

MICRO-INTERFEROMETER VI-direct



The Micro-Interferometer VI-direct extends the range of flatness testing to the domain of smallest diameters. The Fizeau-type interferometer is able to measure the surface flatness of optical parts between approx. 0.8 mm to 3.6 mm diameter. The cost effective Micro-Interferometer VI-direct can be used for testing of optical parts like micro-prisms, laser crystals, fiber endings, etc.

The measurement uncertainty amounts to approx. $\lambda/10$ P-V for visual evaluation. Beside the visual inspection on a TV-monitor a computer-based evaluation is possible, as well. Thereby a measurement uncertainty of approx. $\lambda/20$ P-V is achievable.



Micro-Interferometer VI-direct with reference flat

Further features

- Direct connection to PC via USB3 port, no frame grabber required
- Digital camera with high resolution (1600 x 1200 pixel)
- Insensitive to vibrations due to short exposure time
- Wide range of optical and mechanical accessories
- Usable in vertical, horizontal, or under oblique directions. This makes the instrument extreme versatile for use in customer specific applications
- Due to its compact design the interferometers are well suitable for the integration in application specific workstations
- Light source: fiber coupled HeNe-laser ($\lambda=633$ nm) or stabilized laser diode ($\lambda=635$ nm)



Application example: Workstation, consisting of Micro-Interferometer VI-direct and tripod stand

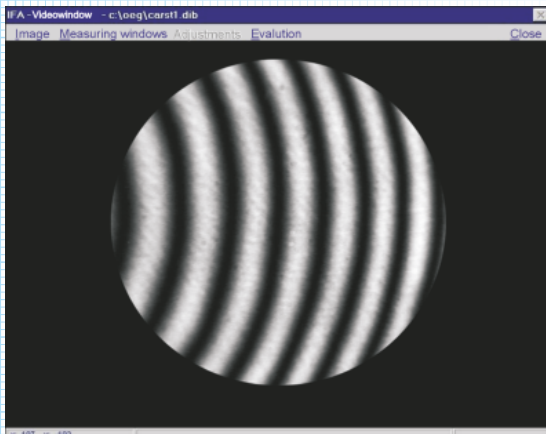


SOFTWARE FOR FRINGE PROCESSING

INTOMATIK-S

Overview

- Evaluation of single-shot interferograms with open fringe according to the ISO 10110-5
- No phase shifter required
- Operating system Windows® NT/2000/XP/7
- Large measuring area by use of the full camera resolution (1600x1200 pixels)
- Coordinate representation in pixel, mm or inches
- Automatic protocol generation
- Export of the results in *.opd-format or as raw data for further processing

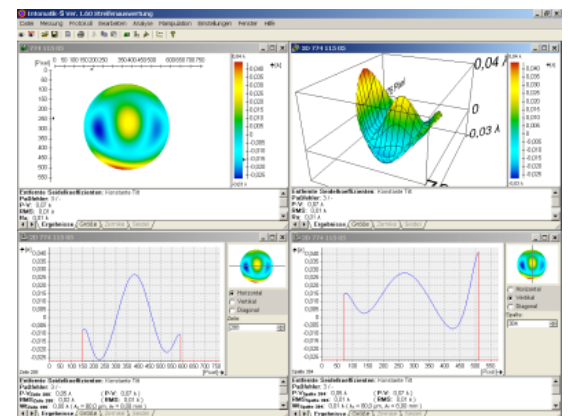


Recording module

- Permanent live-interferogram display, colored overmodulation display in live-image
- Extensive masking option
- Histogram function
- Save of intensity distribution as *.bmp-file

Evaluation module

- Display of the results as contour, 3D- and 2D-plot
- Extensive manipulation options like averaging, filtering and fitting of the phase distribution



ORDERING DATA

| Ord.-No. | Description |
|----------|--|
| 244 318 | Micro-Interferometer VI-direct |
| 244 352 | Reference flat $\lambda/30$ M36x0,75 |
| 223 086 | Tripod stand D40 |
| 223 108 | Vertical stand D40 with tiltable table |
| 244 272 | Software package INTOMATIK-S |