Coating of polymer optics

Optical coatings are used to reflect, direct and filter light, prevent light reflection, protect surfaces and improve the quality of optical components. Jenoptik is your expert partner in the design, manufacture and coating of polymer-based optical components and systems.

Thanks to state-of-the-art infrastructure, a high-tech machine park and a widely experienced team of experts, optoelectronic systems is your ideal partner for optical coatings covering the entire value chain or job order coatings.
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Customer-specific coatings made from polymers such as Zeonex, Zeonor, polycarbonate, PMMA, etc.

- Reflective coatings, metallic mirrors (gold, silver, aluminium)
- Anti-reflective coatings (anti-reflective wide-band, ’W’ coat, ’V’ coat)
- Dielectric mirrors
- Scratch-proof AR coatings
- Dielectric beam splitters and filters
- Nanostructures for anti-reflective coatings of PMMA
- Easy-to-clean coatings
- Design and manufacture of customer-specific coatings
- Design and construction of substrate supports and masks for sample coatings

META 1101 high vacuum vapor deposition

- Coatings based on aluminium, silver or gold, as well as protective coatings based on SiOx or HMDS
- Depending on the coating materials, reflectance of 85% - 95% can be achieved
- PVD vacuum metallization of simple as well as complex 3D components
- Front and rear surface mirrors
- Applications in the following markets: Health Care & Life Science, Digital Imaging, Optical Measurement & Machine Vision, Lighting, Automotive & Mobility

SYRUSpro 1100 high vacuum vapor deposition

- PVD thin-layer coating in a high-vacuum environment
- Anti-reflective wide-band coating, beam splitter and filter
- Mirrors with aluminium enhanced coatings, reflectance larger than 98% can be achieved
- Low operating temperatures to create ideal conditions for coating heat-sensitive substrates
- Superior long-term density, adhesion, and rigidity thanks to the use of plasma-based coating technology
- Applications in the following markets: Health Care & Life Science, Digital Imaging, Optical Measurement & Machine Vision, Lighting, Automotive & Mobility

Our experts will provide you with a wide range of services:

- Optimization of your construction element design for more cost-efficient serial coating
- Selection of suitable materials and processes
- Feasibility studies
- Development of optimized coatings and coat designs according to customer requirements
- Process optimization ranging from cleaning and coating right through to packaging
- Development of suitable measurement and testing procedures according to ISO, DIN, or MIL

We will also gladly provide job-specific coatings of your substrates and offer our experience for the optimization of all coating-related processes.

It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.