SHS Ophthalmic CL
Metrology for contact lenses
The SHS Ophthalmic CL family

Optocraft develops and manufactures a complete range of measurement solutions for the contact lens industry. This includes semi-finished and finished lens testing, surface measurement and inline measurement.

RGP and dry lenses
RGP s and other dry lenses (unhydrated lenses, ortho-k lenses, etc.) vary significantly in their geometry and optical parameters. The SHS Ophthalmic cito handles them all and provides instantaneous results.

Soft lenses
Handling and measuring soft and daily contact lenses in liquid is delicate. The SHS Ophthalmic cito measures the lenses in less than a second and the SHS Ophthalmic omniSpect provides superior multifunctionality and ergonomy using a top-open cuvette and a temperature control and filtering system.

Semi finished lenses, molds, inserts, tool offset
The quality of optical surfaces is vital for high quality lenses. SHS Ophthalmic autoROC measures radius of curvature, asphericity and surface deviation of RGP lenses, inserts and molds as well as the tool offset in lathe cutting processes – all in one go.

Inline metrology for production lines
SHS Ophthalmic instruments are also available as modules for high volume manufacturing lines. Their high speed operation reduces cycle times. Moreover, their hardware and software interfaces ensure a simple and seamless integration.

Customized solutions
Optocraft also offers customized solutions developed and validated to individual customer requirements and specifications.

Why SHS Ophthalmic?
- Excellent accuracy and reliability
- High measurement speed
- Multifunctional system layout
- Superior design and build quality
- Excellent ergonomics
- Powerful software for manufacturing and R&D
Finished lens test instruments

Fast & reliable measurement, ergonomic & easy to use

**SHSOphthalmic cito**

Powerful and economic standard solution - available off-the-shelf

- Sphere, cylinder, axis, prism
- Multifocal evaluation: zones, addition
- Imaging quality
- Diameter

**SHSOphthalmic omniSpect**

All in one workstation for soft contact lenses. Fully digital data processing, controlled measurement environment.

- Sphere, cylinder, axis, prism
- Multifocal evaluation: zones, addition
- Imaging quality
- Diameter, center thickness, sag, equivalent base curve (EBC)
- Cosmetic defects

“For several years, we use SHSOphthalmic instruments in production and development of contact lenses. Functional range and quality of the instruments, but also the excellent and obliged support are of very high value for us in the daily business.”

Stefan Muckenhirn, Hecht Contactlinsen GmbH
Precision instruments for the production of high quality contact lenses

**SHS Ophthalmic autoROC**

Surface metrology for RGPs, molds, inserts, lathe calibration

- ROC and surface shape
- ROC traceable to international standards
- Short cycle time per lens

**SHS Ophthalmic inline**

Optocraft instruments are available as modules for an inline integration into production lines.

- Robust hardware for rough environments
- Fully automated measurement process
- Control interface for seamless integration
- Customization available
SHSOphthalmic – All you’ve ever wanted to know about your contact lenses

Finished lens testing with SHSOphthalmic cito - working principle
Optocraft’s instruments use cameras for different purposes:

**SHSCam**: measurement of refractive data, power map and imaging quality

**VCCam**: detection of lens position, diameter, marks, etc.

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Measurement results

Power mapping for smooth and step designs: graphical and numerical evaluation

Measurement of lens position, diameter and orientation

Defect visualization: bright field, dark field, telecentric illumination

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User friendly from A to Z, easy to integrate

Excellent ergonomics

Paperless reporting, database storage

Easy to use, workflow based graphical user interface
Why Optocraft?

Optocraft has been developing and manufacturing Shack-Hartmann wavefront sensors since 2001. With decades of experience in optical metrology and design, we constantly push the limits of this technology. Our systems can be found all over the world and cover even the most demanding applications. Our customers enjoy our dedicated and reliable support.

We love to be challenged – try us!

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Know your quality.
Optical metrology made by Optocraft