OEG
Optik, Elektronik
& Gerätetechnik

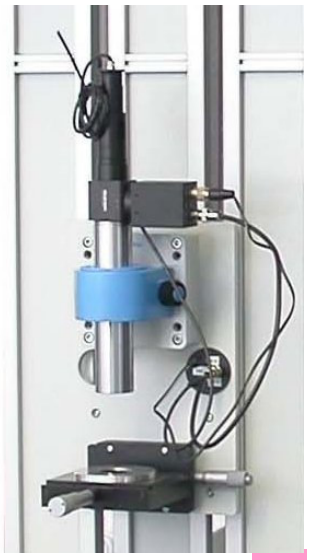
OPTICAL MEASURING SOLUTIONS

COMEF ANGLE

Image processing system for autocollimators and telescopes

Fields of application

COMEF ANGLE is an image processing system which was especially developed for retrofitting of autocollimators and telescopes. A visual autocollimator is equipped with a CCD camera. A PC with a frame grabber digitizes the live video signal of the CCD camera in real time. It serves to objectify, automate and increase the precision of angle measurements and, compared with visual measuring systems, it offers a number of additional features.
COMEF ANGLE is mainly applied if the measurement precision of visual measuring systems is not sufficient, measurements must be recorded in protocols or the measured angles must automatically be converted into measurement data. Due to the very short measuring times, a 100%-testing of optical components is possible without any problems.

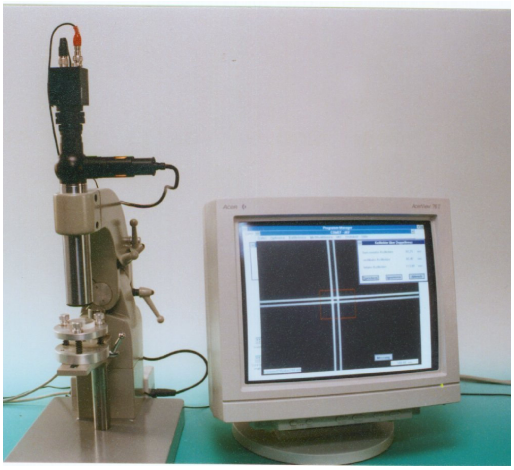


Retrofitting of an autocollimator with a CCD-camera

The following list shows some examples of possible measurements:

- beam deviation of planparallel plates, filters and prisms
- wedge angles or parallelity of planparellel plates
- prism angles
- centring
- adjustment of optical beams
- wobble of rotating glass disks

The measurement results can either be shown continuously or in freely configurable protocols. The software can be adapted to the customers special requirements or measurement systems without much effort. In the continuous measurement functions, the parameters are displayed continuously. The specimen is positioned in the measuring beam and immediately after that the measurement result appears on the screen. This measurement function is ideally applied for serial measurements.



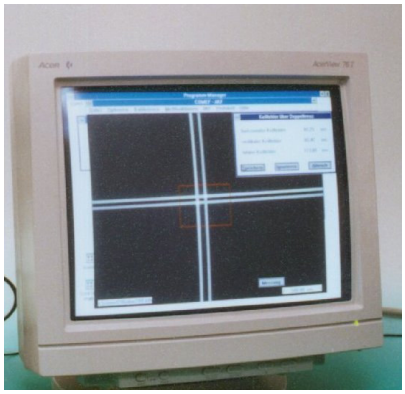
OEG GmbH, Wildbahn 8b, 15236 Frankfurt(Oder), Tel.: 0335 5213 894, Fax: 0335 5213 896
E-Mail: OEG-GmbH@t-online.de Internet: http://www.oeg-messtechnik.de

OEG
Optik, Elektronik
& Gerätetechnik

OPTICAL MEASURING SOLUTIONS

High accuracy based on electronic image evaluation by digital image processing

The live video image appears in excellent quality on the PC-screen. Simultaneously the video data are available for further processing in the PC.
The software determines the position, the distance and the shift of the crosshair on the CCD chip with the help of special algorithms which are based on sub-pixel precise grey-scale value processing.
Thus the resolution of the measurement system can at least be increased by factor 10 compared with visual measurements.
All measurement results are stored in freely configurable and exportable protocols.



Live video image of the crosshair on the PC-screen

Very easy to operate and user-friendly

The program runs on WINDOWS which makes it very user-friendly. Depending on the measurement function, the data are recorded as absolute parameters, as relative parameters in relation to the reference measurement or in relation to a master.

An editor was developed for generating protocols. With the help of the editor, protocol forms can be freely configured. An integrated formula editor facilitates the unlimited further processing of the measurement results.

Setup for measurement of centring, EFL, BFL, MTF and Radius on the basis of COMEF_Angle

Take advantage of our experience

Please also contact us for further information about this or other measurement systems for the optical industry. We would also like to give you more detailed information about the fields of application or our capabilities for special, customized solutions in a personal talk or online on http://oeg-messtechnik .de

Representative:

OEG GmbH, Wildbahn 8b, 15236 Frankfurt(Oder), Tel.: 0335 5213 894, Fax: 0335 5213 896
E-Mail: OEG-GmbH@t-online.de Internet: http://www.oeg-messtechnik.de