

### Holo/OR Deep Cleave

## Cutting Thick Glass with a Laser

LASER COMPONENTS presents Holo/OR's DeepCleave module, a completely optical solution for cutting transparent materials, such as flat panels for mobile phones. A system of lenses with a diffractive optical element is used to focus a single-mode laser beam and create a stretched focus line of 2 mm in beam direction (Z-axis). This 1.8  $\mu\text{m}$  diameter area features uniform intensity distribution.

Embedded in a tube, the DeepCleave system corresponds to a lens with a numerical aperture of 0.35 and can be used immediately. Additional lenses or expensive optics are not required. Together with a DOE from Holo/OR, the DeepCleave module also comprises the sophisticated optical system required to generate the long focal line with constant power density. To achieve this, an input beam with a precisely defined size and a small  $M^2$  is required.

In mass production of glass for cell phones, displays, solar cells and other high-end applications, long, precise cuts have to be made within a very short time. Cut rates of over 500 mm per second are not uncommon, with cut quality having a decisive influence on the flexibility and durability of the resulting components. Lasers with a uniform line on the Z-axis can penetrate deep into the material and deliver optimum results.

### More Information

[www.lasercomponents.com/us/product/diffractive-optical-elements-for-beam-shaping/](http://www.lasercomponents.com/us/product/diffractive-optical-elements-for-beam-shaping/)

### Trade Shows

ECOC, September 22 – 26, 2019, Dublin, Ireland, **Booth 337**  
 22. Breitbandkongress des FRK, September 23 – 24, 2019, H4 Hotel, Leipzig  
 Measurement World, September 24 – 26, Paris expo Porte de Versailles, France  
 JNPLI, September 25 – 26, 2019, Strasbourg, France  
 Photonex Europe, October 09 – 10, 2019, Ricoh Arena, Coventry, UK, **Booth D15**

### 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 230 employees worldwide.