

SHSOphthalmic CL
Metrology for contact lenses

The SHSOphthalmic 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

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

Soft lenses

Handling and measuring soft and daily contact lenses in liquid is delicate. The **SHSOphthalmic cito** measures the lenses in less than a second and the **SHSOphthalmic omniSpect** provides superior multifunctionality and ergonomomy 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. **SHSOphthalmic 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

SHSOphthalmic 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 SHSOphthalmic?

- Excellent accuracy and reliability
- High measurement speed
- Multifunctional system layout
- Superior design and build quality
- Excellent ergonomics
- Powerful software for manufacturing and R&D

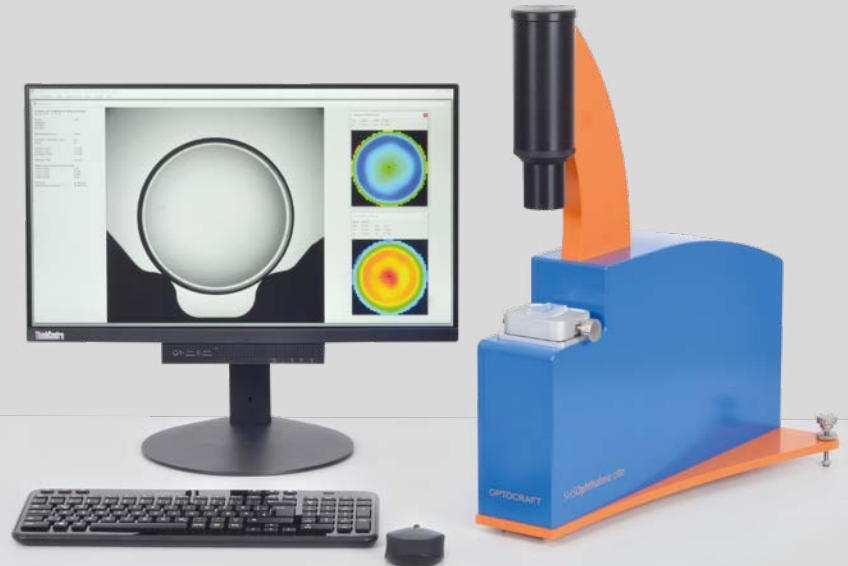
Finished lens test instruments

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

Surface and inline metrology

Precision instruments for the production of high quality contact lenses

SHSOphthalmic autoROC

Surface metrology for RGP, molds, inserts, lathe calibration

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



SHSOphthalmic inline

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

- Robust hardware for rough environments
- Fully automated measurement process
- Control interface for seamless integration
- Customization available

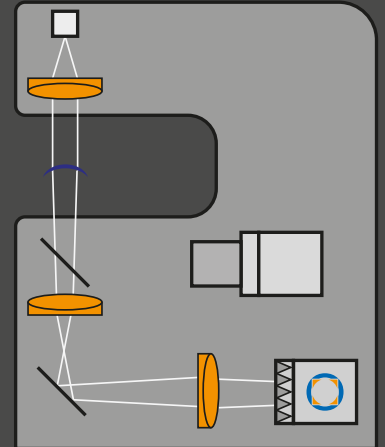
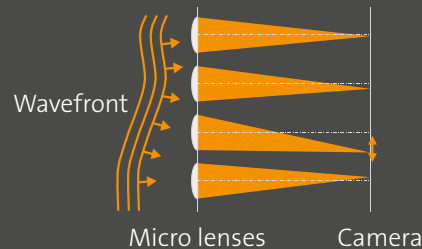
SHSOphthalmic – All you've ever wanted to know about your contact lenses

Finished lens testing with SHSOphthalmic cito – working principle

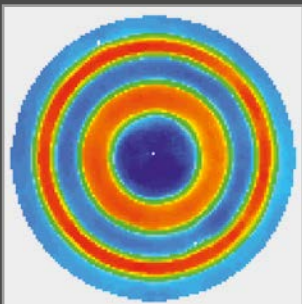
Optocraft's instruments use cameras for different purposes:

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

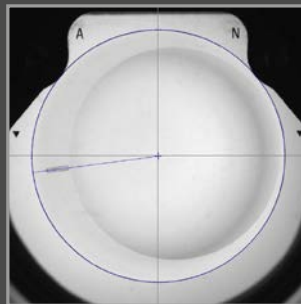
VCCam: detection of lens position, diameter, marks, etc.



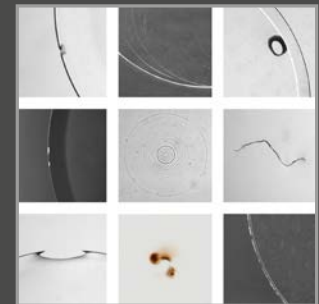
Measurement results



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



Measurement of lens position, diameter and orientation

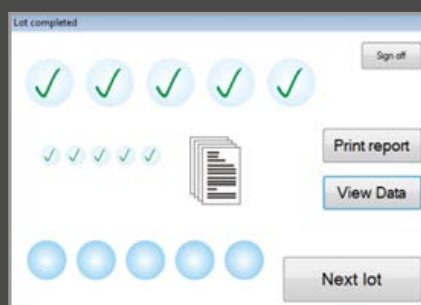


Defect visualization: bright field, dark field, telecentric illumination

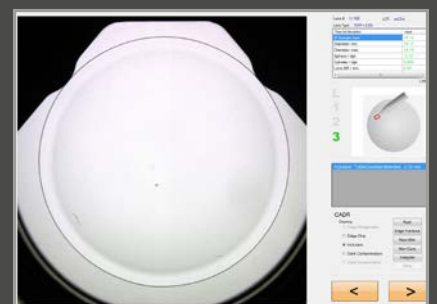
User friendly from A to Z, easy to integrate



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!

Contact us!

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Know your quality.

Optical metrology made by Optocraft

