

Press Release

For High Energy Densities in the Laser Cavity

Laser Optics for IR Wavelengths

Kidney stones are effectively shattered using shock waves. These shock waves are being created more and more with the help of lasers that emit in the mid-IR range around 2 μm and 3 μm - the absorption wavelengths of water.

In the cavity of medical laser systems coated optics are used. They have to meet the following requirements: excellent damage thresholds, „arid“ coating systems, and selected substrate materials.

LASER COMPONENTS offers low dispersion and stable coatings for medical lasers. These laser optics are produced in Germany using IBS technology, Ion Beam Sputtering. To replicate coatings later on, a computer-controlled system records the growth of the layers and regulates the coating unit fully automatically. The laser optics produced with IBS have a high density, low microroughness; their absorption is not measurable at all. Because these coatings do not allow moisture to enter the laser optics are also chemically stable. Compared to conventional e-beam coatings the damage threshold is 10 times higher.

More Information

<http://www.lasercomponents.com/de-en/company/production-facilities/optical-coatings/>

Trade Shows

BiOS 2013, Feb, 2-3, 2013, Moscone Center, San Francisco, USA, **Booth 8517**
Photonics West 2013, Feb, 5-7, 2013, Moscone Center, San Francisco, USA, **Booth 517**
LASER. World of Photonics, 13.-16.05.2013, Neue Messe München, Germany

The Company

LASER COMPONENTS is specialized in the development, manufacture, and sale of components and services for the laser and opto-electronics industries. With sales offices in four different countries, the company has served its customers since 1982. In-house production at six locations in Germany, Canada, and the USA began in 1986 and is meanwhile responsible for about half of its turnover. Currently, the family-run business employs more than 140 people worldwide.