

Anti-Reflection Coatings

Product

To minimize reflection in the visible spectrum and in the UV and IR ranges, BERLINER GLAS GROUP offers several anti-reflection coatings.

Substrates

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

Specifications

MgF₂-single coating with selectable central wave length

- Reflectivity: $R \leq 1,5\%$ for central wave length
- Abrasion resistance: according to MIL-C-48497 A together with MIL-E-12397 B
- Other properties according to DIN 58197 to MIL-C-675 C

V-coating with selectable central wave length

- Reflectivity: $R \leq 0,02\%$ for central wave length
- Adhesion and humidity resistance: similar to MIL-C-675 C
- Abrasion resistance: according to MIL-C-48497 A together with MIL-E-12397 B

Wide-band Anti-reflection for VIS- and NIR-ranges

- Reflectivity: $R_{av} \leq 0,3\%$
- Other data to your specifications or according to DIN 58197 type C1 or C2
- Abrasion resistance: according to MIL-C-48497 A together with MIL-E-12397 B
- Other properties according to MIL-C-14806 A

Quality Assurance

Permanent process and manufacturing control guarantees the above specifications. We use sophisticated measuring instruments and computer programs.

Notes

Different alternatives for substrate profiling are described in the product data sheet „CNC-Manufactured Glass Components“. The coatings listed here are simply a selection of the possibilities we offer. In addition, we can develop individual solutions.

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