

Measure the capabilities of your production

The more precise you measure, the more precise you will produce. μ Phase[®] 2 interferometer systems offer you the most exacting measurement results possible for the most accurate production output.

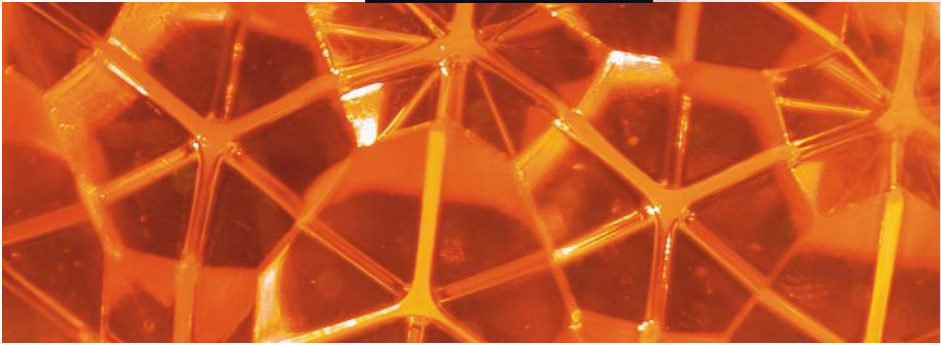
- Universal and reliable
- Compact size and modularity enable adaptation to different production and working environments
- Non-subjective digital measurement eliminates human error
- Built-in vibration damping for direct placement in optical workshops
- Reduction of set-up time and increase in yield bring down manufacturing costs



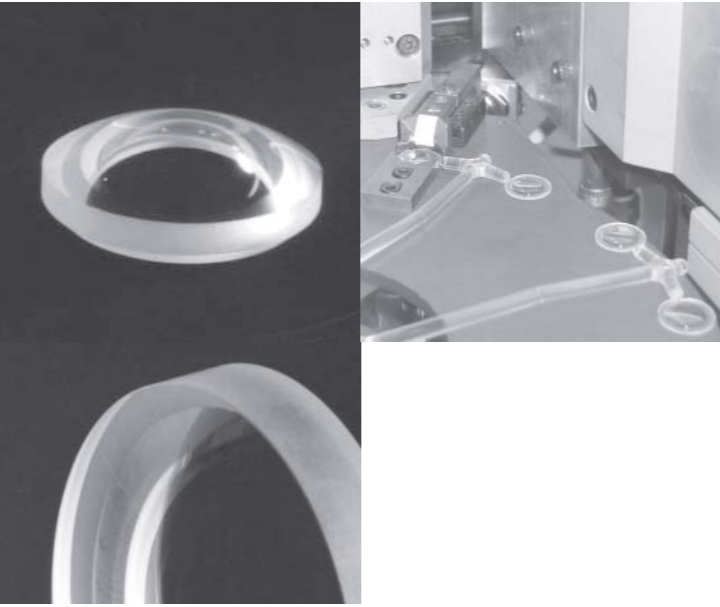
Small measuring solutions for your small and accurately molded optics

Small test samples require small measurement instruments. The μ Phase[®] 2 interferometer systems are compact, small and light digital tools which can be used in almost any working environment.

- Unsurpassed integration possibilities in automation tasks
- Monitoring of process variance for optimization of quality and yield
- Fast assessment of surface topography and analysis of design parameters
- Transmission wave front analysis for testing aspheres, DVD optics, mobile phone camera lenses, rigid endoscope optics, reflectors and other mass-produced optic components
- Industry-specific solutions



$$F_i(x, y) = Z_n^m(r)$$



$$m\phi = R_n^m(r)$$

Application engineering for your individual metrology vision

The high degree of modularity and the uniquely compact design of μ Phase[®] interferometer systems provide the basis for customized metrology solutions using standard FISBA interferometer components. Due to the high flexibility of these systems there are endless possibilities to their integration, adaptation, and extension possibilities.

- Unconventional customer-specific solutions and applications (software, hardware, system components)
- Software interface design for automation solutions
- Design and realization of special objectives for non-standard metrology tasks
- Interferometer and illumination objectives adaptable to any wave length between 355 and 1064nm
- Integration into superordinated process control systems as a slave metrology system
- Closed loop metrology systems with automatic sample positioning

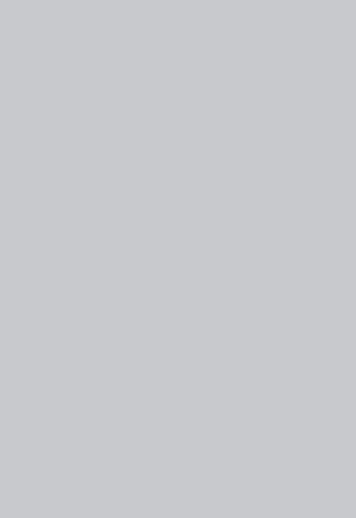


355

670

1064

405 633

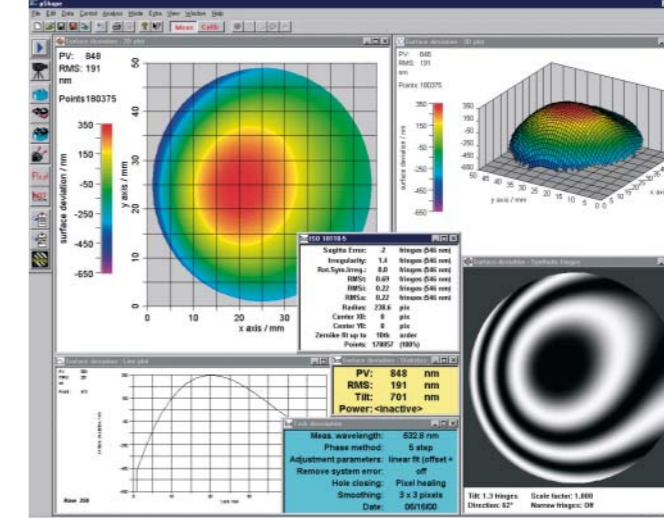
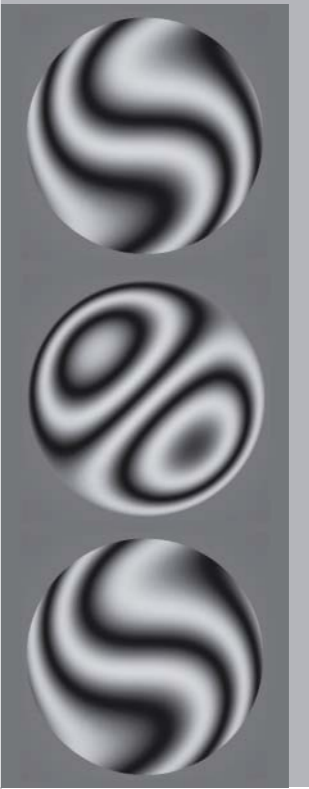


$$F_i(x, y) = Z_n^m(r) - e^{im\phi}$$

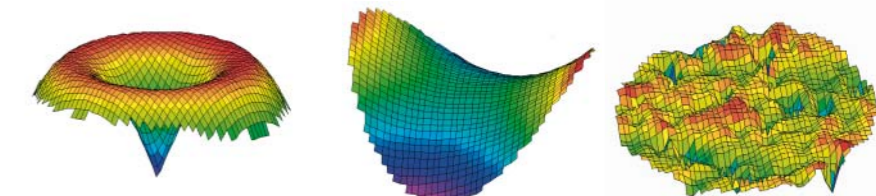
μ Shape[™] measuring and analysis software

The μ Shape[™] interferometry software is a sophisticated tool for integrated quality management, designed for ease-of-use as well as full functionality even for your most demanding needs. μ Shape[™] controls and displays your measuring processes, stores and documents all measured data and ensures maximum transparency.

μ Shape[™] is available in three standard versions: μ Shape[™] Basic, Ophthalmic, and Professional, and two special packages: Generic and Customized. μ Shape[™] Software is the standard software for operating all μ Phase[®] interferometer systems and is an alternative software to other makes of phase-shifting interferometers.



- **μ Shape[™] Basic**
Basic software package for testing flat and spherical surfaces and wave fronts in production and workshop operation.
- **μ Shape[™] Ophthalmic**
Same as μ Shape[™] Basic with additional function for testing lateral tool offsets on SPDT machines (Single Point Diamond Turning). For use in the ophthalmic industry.
- **μ Shape[™] Professional**
With extended functions and add-on modules. For use in production, laboratory and research.
- **μ Shape[™] Generic Package**
Same as μ Shape[™] Professional for use with most commercial or custom-built phase-shift non-FISBA interferometers.
- **μ Shape[™] Customized**
Customized analysis and display functions, add-on modules or exclusive modules for customer-specific measuring tasks. For use with customer-specific applications.



$$\phi) = R_n^m(r) \cdot e^{im\phi} =$$

Testing your polished surfaces without a scratch

The μ Phase[®] 2 interferometer systems are used to measure high-precision reflective components made of metal, ceramic or semi-conductor materials. The non-contact measurement method prevents damage to your test sample, yet gives you the most exact evaluation of the entire surface of the sample under test.

- Measures entire test surface in one measurement cycle within seconds
- Fast analysis of high-density measurement data arrays
- Leaves no marks on surface
- Reflective surfaces are measured with sub- μ accuracy and without leaving marks or scratches
- Quality documentation of mechanical parts with optical accuracy

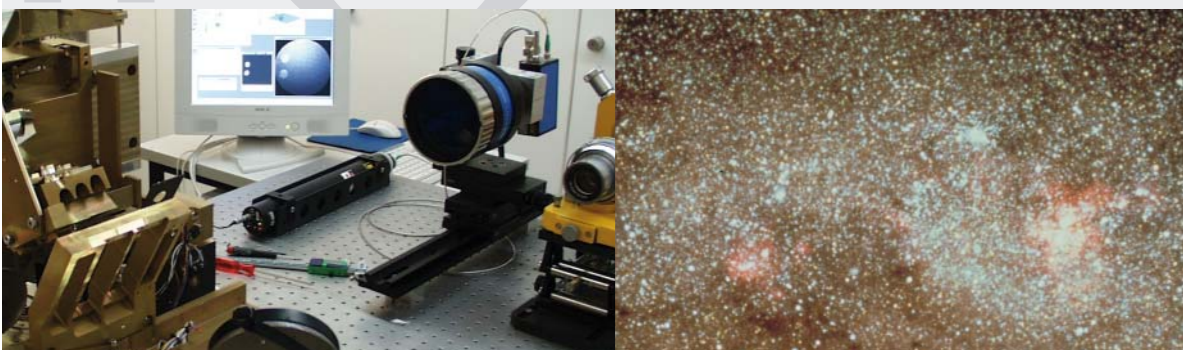


$$(r, \phi)$$

Validate your research efforts with advanced metrology

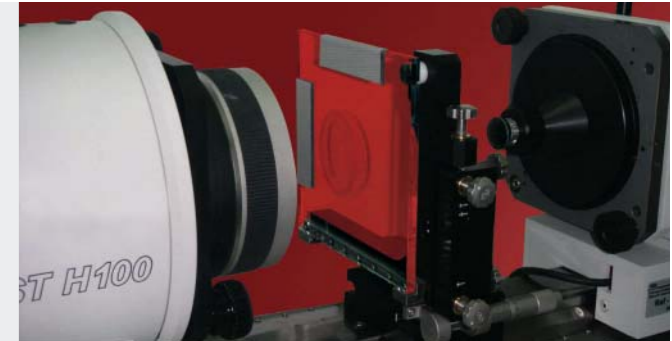
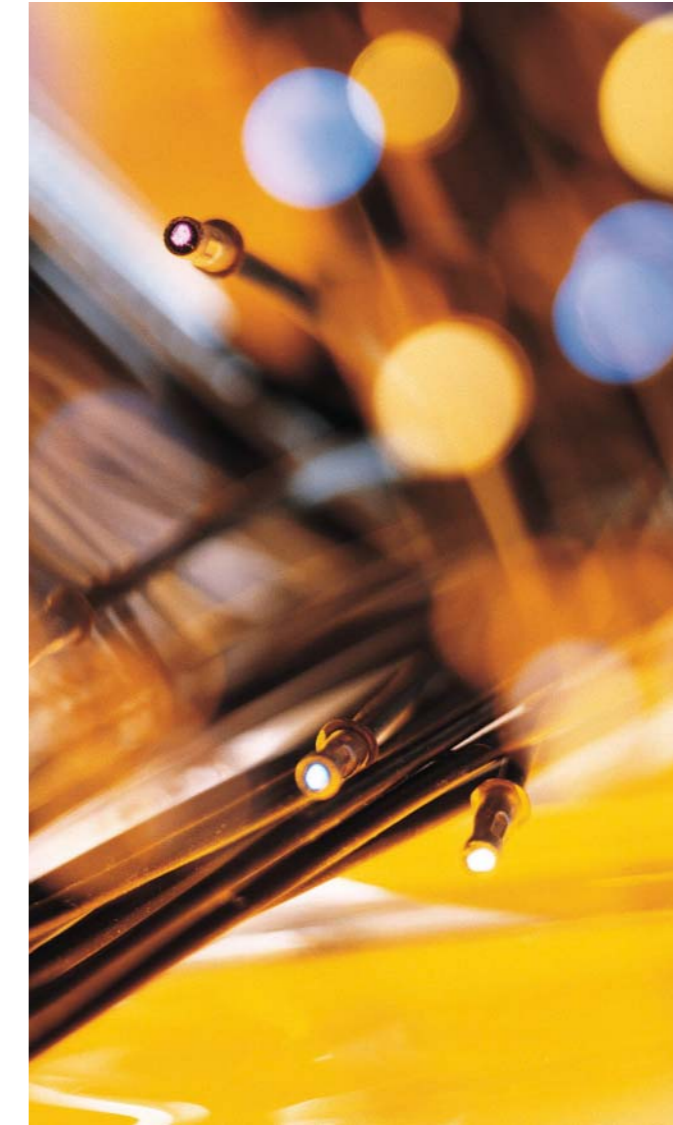
- Flexible and expandable due to modular and compact design
- Scientific and analytic evaluation and display of measurement results
- Custom-made components available to specification
- Flexible and unrestricted mounting positions (vertical, horizontal and diagonal optic axis possible)

$$m_n(r) - e^{im\phi}$$



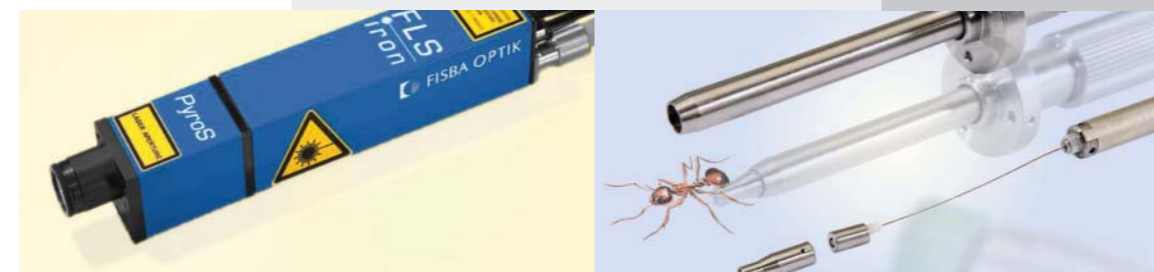
Providing made-to-measure solutions for over 50 years

FISBA OPTIK AG, established almost fifty years ago, is one of the world's leading suppliers of optical systems and high-tech products for industrial manufacturing. Providing made-to-measure solutions for customers in the optical industry is one of FISBA's outstanding strengths. The Business Unit Metrology has consequently implemented this successful company philosophy in the development of the μ Phase[®] Digital Compact Interferometers. The compact design of the μ Phase[®] 2 interferometer together with the μ Shape[™] analysis and measurement software, also developed by FISBA, and a range of further accessories and components allows a large number of system configurations. The perfect synthesis of both products results in a modern measurement tool for a non-contact surface inspection that meets the requirements of modern quality management. The modular design of the instrument, software and its other components makes it possible to adapt the μ Phase[®] 2 for custom-specific measuring tasks.



made-to-measure solutions –
 μ Phase[®] interferometry systems

We reserve the right to alter product design and range, and implement technical changes without prior notice.



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$$F_i(x,y) = Z_n^m(r, \phi) = R_n^m(r) \cdot e^{im\phi}$$

