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Technical range of specifications (see product data sheet for detailed information)	
SHSLab wavefront sensor head	AR ... XHR type resolution
SHSWorks evaluation software	STD, PRO Process management Data collector
Opto-mechanics	Manual, motorized
Automation	Available for any system axis
Light sources	Selectable from 400 ... 1100nm
Pupil range	1 ... 300mm, depending on method
Numerical aperture range	0 ... 0.95
Wavefront evaluation speed	Up to 1000Hz
Functionality of SHS**Inspect 2Xpass systems**	
Wave aberration	< lambda/20 (PV)
Imaging quality	PSF: Plot, Strehl, Split-Strehl, MTF
Focal length	Down to 0.1%
Field angle	Up to 20°
Centering	Measurement of total system centering
Multiple wavelength testing	Chromatic behavior
Functionality of SHS**Inspect 1Xpass systems**	
Wave aberration	< lambda/20 (PV)
Measurement of filters	Transmission below to 0,1%
Multiple wavelength testing	Chromatic behavior, color filter testing
Functionality of SHS**Inspect reflex systems**	
Detection of large deviations	Non-null testing, thermal stress tests
High speed by automation	ROC, shape deviation, thickness in a few seconds
OEM module	Testing large space optics or system alignment

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SHSInspect

Universal optics and objective test system

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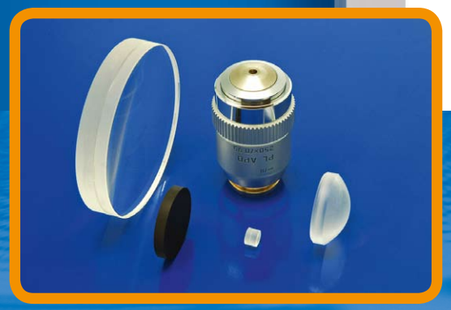

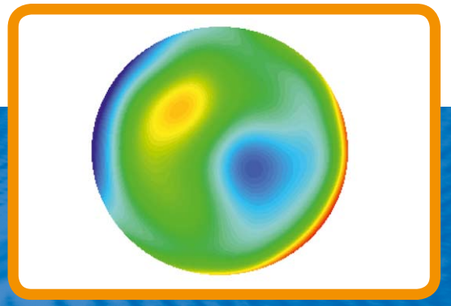

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SHS**Inspect**
Universal optics and objective test system

SHS**Inspect**

The SHS**Inspect** is an all-in-one test system for objectives and optical elements providing advantageous quality control:

- Real-time speed and high accuracy
- Low inter-operator variability
- Connecting R&D, design and fabrication

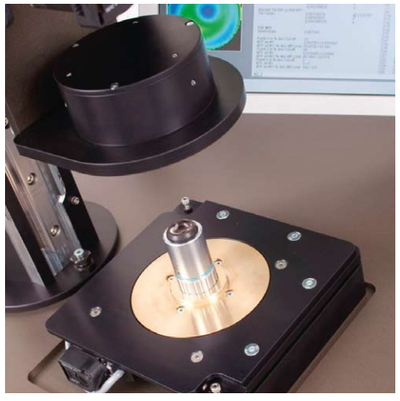
SHS**Inspect** is well suited for production environments due to its vibration insensitivity and large lock-in range. Optocraft's experienced team will select from standard options to flexibly fit SHS**Inspect** into the customer's functional requirements and workflow.

Functional range

The SHS**Inspect** is equipped with the comprehensive software SHS**Works** providing:

- Wavefront, PSF, MTF, Strehl, Zernike, focal length
- Pass/Fail and Reporting
- Automation and connection to customer's data base
- Motorization for any system axis

Measurement and analysis processes take advantage of SHS**Works**' powerful internal data collector engine.



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WAVEFRONT TECHNOLOGY UNLEASHED

Objective testing – 2Xpass

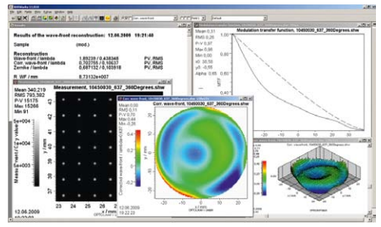
SHS**Inspect 2Xpass** is a dedicated system for testing for high end samples like:

- Microscope and photographic objectives
- F-Theta objectives
- Collimation aspheres

Sample characteristics
- High NA
- Small and large diameter
- UV to IR

Measured data
- Wave aberrations, MTF, PSF, Strehl

Functional options
- WF, PSF, MTF at field points
- EFL, BFL, ...
- Field curvature and chromatic aberrations
- Automated aids for perfect lens barrel alignment
- Single pass option for stronger aspheres



Plano optics testing – 1Xpass

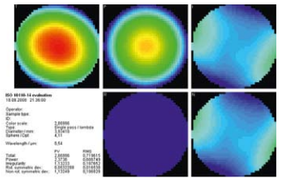
SHS**Inspect 1Xpass** for testing:

- High density filters
- Color filters
- Windows and wedges

Measurement according to ISO 10110-14 with:

- Excellent reproducibility and accuracy
- High speed of evaluation
- Ease of use

Options
- Multiple wavelength testing
- Visual defects inspection
- Integration into automated fabrication



Surface testing – reflex

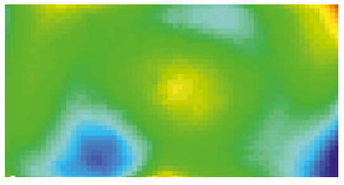
SHS**Inspect reflex** for measurement of mirco to macro optics:

- Plane and spherical mirrors
- Lens surfaces

Functional benefits:

- Vibration insensitive
- Detection of large deviations
- Suitable for thermal stress tests

Options
- Visual inspection
- Available as OEM module
- Fast characterization of lens shape parameters



Higher order surface deviation of light-weighted mirror 100mm x 200mm