

# METROLOGY LABORATORY

Top-class measuring technology and professional precision – the key to producing ultra-precise optics. Thanks to advanced measuring systems and our specialists' extensive know-how, we can inspect every detail of optical components with extreme accuracy.



## **ASI QED – Aspheric Stitching Interferometer**

Measurement of elements with high numerical aperture (e.g. hemispheres) and aspheric elements with deviation from the best-fit sphere up to 650  $\mu\text{m}$

## **LuphoScan**

Measurement of rotationally symmetric spherical and aspheric surfaces with a diameter of up to 250 mm and accuracy of 50 nm PV

## **NewView 7200**

Coherence scanning interferometry enabling non-contact measurement of surface topography with complex shapes and from various materials, with sub-nanometer axial resolution

## **AFM Microscope**

Atomic force microscope for visualizing and measuring surface topography with high lateral (up to 30 nm) and vertical (0.1 nm) resolution

## **LSM Microscope**

Confocal microscope for measuring surface topography with axial resolution of 1 nm, used for micro-roughness or waviness analysis, layer thickness measurement, etc.

## **SpectroMaster**

Refractometry of prismatic elements with high accuracy, capable of working in both VIS and NIR

**PLANAR, SPHERICAL AND ASPHERIC INTERFEROMETRY |**  
**COLLIMATORS, AUTOCOLLIMATORS | GONIOMETERS (INCL. X-RAY GONIOMETER) |**  
**3D COORDINATE MEASUREMENT | SPECTROMETERS | WHITE-LIGHT INTERFEROMETRY |**  
**CONFOCAL MICROSCOPE, AFM MICROSCOPE | REFRACTOMETERS | SPHEROMETERS |**  
**THICKNESS-METRES | LENGTH COMPARATORS | RONCHI AND FOUCAULT TESTS**



### Mitutoyo LEGEX 774

Measurement of optical and mechanical components with  
 $MPE_e = [0.35 + 0.1L/100] \mu\text{m}$  within a measuring range of  $700 \times 700 \times 400 \text{ mm}$

### MarForm MFU 200 Aspheric 3D

Measurement of topography of planar, spherical, aspheric, and freeform optical components up to 200 mm in diameter, with accuracy better than 50 nm PV



### DynaFiz Interferometer

4" dynamic laser interferometer for high-precision measurement and alignment in real time and under vibration conditions

## DEVELOPMENT OF OUR OWN INSTRUMENTS AND MEASUREMENT TECHNOLOGIES

- Aspheric interferometer based on multi-wavelength absolute interferometry
- Interferometer for measuring plane-parallel elements without multiple interference
- System for visualization of welding processes
- Digital holographic measuring methods and microscopy
- Method for measuring homogeneity of optical materials
- Wavefront sensors
- Hyperspectral detection system
- Real-time hyperspectral imaging using compressed sensing