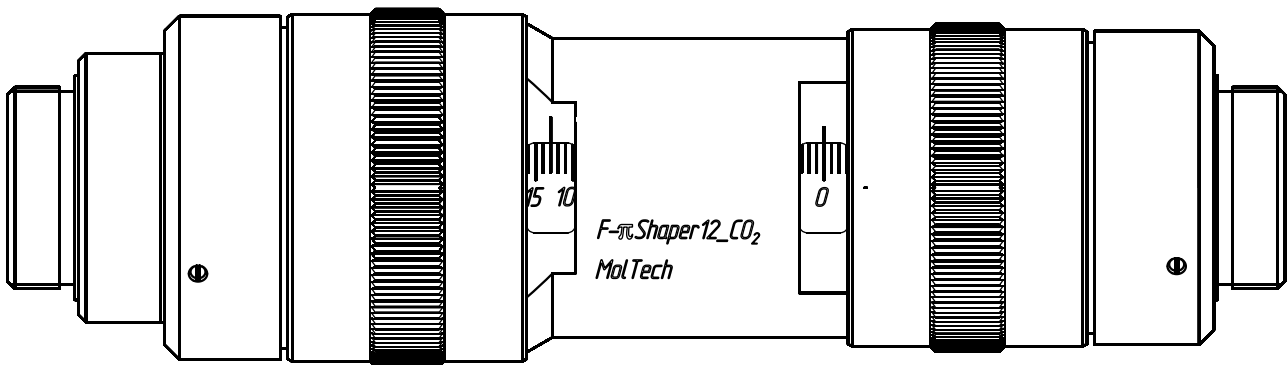


Focal- π Shaper 12_CO₂

***Series of high efficient Beam Shapers
To manipulate the intensity profile of focused TEM₀₀ beams
CO₂ Lasers***



With these unique tools the long-standing wish to manipulate the shape of focused beams becomes a reality.

With nearly 100% efficiency the **Focal- π Shaper** produces various profiles:

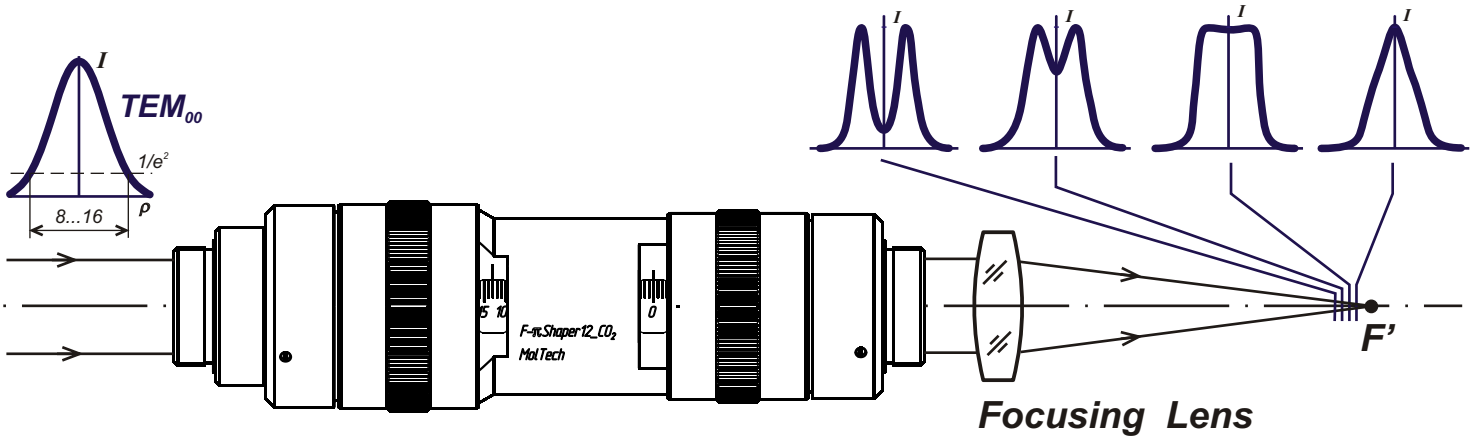
- Flattop
- "Reverse Gauss"
- "Donut"
- "Trident", etc.

An appropriate optical design provides simple adjustment procedure and lets it easy to integrate the **Focal- π Shaper** in your applications:

- Marking and Engraving
- Drilling
- Scribing
- Dicing
- Printing
- Welding

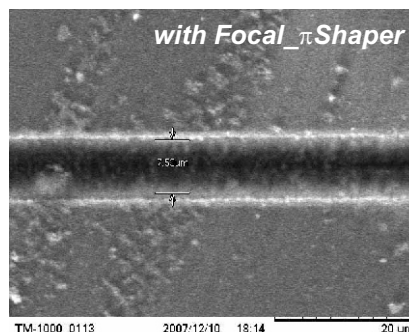
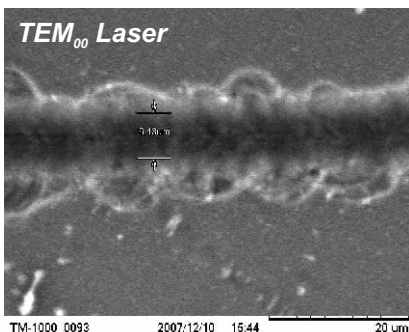
Beam Shaping never was so easy!

No more losing of energy!



Technical Specifications

Common for all Focal- π Shaper 12_CO ₂ models:		
Type	Telescope of Galilean type (without internal focus)	
Input beam	<ul style="list-style-type: none"> - TEM₀₀, Collimated or low divergence - Diameter < 24 mm - Optimum 2ω diameter for a Gaussian beam 8...16 mm (1/e²) 	
Output beam	<ul style="list-style-type: none"> - Collimated or low divergence - Profile is optimized for Intensity distribution manipulation in focal plane of a diffraction limited lens - Diameter < 24 mm 	
Other features	<ul style="list-style-type: none"> - Easy integration to an optical setup and adaptation to a laser source - Compact design suitable for scientific and industrial applications - A diffraction limited focusing lens of any type can be applied with the F-πShaper - Easy tolerances for alignment as well as positioning of the F-πShaper with respect to a lens - Capability to work with scanning mirrors - Applications based on CO₂ lasers 	
Overall dimensions	<ul style="list-style-type: none"> - Diameter 48 mm - Length 171 mm 	
Weight	450 g	
Mounting	Entrance: External Thread M 27x1 or M 33x1 Exit: External Thread M 27x1	
Focal- π Shaper 12_CO ₂ features		
Model	F-πShaper 12_CO₂_10.6	F-πShaper 12_CO₂_9.4
Optimum spectral range**	10.5 – 10.7 μ m	9.3 – 9.5 μ m
* - working wavelength range without taking into consideration the coatings		
** - according to coatings applied		



Comparison of Scribing (Courtesy of Altechna)

