



OptiCentric® 101

The industry standard for lens centering taken to the next level





OptiCentric® 101

For decades now, the OptiCentric® product family has been setting the global standard for optical centration testing as well as manual and automated cementing or bonding of lenses and lens systems. To keep pace with meeting the demand for the highest precision and accuracy, TRIOPTICS combines proven concepts with state-of-the-art technologies on an ongoing basis. With these developments, the OptiCentric® 101 sets new standards in precision and efficiency.

Two design variants

The OptiCentric® 101 is available in two configurations:

Moving autocollimator

This classic model, in which the autocollimator travels on-axis, minimizes the impact of the vignetting. (below left)

Static autocollimator

In this variant, the autocollimator is statically positioned above the travel axis. This reduces the effects of the rolling error of the stage and facilitates better determination of the azimuth angle, e.g. during cylindrical lens measurements. (below right)





Highly accurate centration error measurement of lens systems

For the centration testing of optical surfaces, the accuracy of the rotation bearing is the crucial factor. Optimizations in the new OptiCentric® 101 resulted in a significant improvement of the azimuth accuracy – an advantage for anyone who wants to thoroughly test lens systems using the MultiLens software and perform lens alignment using the SmartAlign module.

Greater precision in lens alignment

The increased stability of the new stage concept has a positive effect on the accuracy of single-shot measurements. This offers particular advantages when aligning lenses.

Higher efficiency

The new stage in the OptiCentric® 101 allows the head lens to be moved more quickly. This reduces the measuring time and increases efficiency, especially for series production measurements.

OptiCentric [®]	101
Measurement accuracy in visual range	≤ 0.1 μm
Lens rotation	Air bearing AB 100Motorized lens rotation device
Minimum sample diameter	0.5 mm
Maximum sample diameter	 With air bearing AB 100: 225 mm (280 mm with restrictions) With lens rotation device: 200 mm
Maximum sample weight	20 kg
Linear stage	Motorized and PC-controlled
Measurement head for visual spectral range*	Electronic autocollimator Standard: 200 mm effective focal length
Light source*	High power LED light source Standard: λ = 525 nm

^{*} Other light sources upon request

