

# WS-Turret

Compact and flexible system



WS-Turret is a unique and flexible workstation intended for microablation operations with multiple wavelength ultra-short pulse laser sources, with a working volume of 200x200x150mm (under all optics).

The system is extremely robust, and ideally adapted for complete & partial cutting, drilling, milling, surface structuring and others high precision tasks on a wide variety of materials all while maintaining the minimum kerf width associated with short pulse laser processing at wavelengths in IR, visible & UV. Wavelength switching is obtained automatically with our unique Turret system.

ProcessPower™ with OptecCAD™ allows simplified attribution of lasing parameters by layer or by entity, plus a full range of processing tools including hatching, helical drilling, slicing, segmentation etc.

## KEY FEATURES

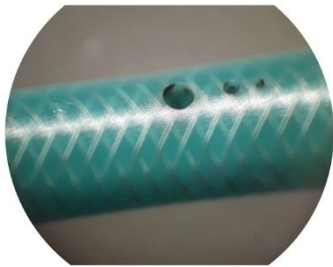
- Motorized X,Y,Z axes
- Turret with 4 working positions
- 200x200mm working Zone
- 1µm stages resolution
- From ns to fs laser
- From 1064 to 355nm wavelength
- Wavelength automatically switched
- Mini Galvo scanners
- Motorized zoom inspection microscope
- ProcessPower™ and OptecCAD™
- Class 1 laser system (fully interlocked)
- CE certified

## OPTIONS

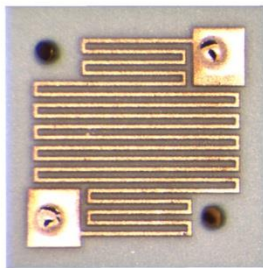
- Rotary Theta stage
- Lathe for Tube cutting
- IFOV for extending scan range
- Fume extraction system
- Auto-alignment system for automatic production
- Larger scanner available
- Extension available for larger laser

## APPLICATIONS

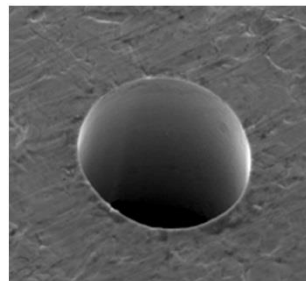
- Cutting, Milling, drilling of a wide range of materials.
- Tube processing
- Composite material cutting
- Scribing
- Surface structuring



Braided catheter drilling



Circuit patterning



Metal drilling



Nitinol tube cutting

## Beam Delivery Unit

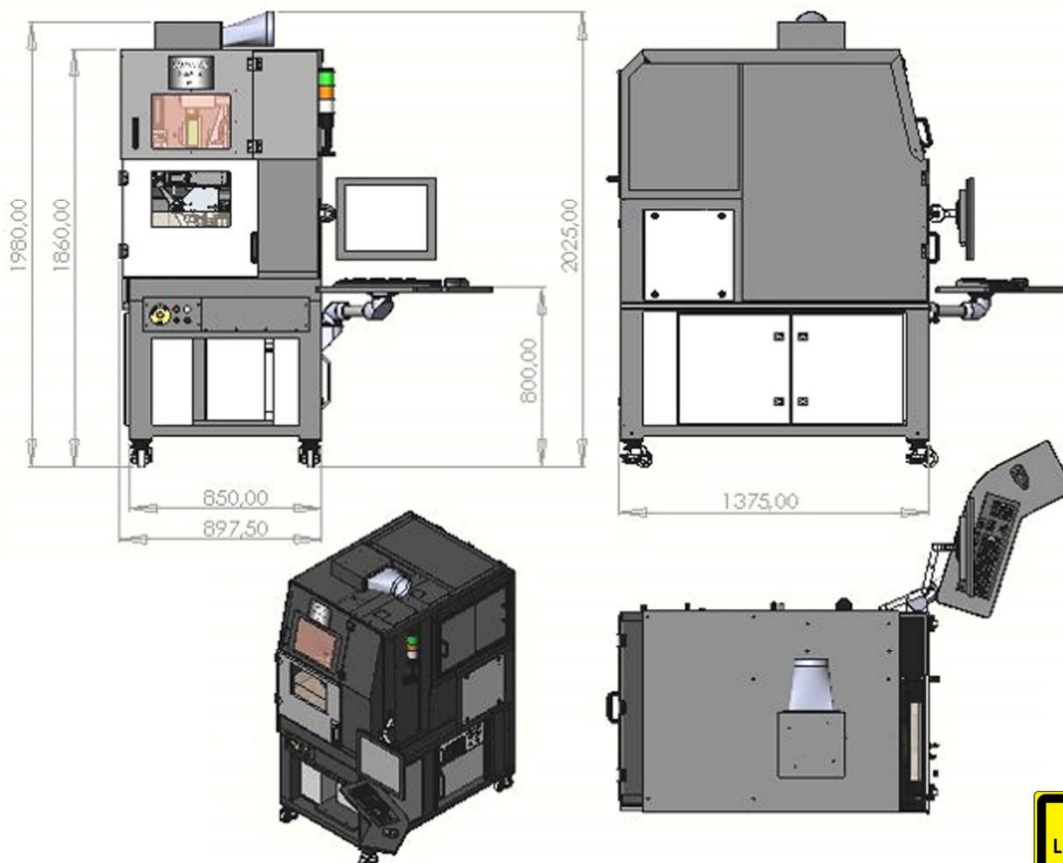
Wavelength	1064/1030nm, 532/515nm or 355/343nm
Wavelength switch time	<5s
Turret accuracy	<2 $\mu$ m
Turret repeatability	<2 $\mu$ m
Focal length	Maximum 60mm with turret
Scanner area	20x20mm with turret, up to 90x90mm without turret
Minimum Spot size	<7 $\mu$ m with scanner (depending on wavelength and Ftheta lens)
Laser type	Femtosecond / nanosecond

## Part Positioning

Travel range	200x200mm
Stage type	Linear motors
Resolution	1 $\mu$ m
Repeatability	1 $\mu$ m
Absolutely accuracy	<2 $\mu$ m with DMC calibration

## Vision systems

Motorized zoom microscope  
with color camera



CE

CLASS 1  
LASER PRODUCT