

Microstructuring and Thinfilm Coating

Product

Complete solutions integrating microstructured patterns and coatings for:

- Reticles, masks, diaphragms
- Encoded and graduated circles
- Gradient filters (continuous or customer-specific behaviour curve)
- Coated patterns (mosaic filters, customer specific patterns)
- Anti-reflection coatings (see data sheet "anti-reflective coatings")
- Filters and mirrors (long pass, short pass, narrowbandpass, heat protection filters, cold mirrors, metallic or dielectric mirrors, laser mirrors)
- Beamsplitting coatings

Substrates

Clear float glass, grey glass, quartz, and filter glass can be used as substrates.

Specification

- **Spectral ranges:** DUV, UV, VIS, NIR
- **Reticles masks and diaphragms:**
 - Diameters from 2 mm to 140 mm
 - Line width $\geq 1 \mu\text{m}$
 - Line precision up to $0,5 \mu\text{m}$
 - Black, etched or luminescent

Quality Assurance

Permanent process and manufacturing control guarantees the above specifications. We use sophisticated measurement devices and computer programs.

Notes

The different possibilities for substrate shaping are described in the product data sheet „CNC-Manufactured Glass Components“.

The listed coatings are just a selection of our coating possibilities. In addition, we can develop individual solutions. Our computer software for thin films will help you to optimize your films.

Measuring Instruments for Quality Assurance

Wavefront:	Interferometer 4-24", Shack-Hartmann-Wavefront-Sensor (UV and DUV)
Resolution:	Computer-supported MTF measurement
Centering:	Objective metrology station, Laser centering station
Angle Precision:	Goniometer, interferometer
Transmission/ Reflection:	Spectrometer, diode array
Surface defects:	Automatic microscope
Micro-Roughness:	White light interferometer, AFM
Dimension:	3D Coordinate-measurement, caliper, CCD-Micrometer, Stitching interferometer