

AspheroCheck UP

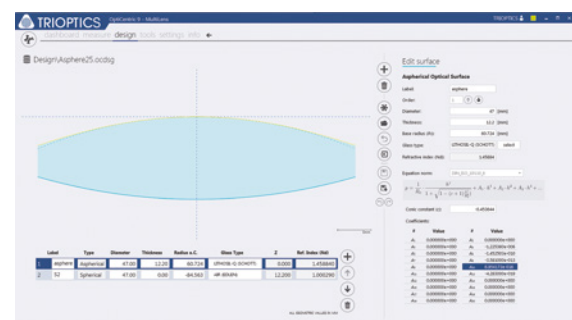
Fully Automated Centration Testing
of Aspheres



There are high quality control requirements for testing aspheres following optics production. In order to fulfill these requirements, the AspheroCheck UP measurement system was developed, allowing the testing of centration and tilt of aspheric surfaces.

Designed for production environments, the AspheroCheck UP provides a fully automated measurement process that is controlled by intuitive software. The complete measurement process stands out through its user-autonomy, as all centration and positioning tasks run automated and thus fast. Based on the proven OptiCentric® measurement technology, the centration of the aspheric surface is measured precisely. The asphere tilt is then determined using a non-contact optical sensor.

As a result of complete automation, the AspheroCheck UP can achieve an accuracy of 0.1 μm for centration and up to 0.05 arcmin for tilt, reproducible independently of the operator. The continuous, automated process reduces the total measurement time to less than one minute per lens.



User interface of the AspheroCheck UP for entering all lens parameters for asphere testing

Key Features

- Determination of centration and tilt of aspheric surfaces
- High precision through automatic positioning of non-contact sensor
- Completely automated measurement allows for the rapid collection of results with high measurement accuracy

Technical Data

| | AspheroCheck UP |
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| Centration measurement accuracy | 0.1 μm |
| Tilt measurement accuracy | Up to 0.05 arcmin (depending on sample) |
| Measurement time | < 1 min |
| Lens rotation | High-precision air bearing |
| Sample diameter | 0.5 mm ... 100 mm |
| Max. sample weight | 5 kg |
| Measurement head | Electronic autocollimator, 200 mm EFL |
| Light source | High-performance LED |