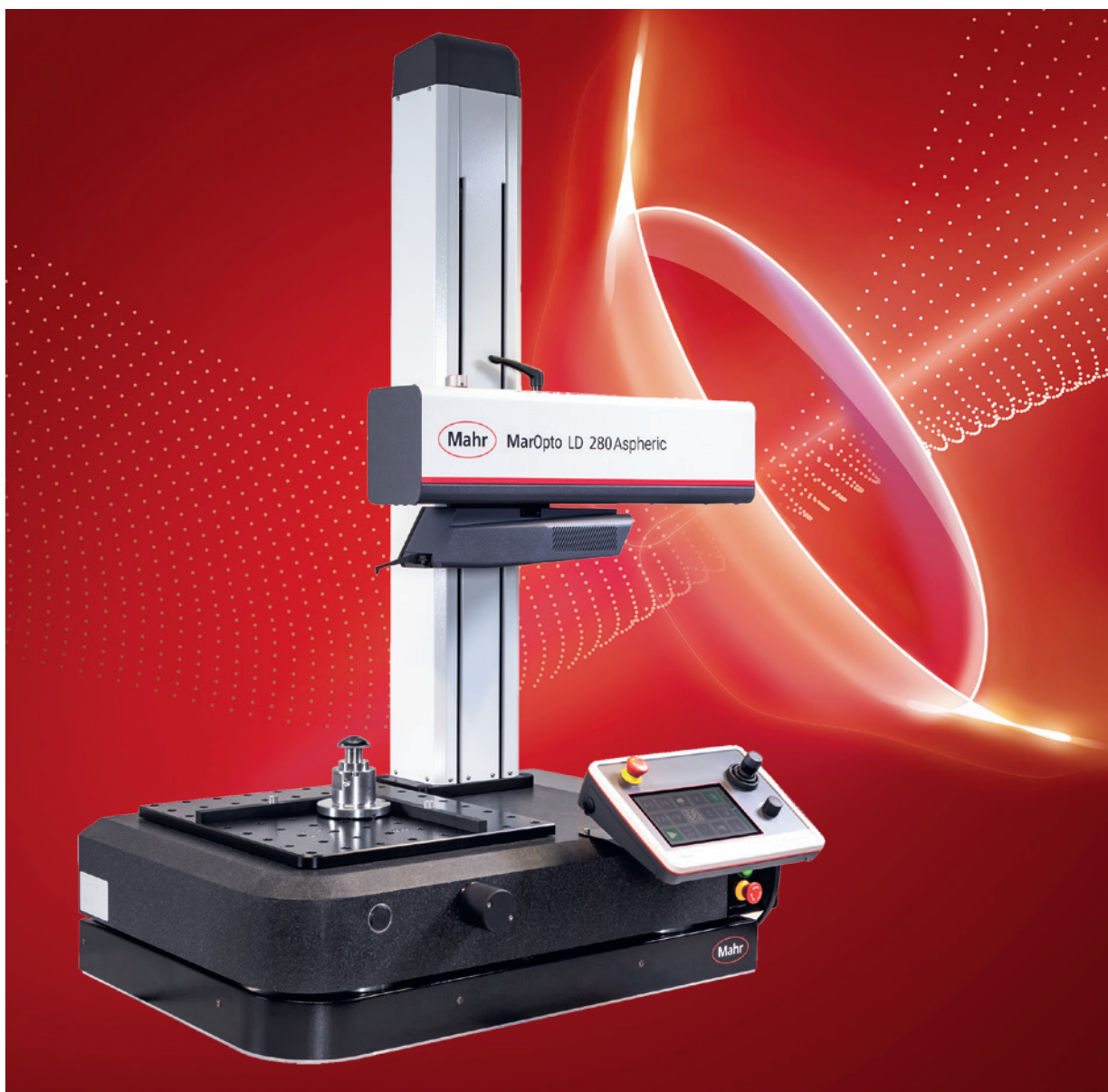


# MarOpto LD 280 Aspheric

PRECISE, EASY, FAST



## New Generation, Proven Track Record

The **MarOpto LD 280 Aspheric** is a highly precise tactile contour measurement system dedicated for the metrology of high precision optical components. It closely accompanies the lens production process in closed loop, ensuring optimal manufacturing results. Quality control is a snap with evaluation and documentation tailored to your needs and standards.



The **increased measuring x-axis distance of 280 mm and the large sagittal measuring range of up to 37.5 mm**, makes measurement of even larger spheres, aspheres, and DOEs possible – with the proven accuracy and speed.



Mahr's innovative technology for the **magnetic attachment of the probe arms** has been further improved to ensure perfect positioning and automatic detection, making exchange child's play. The optimized interface integrates the chip-coded probe arms reproducibly into the measuring circuit, **reducing the need for calibration**. As the scanning force can be adjusted via software, even sensitive materials are safe.



The MarOpto LD 280 Aspheric system increases the flexibility to **handle and measures loose aspheres**. The user-friendly alignment is performed using a tilting and centering table. The optional motorised Y-axis automates the zenith search and the manual rotary table adds an additional dimension to the profilometer: measuring several linear cuts in just one set-up provides the basis for **detecting non-rotationally symmetrical defects** and can be used to determine **astigmatism**.



The **4th generation of the Aspheric.Lib software** includes several new features as well as improvements to proven capabilities. Evaluation according to **ISO 10110-5** is as standard as the fitting of geometry parameters. Even the measurement and evaluation of the inner centration error of **double-sided optical elements** is fast and easy.



### Advantages

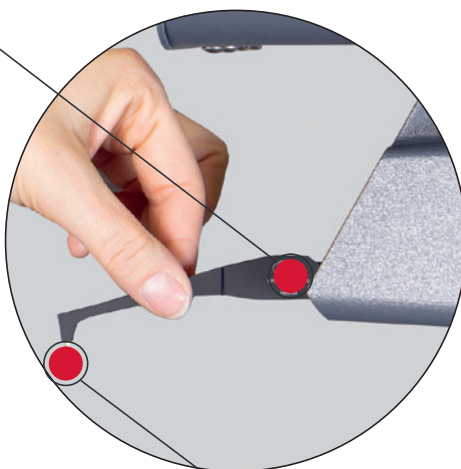
- 4th Generation of Aspheric.Lib Software – evaluation according to ISO 10110 with many new features
- Production and Quality Control - closed-loop capabilities for production process
- Automatic Detection – chip-coded probe arms reduce errors and need for calibration
- Compact Design – smaller footprint



# Precise, Easy, Fast – In Production and Quality Control

**NEW!** Improved Magnetic  
Probe Arm Holder

Perfect positioning, fast change  
and automatic detection



**NEW!** Support Plate with  
50 mm Hole Grid

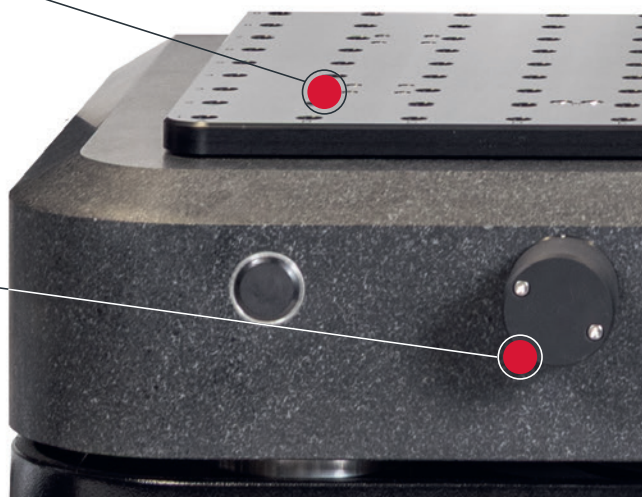
For more flexibility

**NEW!** Large Sagittal  
Range

15 mm for 100 mm probe arms  
37.5 mm for 250 mm probe arms

**NEW!** Integrated 60 mm  
TY-adjustment

Motorized option available





### Important Specs at a Glance:

280 mm	Measuring Range
< 100 nm	Form Deviation 2D
0.02 – 10 mm/s	Measuring Speed

**Mahr** MarOpto LD 280 Aspheric

**NEW!** High Speed  
X-Axis

280 mm measuring axis  
0.02 – 10 mm/s measuring speed

**NEW!** New  
Probe System

< 100 nm form error

**NEW!** Improved  
Control Panel

Full functionality – user friendly

## Software Features Aspheric.Lib



### 4th Generation Aspheric.Lib with many new features

Process optimized software for the best closed-loop integration for the manufacturing of precision optical components

- Evaluation acc. to ISO 10110-5, including astigmatism and Zernike polynomials
- Improved and optimized export features
- User guided alignment of loose lenses
- Several linear cuts for extended surface information
- Improved and optimized measurement and evaluation of diffractive optical elements (DOEs)
- Double-sided measurement for the determination of the inner centration of optical elements. Evaluation according to ISO 10110-6.

## Feature Applications



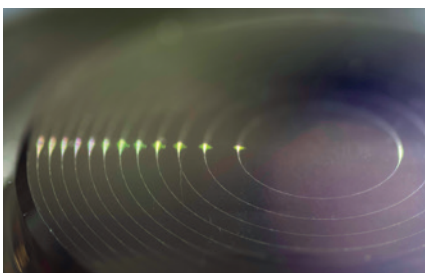
Aspheres



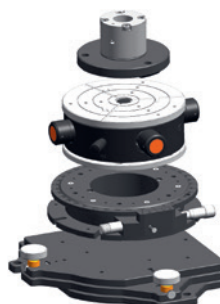
Double-sided components



Cylinder Lenses



Asphero-diffractive components



### Optional

Centering and tilting stage with rotary table  
Optimized for loose lenses

## Notes



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