Focal-πShaper 12_CO_2

Series of high efficient Beam Shapers for focused TEM_{00} beams of CO_2 Lasers

With these unique tools manipulating the shape of focused beams becomes a reality.

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

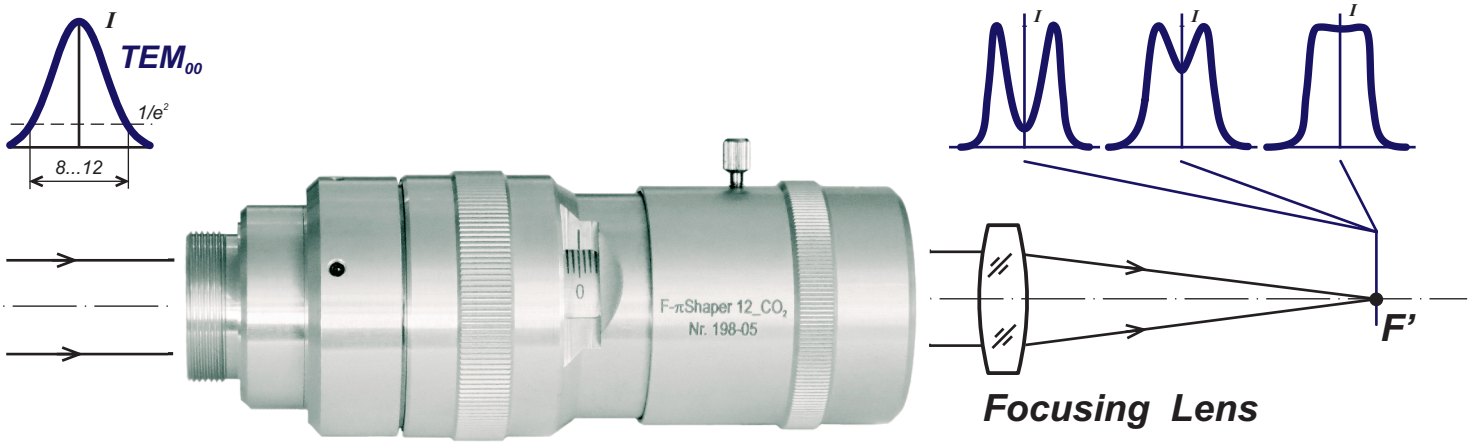
- Flat-top
- "Inverse Gauss"
- "Doughnut"

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

- Marking and Engraving
- Drilling
- Scribing
- Dicing
- Material micromachining
- Printing
- Microwelding

Beam Shaping never was so easy!

No more energy loss!

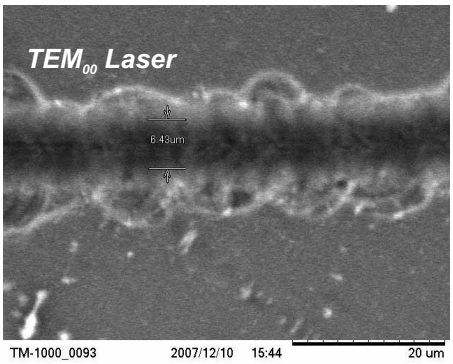


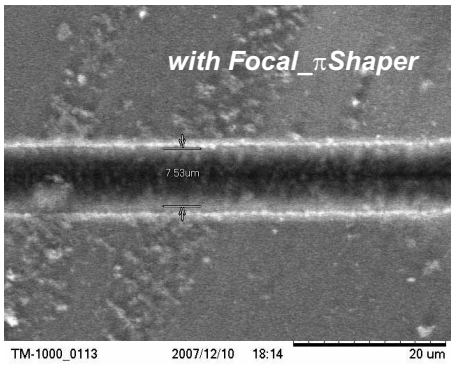
Technical Specifications

Common for all Focal-πShaper 12_CO_2 models:	
Type	Telescope of Galilean type (without internal focus)
Input beam	- TEM_{00}, Collimated or low divergent with full divergence angle ±5 mrad - Diameter < 24 mm - Optimum 2ω diameter for a Gaussian beam 8…12 mm ($1/e^2$)
Output beam	- Collimated or low divergence - Profile is optimized for flat-top, doughnut spot in focal plane of a diffraction limited lens - Diameter < 24 mm
Other features	- Easy integration in equipment - Compact design suitable for scientific and industrial applications - Operation with diffraction limited focusing lens of any type - Easy alignment - Optimized to work with scanning optics: mirror scanners, F-Θ lenses
Overall dimensions	- Diameter 48 mm - Length <139 mm
Weight	400 g
Mounting	External Thread M 27x1

Focal-πShaper 12_CO_2 features		
Model	**F-πShaper 12_CO_2 _10.6**	**F-πShaper 12_CO_2 _9.4**
Optimum spectral range**	10.5 – 10.7 μm	9.3 – 9.5 μm

* - working wavelength range without taking into consideration the coatings
** - according to coatings applied





***Comparison of Scribing** (Courtesy of Altechna)*

AdlOptica
Rudower Chaussee 29, 12489 Berlin Germany
Tel.: +49-30-565908880 E-mail: info@adloptica.com

www.pishaper.com/f_pish_12_co2.php