

OUR PRODUCTS

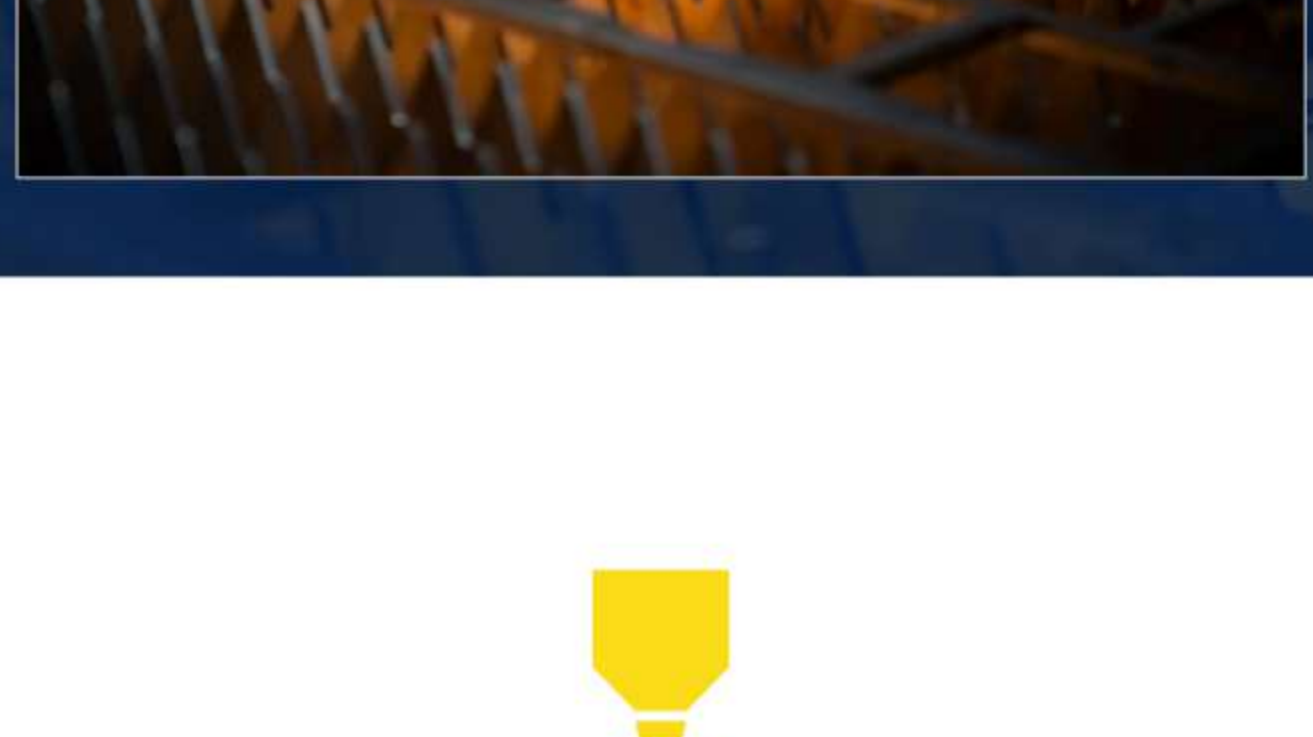


Innovative Laser Beam Shapers & Splitters by Midel Photonics

We manufacture laser beam shapers and splitters for your needs. All our products are based on High-Power-Laser-Mirrors with an all-reflective Design made for NextGen Laser Manufacturing – High-Power, High Energy, Shorter Wavelengths, and tailor-made beam shapes.

» All our beam shapers & splitters utilize the power of Diffractive Optics to efficiently redistribute laser light into the new shape «

Just replace an existing beam steering mirror with our products and you are good to go – We include your angle-of-incidence and beam diameter in the design of the product.



Next-Level Laser Applications

Use our beam shapers & splitters to increase precision, reduce defects and speed up you processes.



Tailored to Your Needs

No compromises, no waiting & simple integration! Made for your laser system and quickly delivered.



State-of-the-art Quality

All our beam shapers & splitters utilize the power of Diffractive Optics to efficiently redistribute laser light into the new shape

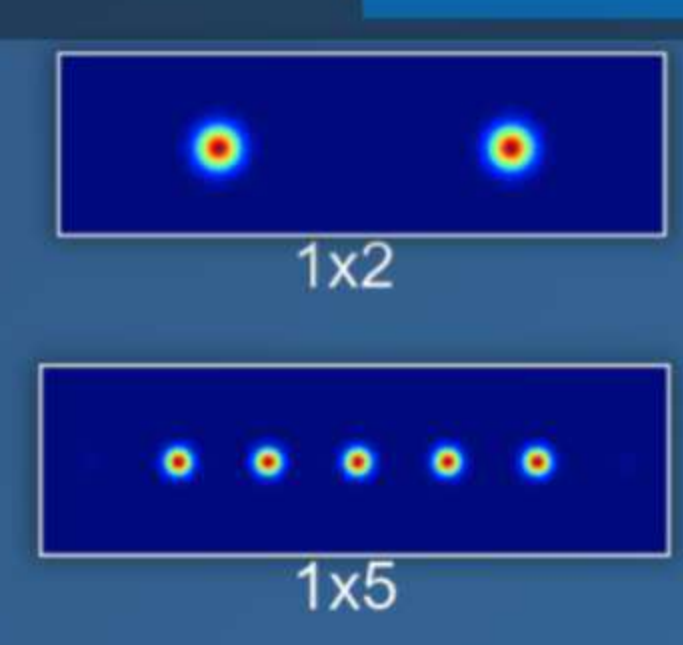
OUR PORTFOLIO

Beam Shapers

Control your beam shape at the workpiece in x and y direction. Possible shapes include flat tops (square & round), axicons, donuts, ring-spot-combinations and more.

Examples:

Flat Tops



Homogeneous Intensity: Large Scale down to the Diffraction Limit

Axicons



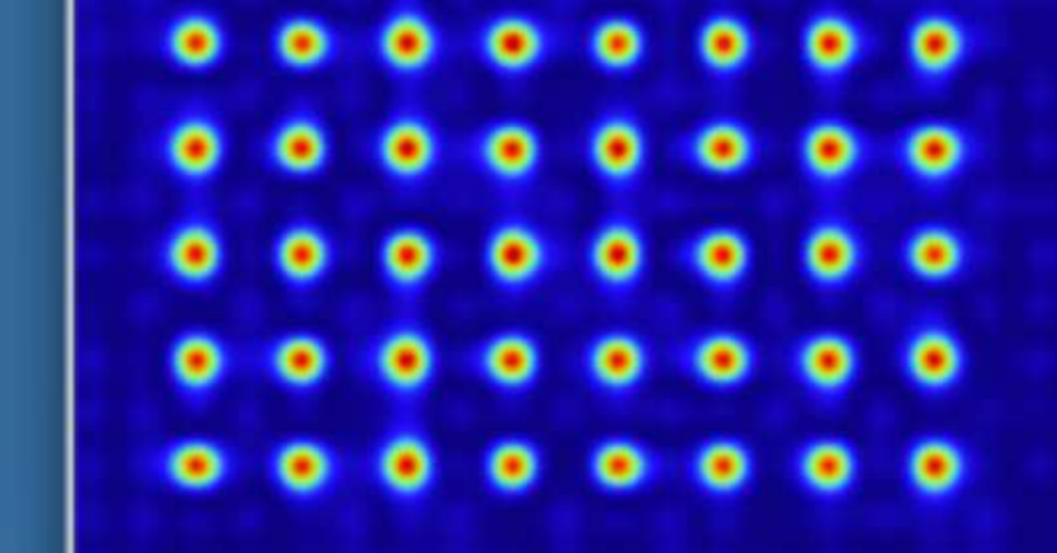
Create Bessel Beams

Donuts



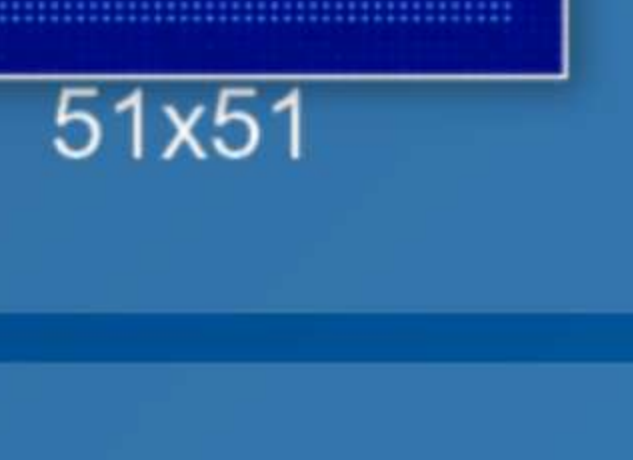
Dark Beam Center

Ring-Spot-Combinations with Tailored Power Ratio



Beam Splitters

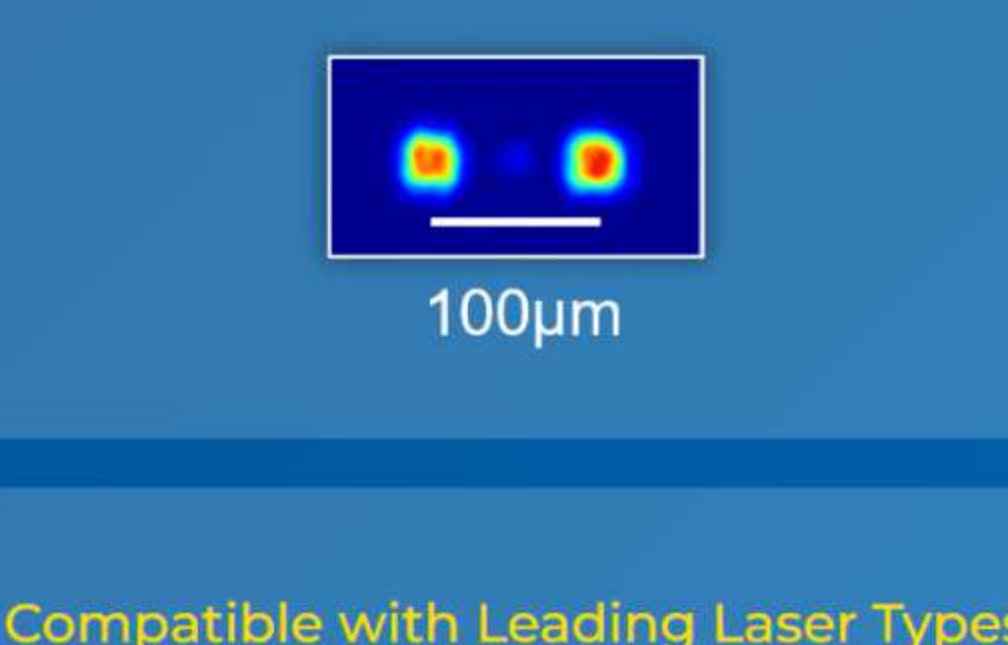
Use a single laser for parallel processing! Various patterns possible (1D/2D). State-of-the-art efficiency & uniformity.



1x2



1x5



2x2



8x8



51x51

Shaping along z-Axis

You need to elongate your focal region? We include it in our product!

Example: z-Shaper



Combined Shaping & Splitting

Multiple shaped beams? We combine both in one product!

Example: 1x2 Flat Top Shaper



100µm

Compatible with Leading Laser Types and Applications

Our beam shapers & splitters are made for high energy ultra-short-pulse lasers (down to 300 fs) and high power continuous-wave lasers up to multi kilowatt regime. Laser wavelengths support: UV (343/355nm), Blue (450nm), Green (515/532nm). Infrared (1030/1064nm) is currently in prototyping phase. Further wavelengths are available on request.

APPLICATION EXAMPLES

Fits Industrial Standards

Our products come in sizes of one and two inch (25mm/50mm). Further diameters or geometries are available on request.

25mm/1"

← 50mm/2" →