

# LE-SC Spot Creator – Symmetric Focal Spots For Engraving, Cutting, and Marking



**Spot Creator** is an innovative accessory developed for enhancing the performance of blue laser diode based engraving and cutting machines. **Spot Creator** solves a major problem with using asymmetric blue laser diodes: the production of engraving features that are different in the X-Y directions, resulting in unequal or blurred lines. Using **Spot Creator**, line widths are equal in the X-Y directions, with a minimum spot of 50  $\mu\text{m}$ . The intensity on the engraved part is thus maximized.

Three focusing lenses come with **Spot Creator**, with focal lengths of 30, 50, and 70 mm. Shorter focal lengths produce smaller spot sizes and are well suited to laser engraving. Longer focal lengths are more appropriate for cutting. The Table shows the spot diameters achieved with the three lenses and 445 nm laser output:

Focal Length (mm)	Focal Spot Diameter ( $\mu\text{m}$ )
70	100
50	80
30	50

**Process wood, plastics, anodized aluminum, stone, tile, and for the first time, stainless steel. Changing the laser power output and scanning speed can create colors as well.**

# LE-SC Spot Creator Dimensions, Spot Size Adjustment, and Material

Model	LE-SC
Dimensions (mm <sup>3</sup> )	40 x 40 x 30
Spot Distance Adjustment (mm)	±3
Material	Anodized Aluminum

## Outline Drawings

