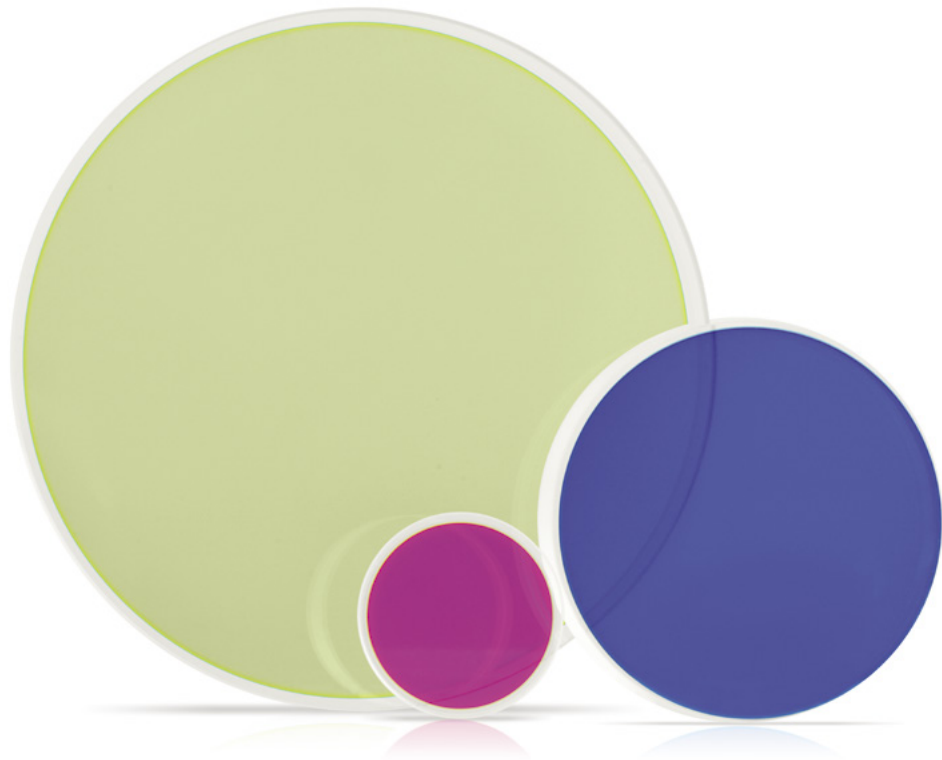


# PREMIUM LASER OPTICS



# About Us

## Long-standing History Since 1986

### Long-standing history since 1986

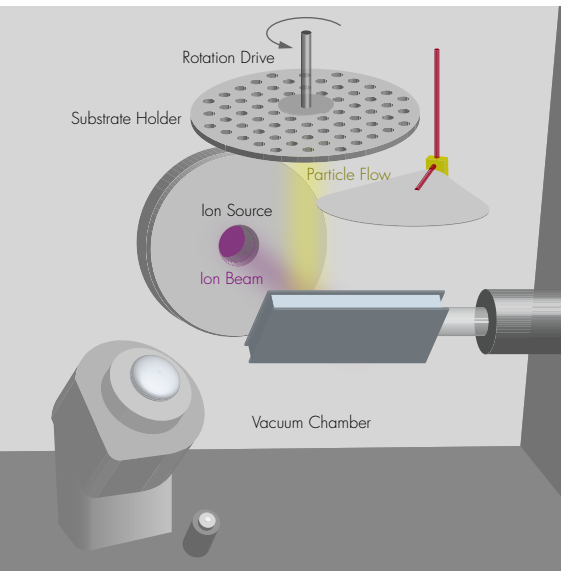
At LASER COMPONENTS, we deliver durable, long-life, and custom laser optics with a quick turnaround at an affordable cost.

Working closely with our customers, we commit to high quality solutions with continuous investments in state-of-the-art equipment and highly trained staff.

You will work with an innovative partner  
who keeps pushing the boundaries!

### We actively participate in:

- Research projects
- DIN standards committee
- SPIE laser damage competitions



### IBS (Ion Beam Sputtering)

Lowest dispersion losses and  
very high reflection rates:  $R > 99.95\%$

# ITAR

registered &  
compliant

# >80%

custom laser  
optics



## UV Coated Optics

### Durable and Long-life

We produce industrial-grade mirror coatings in the standard wavelength ranges between 248 nm and 355 nm, as well as beam splitters, thin-film polarizers, and AR-coated optics in the UV range.

Depending on the application, we offer standard UV specifications at attractive pricing or complex designs of more than one hundred homogeneously coated layers.

*"No degradation, not even after three years" – Industrial laser customer*

### Specifications:

- Wavelengths: e.g. 266 nm, 308 nm, 355 nm, and the like
- Long lifetime
- High LIDT
- Low absorption



## Mid-IR Coated Optics

### Up to 3,000 nm

Our 2- $\mu$ m coated laser optics can be found in the cavities of many medical laser systems. The know-how we have built over the years allows us to produce high-damage-threshold optics with barely any water retention and thus extremely low temperature drifts.

*"Best quality vs. pricing, and very good LIDT" – Medical laser customer*

### Specifications:

- Wavelengths: e.g. 2100 to 2100 nm
- High reflectivity or transmission
- High LIDT
- Low absorption



## High-Power Optics

### Highest LIDT

We offer a wide range of durable laser optics for high power and high energy laser applications such as the megajoule and petawatt laser projects.

Our manufacturing capabilities include new design approaches for plasma ion assisted deposition (PIAD) and ion beam sputtering (IBS) to produce coated optics up to 380 mm in diameter that are homogeneously coated across the entire surface (deviation: <1%).

*"Impressed by high power mirrors" – Research center customer*

### Specifications:

- Wavelength range: e.g. 750 nm to 850 nm
- GDD <  $\pm 100$  fs<sup>2</sup>
- LIDT > 5 J/cm<sup>2</sup> at 300 psec
- Above specifications are all combined in one coating design

# Do you require coated optics?



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Let us know how we can help

## How to specify the best optical properties for your application

Choose from:

### Flexible production capacity

- Substrate: diameter up to 380mm
- Wavelength: from 248nm to 3000nm

### State-of-the art coating technologies

- Electron beam deposition – Flexibility
- Ion assisted deposition – Homogeneity
- Ion beam sputtering – Complexity

### Variety of optical components

- Mirrors
- Thin film polarizers
- Dichroics
- Beam splitters
- Output couplers
- Gaussian mirrors



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