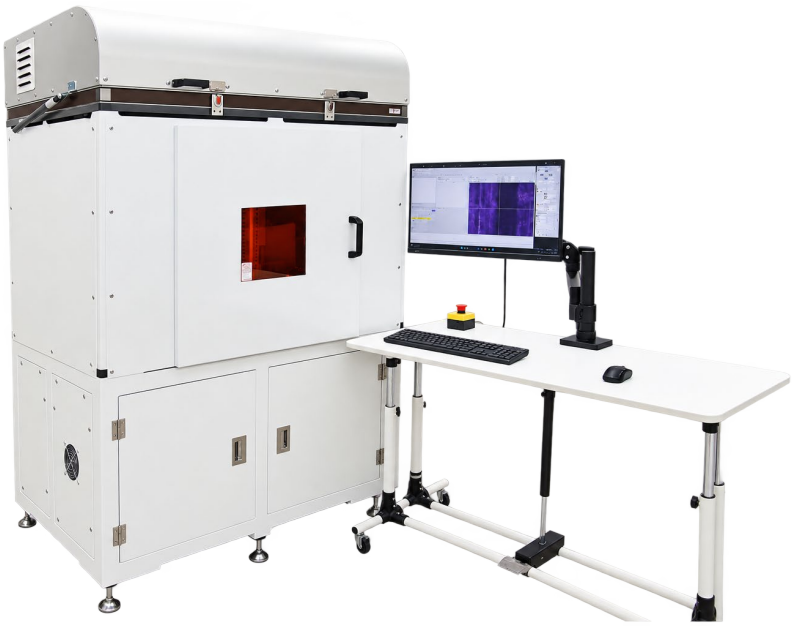
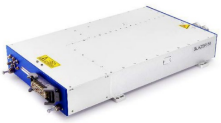
Green Laser Solution

- Green picosecond laser system designed for micromachining.
- High-quality processing with minimal thermal effects.
- Fully integrated system for high-precision machining.
- Custom configurations available to meet your requirements.
- Application trials and sample processing available.



Pico second Green laser

High-Performance Industrial Green Picosecond Laser



- Green picosecond laser for ultra-fine processing
- Wavelength: 532 nm
- Pulse width: < 15 ps
- Average power: 60 W
- Pulse energy: 300 μJ
- Burst mode

*Select the optimal laser according to the intended use

Laser scan

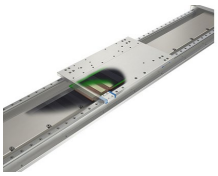
High-Speed Digital Scanner



- Digital control galvanometer scanner
- Maximum speed: 25,000 mm/s
- Repeatability error: < 2 μrad
- Tracking error: 0.15 ms

Positioning

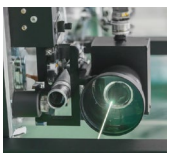
High-Precision XY Linear Stage



- High-precision, high-speed linear stage
- Equipped with optical linear encoder
- Range: X600 mm × Y400 mm
- Position resolution: 0.1 μm
- Maximum speed: 700 mm/s
- Slim, highly stable

Beam delivery & vision system

Efficient beam delivery & accurate monitoring



- Beam delivery optimized for laser performance
- Stable and reliable optical component arrangement
- High-resolution vision system

MEP
Micro Edge Process

Green Laser Solution

Specification

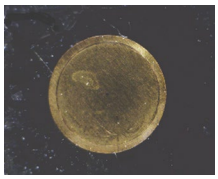
Category	Item	Value	Remark
Laser	Wavelength	532nm	
	Average power	60W	@200kHz_2Burst
	Pulse energy	300mJ	@200kHz_2Burst
	Rep rate	1Hz～2,000kHz	
	Pulse width	<15ps	
Machining	Laser spot diameter	ϕ10mm	
	Operation method	Linear stage Galvano scanner	
	Operation speed	Linear stage 700mm/s Galvano scanner 25,000mm/s	
	Motion area	Linear stage X600mm × Y400mm Galvano scanner X40mm × Y40mm	

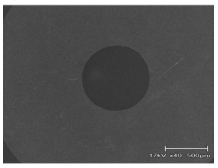
Category	Item	Value	Remark
Vision/ Machining area	Area (XY)	X600mm × Y300mm	
	Area (Z)	Z150mm	
	Scanner area (XY)	X40mm × Y40mm	
Vision system	Item	On-axis：1 Off-axis：1	
	Camera	High resolution Full HD	
Pointer	Item	1	
	Color	Red	
Dimension		W1,200mm × D940mm × H1,780mm	
Weight		830kg	

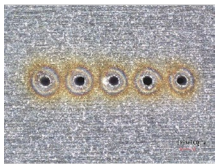
*Flexible customization support according to usage

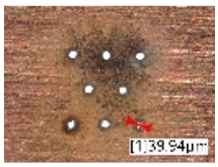
Laser micromachining

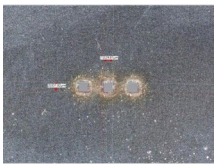
Examples of Laser Micromachining

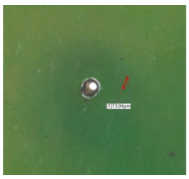

Micro hole

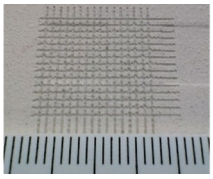

Ultra fine hole


Deep holes

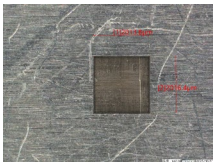

Copper foil microholes


Square holes

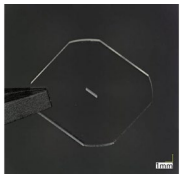

SIC hole

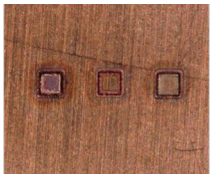

Ceramic groove


High density holes


Precision engraving


Precision line


Glass precision lit


Copper micro welding

Laser machine

Other Products



- Picosecond UV laser micromachining system
- Wavelength: 355 nm
- Average power: 15 W
- Pulse energy: 30 μJ
- Pulse width: <12 ps
- Laser spot diameter: ϕ12 μm
- Camera: Full HD coaxial camera
- Robot stroke:
  X200 mm × Y200 mm × Z25 mm
- Position resolution: approx. 0.1 μm
- Micromachining, cold ablation
- Customizable according to application



- Semiconductor laser robot system
- Wavelength: 450 nm, 808 nm
- Output: 50W, 80W
- Coaxial laser head with temperature monitor
- Temperature sensor: 140–2,000℃
- Laser spot diameter: ϕ30 μm
- Camera: Full HD coaxial camera
- Robot stroke:
  X300mm × Y320mm × Z100mm
- Position resolution: approximately 5 μm
- Soldering, fine welding, fine processing

Micro Edge Process Co., Ltd.
https://www.mepinfo.jp/