

Press Release

Diffractive Optical Elements – A Comparison

Stable Top or Top Hat

Diffractive optical elements are used with high power lasers at an increasing rate. Achieving a homogeneous intensity distribution (top hat) in the laser beam is very difficult in industrial applications. The demands on the incoming beam are high when using a top hat element. In addition to exact specifications, extremely exact positioning must be guaranteed. Even slight deviations lead directly to a deterioration of the beam profile.

For this reason the product was further developed by Holo/OR. So-called stable-top elements are now available that combine the positive characteristics of the good homogeneity of a top hat with the flexibility of a homogenizer. Stable tops have steep edges and are not as sensitive to x/y positioning and the incoming beam. However, they exhibit a certain amount of waviness and a spike at the edge.

Stable tops can be developed to meet customer specifications for all wavelengths, typically from 355 nm to 10.6 μm . The first standard elements are available for 10.6 μm , 1064 nm, and 532 nm. LASER COMPONENTS is the official distributor for these elements.

More Information

<http://www.lasercomponents.com/de-en/product/diffractive-optical-elements-for-beam-shaping/>

Trade Shows

Analytica 2012, April, 17-20, 2012, Munich International Trade Fairs, **Booth A2.400A**

Optatec 2012, May, 22-25, 2012, Frankfurt Exhibition Centre, **Booth E01**

Sensor + Test 2012, May, 22-24, 2012, Nürnberg Exhibition Centre, **Booth 12-426**

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 130 people worldwide.