



**Coatings.**

**Application-Specific Solutions.**

# Coatings.

The BERLINER GLAS GROUP offers a wide spectrum of optical coating and functional layer solutions to meet your demanding application needs.

We design, develop and produce – from prototype to volume production.

Five reasons why you should choose the BERLINER GLAS GROUP to provide your coating solutions:

1. We manufacture a wide spectrum of coatings using PVD and CVD processes
2. We cover the spectral range from UV to IR
3. We develop individual solutions, including consulting services
4. We provide contract coating on customer substrates
5. We conduct in-house environmental and stress tests according to DIN ISO and MIL standards

## Applications

- Semiconductor industry
- Metrology
- Medical technology
- Laser technology
- Space
- Data communication
- Lighting industry

## Substrates and Substrate Sizes

- Max. substrate size of 400 x 1,000 mm
- Wide variety of optical and colored glass
- Additional materials: sapphire,  $MgF_2$ ,  $CaF_2$ , glass ceramics and ceramics, among others

## Technology

- PVD processes:
  - Classic vaporization (electron beam and thermal vaporization)
  - Magnetron sputtering (MF)
  - Ion-supported evaporation (APS technology)
- CVD process for DLC (diamond-like carbon)



## Clean Room

- Clean rooms (total of 900 m<sup>2</sup>) of ISO classes 5–7
- Controlled temperature and humidity
- Optimized arrangement of equipment, measuring devices and inventory to increase efficiency
- Increased reliability and safety



## Metrology

- Spectral transmission and reflection measurement of 190–3200 nm (6–70° reflection)
- High spatial resolution fiber spectrometers in reflection (measurement surfaces <1 mm<sup>2</sup>)
- Layer tension
- Surface profiling: Measurement of the geometric layer thickness
- Electrical conductivity of metals and ITO
- Absorption for 1,064 nm
- Surface energy
- Surface roughness (white light)

[www.berlinerglasgroup.com](http://www.berlinerglasgroup.com)

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