

ProMaster

The compact system



The ProMaster is the ultimate in compact excimer laser Micromachining system. It uses a table top excimer laser with ultra-short wavelength & nanosecond pulse duration to ensure efficient coupling of laser energy to the workpiece with the highest peak power.

KEY FEATURES

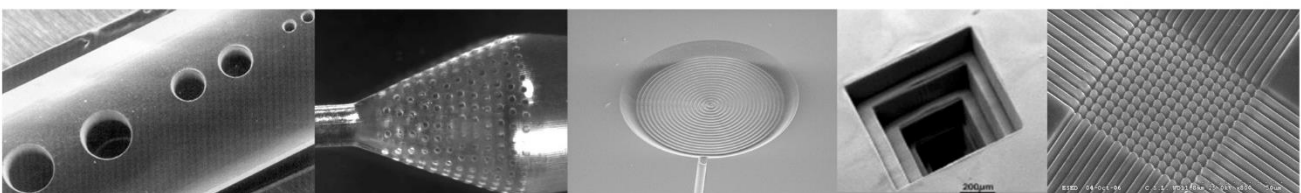
- Motorized X,Y,Z axes
- 100x100mm XY travel range
- 1 μ m machining resolution
- Fixed demagnification ration of 10X
- Motorized motif selection
- >5J/cm² on the part
- Through The Lens (TTL) vision
- User friendly softwares
- CAD compatible
- Table top excimer laser @248nm

OPTIONS

- 193nm
- Large Field of view machine vision
- Manual Theta stages
- Motorized Z axis
- Motorized Attenuator

APPLICATIONS

- Milling of a wide range of polymers, glass, ceramics ...
- Micro hole drilling/grooving
- Micro-fluidics prototyping
- Thin layer removal



Beam Delivery Unit

Wavelength	193 or 248nm	
Maximum e.d.	From 0.05 to 5J/cm ²	Varies with wavelength
Rep rate	200 Hz	500Hz & 1kHz options available
Feature size	From 5µm to 250µm	32-position motif selector
Machining resolution	<1.5µm	UVFS/CAF2 optics NA 0,1
Focus Range	20mm	Depends on options - Motorized (options)
DMG ratio	10X	Fixed
Attenuation range	from 2 to 100%	Varies with wavelength

Part Positioning

Travel range	100x100mm
Resolution	1µm
Repeatability	2µm
Absolutely accuracy	<2µm with DMC calibration

Machine vision

2 color cameras (High FOV in option)
TTL vision
Coaxial lighting

