- Automatic measurements for production and QA/QC
- Advanced 3D comparison software (Sensocomp)

System capabilities

- Manual and automatic motorized positioning
- Form deviation from 3D CAD models (providing the geometric difference and tolerance measurement)
- Life test and wear measurements show deviations from original to processed piece
- Measuring critical dimensions (angles, radius, contour), surface texture according ISO 25178 (form and roughness) and volume
- Full 3D measurement (automatic or manual)
- Five multiple recipes (5MR) from CAD model



Markets and applications

- Micromanufacturing (EDM, Milling, Laser, Additive Manufacturing)
- Medtech (Implants)
- Tooling
- Forensics (Toolmarks)



Rotational module

Rotation axis	360° endless motorized
Tilt axis	-30° to +100° motorized
Clamping options*	System3R Macro chuck High precision 1 to 16 mm collet set from Rego-FIX (5µm runout) Versatility & precision: Precision three-jaw chuck (1 to 30mm) (20µm runout) Flat sample holder

* Other options available

Sample

Maximum length	150 mm
Sample diameter	1 to 30 mm
Maximum sample weight	5 kg