FOGALE *nanotech*, founded in 1983, is a worldwide known reference in the field of high accuracy dimensional metrology.

Thanks to our multidisciplinary team with expertise in capacitive, optical, and inductive metrology and a strong scientific background, we provide standard, specific and integrated solutions.

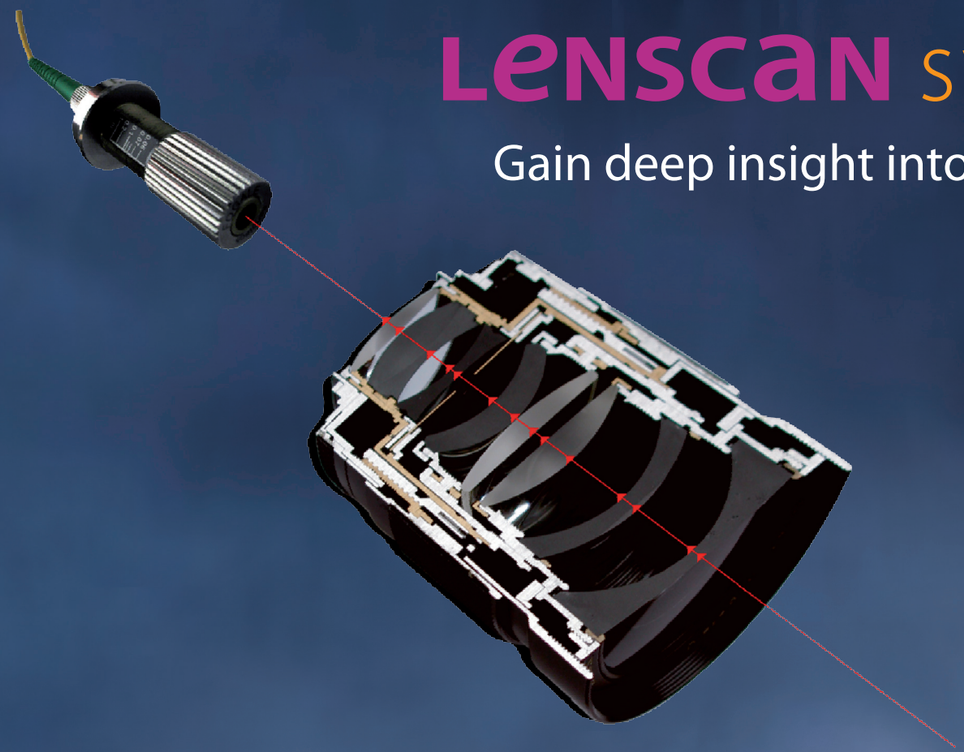
Our worldwide support provides the service you deserve, wherever your business is located. Our team of experts helps you setting up new systems and provides a complete range of after sales services : on-site installation and calibration, training, technical assistance, and upgrades.

Expertise and Performance

Our extensive line of high accuracy dimensional metrology sensors and systems, our experience and know-how, our after sales support as well as our commitment will guarantee your full satisfaction.

For more information about our products, visit our web site at www.fogale.com

FOGALE nanotech



Lenscan system

Gain deep insight into your lenses

Photography
Cinema
Photolithography
Custom optics
Microoptics
Interferometer positioning

distributed by JINSHANG Ltd.
contact@jinshang.asia
www.jinshang.asia

FOGALE nanotech

LENSCAN system

Gain deep insight into your lenses

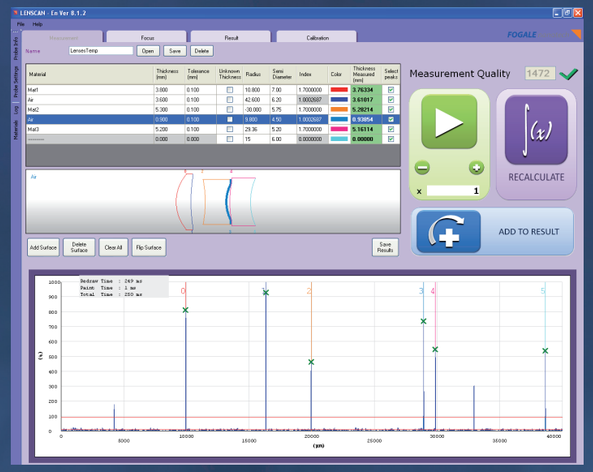
LENSCAN Software

Complete set of functions

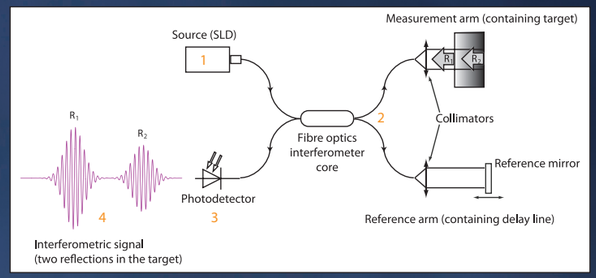
- ✔ Sample set-up, Sample definition with extensive list of known glass materials
- ✔ Automatic pattern matching
- ✔ Accuracy/Repeatability testing
- ✔ Statistics on measurement batch
- ✔ Monitoring of environmental conditions to ensure accurate optical index computation for internal delay line
- ✔ Specific linearity calibration procedure with high accuracy length standard, tested over the whole system range
- ✔ Motorized collimator option with wizard to find optimal setting

Straightforward measurement procedure

- ✔ Load/Save predefined measurement recipes with tolerances
- ✔ Single button
- ✔ GO / NO GO validity indicator
- ✔ Output PDF report files



How does it works?



1 – Light emitted by a SLD is coupled into a monomode optical fiber

2 – The light is splitted between the measurement arm and the reference arm

3 – The light coming back from both arms is directed onto a photodetector

4 – When the optical lengths of the measurement arm and of the reference are equal, interferences are visible on the photodetector

5 – High stability mechanics, specific calibration procedure, usage of internal thermal probe and precise index computation enable high accuracy

Up to 600 mm measuring range

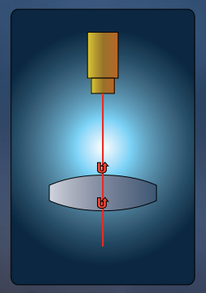
Optoelectronic units	Lenscan 40	Lenscan 200	Lenscan 600	Lenscan (+) 600
	Single Unit		Electronic Unit / Separated Delay Line	
Internal metrology	Linear scale	Linear scale	Linear scale	Laser interfometer
Measurement range	40mm	200mm	600mm	600mm
Measurement time or frequency	< 2 s	< 10 s	< 30 s	< 30 s
Absolute accuracy (± µm)	1	1	1	< 0.15
Measurement channels	Up to 4	Up to 4	Up to 4	Up to 4
Working distance (mm)*	150	250	600	600
Minimum measurable thickness (µm)	< 30 µm (option : < 10 µm) in air			
Light source	SLD λ = 1.3 µm			

*Up to several meters on request

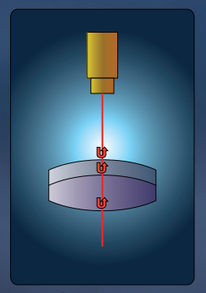
Measurement of microscope objectives, imaging optics, photolitography optics, ...

The LENSCAN system allows the direct measurement of the position and the center thickness of all optical elements (lenses, cubes, flats...) of an assembly along the optical axis.

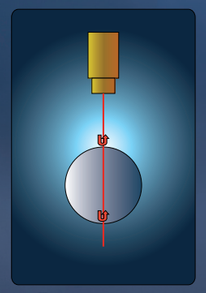
It can be used with large benefits in terms of time saving and quality assessment at all steps of the optical design and manufacturing process.



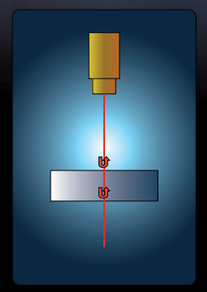
THICKNESS OF A SINGLE LENS



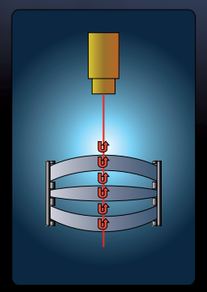
GLASS THICKNESSES OF A DOUBLET



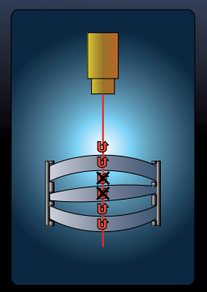
THICKNESS OF BALL LENS



THICKNESS OF AN OPTICAL FLAT



AIR GAPS AND LENSES THICKNESSES INSIDE AN OBJECTIVE



IDENTIFICATION OF WRONG OR BADLY POSITIONED ELEMENTS IN AN OBJECTIVE

A range of collimators for the best responses to all situations

Thanks to our range of collimators, we can find industrial solutions to all your needs.
With the large angular acceptance and/or working distance of our collimators,
the LENSCAN system is easy to use and to integrate in your environment.

Collimators	CR 18 -10 (manual)		CR 40-30 (manual)		CM 50-30 (motorized)		CR 3.3 (fixed)	
Main application	Standard lenses		Micro lenses		Complex lenses assembly		Glass thickness	
Working distance from the tip on the fiber (min – max)	60 mm	1 m	150 mm	15 m	150 mm	15 m	36 mm	1000 mm
Depth of field (Rayleigh distance)	4 mm	3 m	2 mm	70 mm	2 mm	70 mm		50 mm
Spot size corresponding to the working distance	30 µm	800 µm	20 µm	4mm	20 µm	4 mm		200 µm
Angular acceptance corresponding to the working distance	2.2°	0.08° (5')	3.3°	0.016° (1')	3.3°	0.016° (1')	0.2°	0.02°
Collimator mechanical diameter	16mm		50mm		(L) 97mm x (l) 67.4 mm x (H) 79.5 mm		3.3/4.2	
Mount type	1" mount		2" mount		2" mount		3.3 mm hole non threader	