

- Laser micromachining system with high power picosecond laser
- High quality laser process with cold ablation
- Highly integrated laser micromachining system designed for R&D and industrial application
- Fully customizable system
- perform (or assist with) process / application development if needed



Pico second laser

High reliable industrial picosecond laser



- Picosecond laser for micromachining
- Wavelength : 532 nm
- Pulse width : < 15 ps
- Average power : 60 W
- High pulse energy : 300 μ J
- Burst mode

*We can offer the best solution

Laser scan

High speed digital galvo-scanner



- Digital galvo-scanner
- Max speed : 25 m/s
- Repeatability : < 2 μ rad
- Tracking error : 0.15 ms

Positioning

High accurate XY linear axes



- High accurate, high speed axes
- Optical glass encoder
- Positioning area : 600 mm \times 400 mm
- Resolution : 0.1 μ m
- Max speed : 700 mm/s
- Low profile stable drive

Beam delivery & vision system

Efficient beam delivery & accurate monitoring



- Beam delivered efficiently
- High accurate vision system
- Fully designed for micromachining

Specification

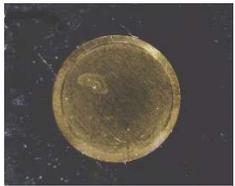
	Item	Value	Remark
Laser	Wavelength	532 nm	
	Average power	60 W	
	Pulse energy	300 μ J	@200kHz burst
	Rep rate	1Hz ~ 2 MHz	
	Pulse width	< 15 ps	
Machining	Beam spot	ϕ 10 μ m	
	Laser scan	Linear stage Galvo scanner	
	Laser scan speed	Linear stage: 700mm/s Galvo-scanner: 25,000mm/s	
	Laser scan area	Linear stage: 600mm x 400mm Galvo-scanner: 40mm x 40mm	

	Item	Value	Remark
Vision system	Area (XY)	600mm x 300mm	
	Area (Z)	150mm	
	Camera	On-axis : 1 Off-axis : 1	
	Resolution	Full HD	
Pointer		Red : 1	
Machining	Beam spot	ϕ 10 μ m	
Dimension		W1200mm x D940mm x H1780mm	
Weight		900kg	

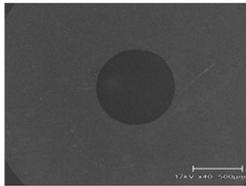
* All device can be castmizable.

Laser micromachining

Examples of laser micromachining



Tiny thru hole



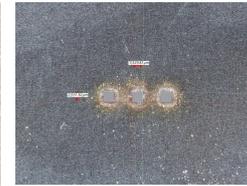
Micro thru hole



Deep drilling



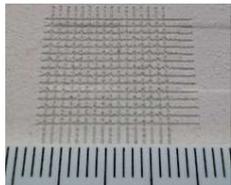
Precise small holes



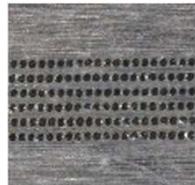
Rectangle hole



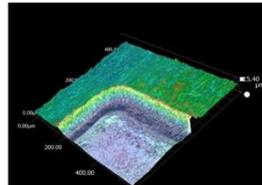
Cold ablation



Micro groove



Narrow pitch hole



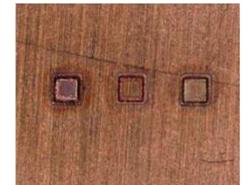
Precise engraving



Thin grooving



Precise slit



Micro welding

Laser machine

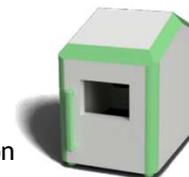
Laser micromachining lineup



- Semiconductor laser
- Wavelength : 450 nm
- Average power : 5 W
- On-axis camera
- Process development



- Semiconductor laser
- Wavelength : 808 nm
- Average power : 20 W
- On-axis camera
- Designed for production



- Nano second laser
- Wavelength : 1064nm
- 50W, 100W
- Galvo-scanner
- Table-top system

