



OptoTech

OWI 60 HP Invers

Non-Contact Testing and Measuring of Optical Components



The compact Fizeau workshop interferometers OWI 60 HP and OWI 60 HP Invers are ideal tools for measuring of optical components. Several options allow the adaptation of these measuring devices to individual measuring tasks.



Technical data

OWI 60 HP Invers	
Application	Non-Contact Testing and Measuring of Optical Components
Measuring Range Diameter	0 mm - 60 mm
Measuring Range Radius	Depending on reference sphere
Drive	Manually via ball screw spindle
Interface	Reference sphere with bayonet interface
Measuring Accuracy	$\lambda/10$ or $\lambda/20$ (depending on reference sphere)
Reference Spheres	60mm F/D 0,6 - 3,33
Travel	500 mm (depending on reference sphere)
Dimensions	Width: 400 mm, Height: 1150 mm, Depth: 400 mm
Weight (approx.)	130 Kg
Disclaimer	All data are subject to change without notice. Please verify details with OptoTech.





Highlights

- Inverse setup of the interferometer module positioned on top of Z-axis and directed towards the granite table. Ideal for measuring optics on runners.
- Ideal tool for measuring of spherical components. Several options allow the adaptation of these measuring devices to individual measuring tasks.
- Measuring ranges for micro optics up to Ø 60mm
- Compact design for use in the production
- Mounted on vibration dampening granite table. Passive shock absorbing system with 4 dampening elements.
- A comprehensive modular system allows a configuration of all axes that is ideally tailored to the individual application in terms of bearings (either friction or crossed roller bearings) and table drive (manual or motorized) via ballscrew spindle
- OptoTech Interferometer Module Inspect Mini EL-F digital with 60mm beam expander
- Usage of high quality OptoTech 60mm reference spheres for measuring of micro optics with $\lambda/20$ measuring accuracy
- Integrated digital position transducer (Heidenhain linear scale) with 1µm resolution, for measuring of the test radii

System advantages

- Combined with the high-quality OptoTech 60mm reference spheres, the setup has the ideal measuring range for micro optics up to Ø 60mm with $\lambda/20$ measuring accuracy
- Setup of the interferometer module suitable for measuring optics on runners
- Easy to operate for short measuring cycles
- No damage to surface due to non-contact measurement technology. Safer and more precise than test plates.

Options

- Phase shifter and software evaluation OptoTech µShape OWI for maximum accuracy and logging
- Upgrade to 2nd measuring table for measuring in reflection or transmission mode
- Asphere measuring with customized CGH
- Laser measuring system in the optical axis for high-precision radius measurement
- Fizeau Interferometer reference spheres 60mm in $\lambda/10$ and $\lambda/20$ available
- All axes can be motorized as an option
- OWI 60 HP-A Invers: Automated Version with motorized axes and automatic radius and form measurement of optical components, Different combinations with additional loading robot available for either UR5e/palett-system or conveyor belt.