

Diffractive Optical Element

M-Shaper for Optimal Scanning Results

When scanning with a laser it is a familiar problem of illuminating a line uniformly using a dot laser. To date, customers have used round Top-Hat elements as DOEs for the purpose of creating a homogeneous line; however, this has always led to a decrease in the distribution of intensity at the edge across the width of the line.

The M-shaper is a different story! LASER COMPONENTS presents the DOE that is perfectly suited for a high homogeneity in all directions. This diffractive optical element changes the laser beam in such a way that the intensity at the edge (flanks) is higher than in the center of the element.

To put it another way: If the M-shaper is used to scan across a line, then the beam quality of a Top-Hat element will be achieved - both in length and width; this results in optimal scanning performance! Neither with refractive nor with reflective elements can this be achieved.

Fifteen different standard designs are available; naturally, custom solutions to meet special specifications are available.

More Information

<http://www.lasercomponents.com/de-en/news/m-shaper-for-optimal-scanning-results/>

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.