

## Press Release

### Different Types of Diffractive Optical Elements

#### DOEs according to Customer Request

The variety of diffractive optical elements is growing significantly: Holo/Or will be introducing elements with completely new functions as well as revised DOEs with improved characteristics or cheaper versions of existing models with modified specifications.

Products according to customer requests are possible and desired products can be manufactured surprisingly inexpensive. Thanks to the distribution partner LASER COMPONENTS customers have a regional contact person which is in daily contact with the manufacturer.

A new development that originated from a customer request is the vortex element for welding applications in which two donut profiles can be arranged either next to or one after the other. Also available are DOEs with up to 11 focal points set up one after the other to extend their focus depth. Excitingly inexpensive are TopHat DOEs for scanner applications in which beam formation is carried out with very small spots that are up to 1.5x diffraction-limited. These elements are available as a line or with a square or round spot.

Very special are DOEs where an airy beam is produced from the Gaussian beam of the laser: An airy beam is a non-diffractive wavefront that does not move along the beam axis but is bent during propagation and follows a parabolic arc.

#### More Information

<http://www.lasercomponents.com/de-en/news/different-types-of-diffractive-optical-elements/>

#### Trade Shows

**Photonex 2014**, Oct. 15-16, 2014, Ricoh Arena, Coventry, UK, **Booth D20**  
**Vision 2014**, Nov. 04-06, 2014, Messe Stuttgart, Germany, **Booth 1F14**  
**electronica 2014**, Nov. 11-14 2014, Messe München, Germany, **Booth B1-306**

#### The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 170 employees worldwide.