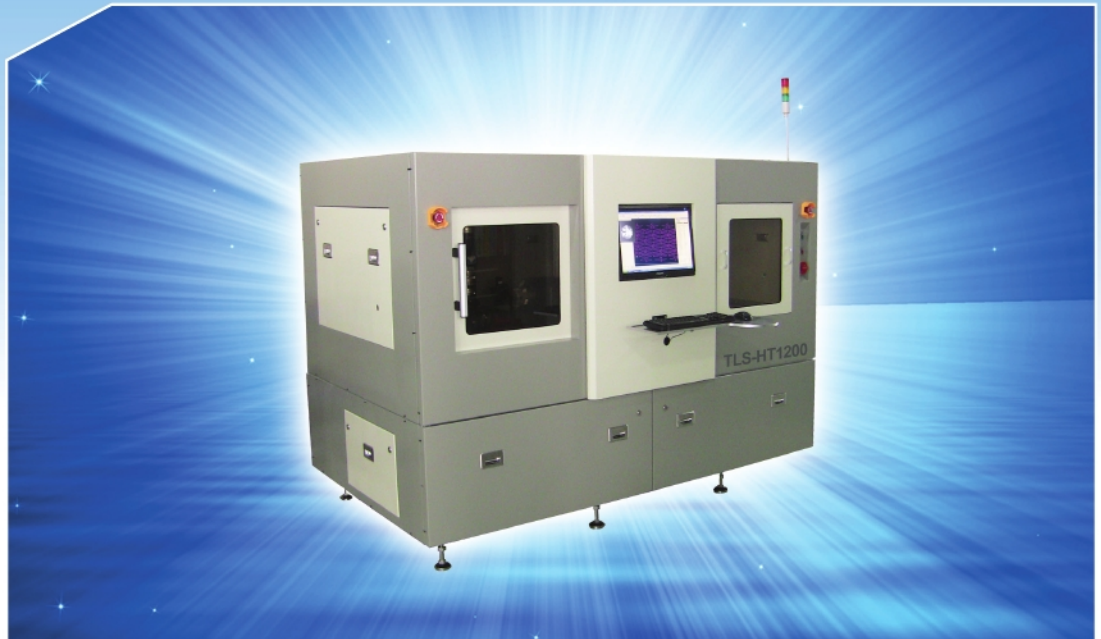


TLS-HT1200

Stent Laser Cutting Machine



Stent Laser Cutting Machine



Characteristics:

- 1、 **Flexibility for Multi-type Laser Sources:** Can use high-performance fiber lasers, picosecond lasers and femtosecond lasers, adapt to different metal and polymer tubes processing requirements, and ensure the stability and reliability of cutting quality.
- 2、 **Flexibility for Multi-type Cutting Heads:** Can use different laser cutting heads with different kerf widths and easy to be changed to another kind of laser cutting head. Can connect with a CCD camera with a port to view the cutting area, help focus alignment and to shoot the cutting process.
- 3、 **Natural Granite Platform:** The support part of the machine is made of natural granite, sports pedestal part adopts pillar structure, and all axes are mounted on the granite datum plane, which ensures the machine's high precision and stability.
- 4、 **Precise 2D Motion Platform:** The system consists of rotation axis and direct-drive, highly-precise linear axis. This design employs high-resolution linear gauge and high-precise optical encoder for position feedback, which incorporates closed-loop control. The cutting machine has higher speed, accuracy and better sealing. Lifetime use of the key components reduces the maintenance cost.
- 5、 **Tube feeding and clamping fixture design:** Adopting high precision fixture, and using the technology of control pneumatic tube feeding, a precise and reliable, fully automated process can be achieved, which can cut continuously a tube stock and many pieces of stents.
- 6、 **Compatible with dry cutting and wet cut processing:** Full machine is used sealing design. The water-resistant unit meets to catch the workpiece and stop water splash, which provides optimal processing solutions for different metal and polymer tubes.
- 7、 **Autofocus Function:** Automatic focus during the process; no additional adjustment.
- 8、 **Software:** PowerLaser is a smart laser micromachining application platform, which is user-friendly, and can support most industrial data formats.

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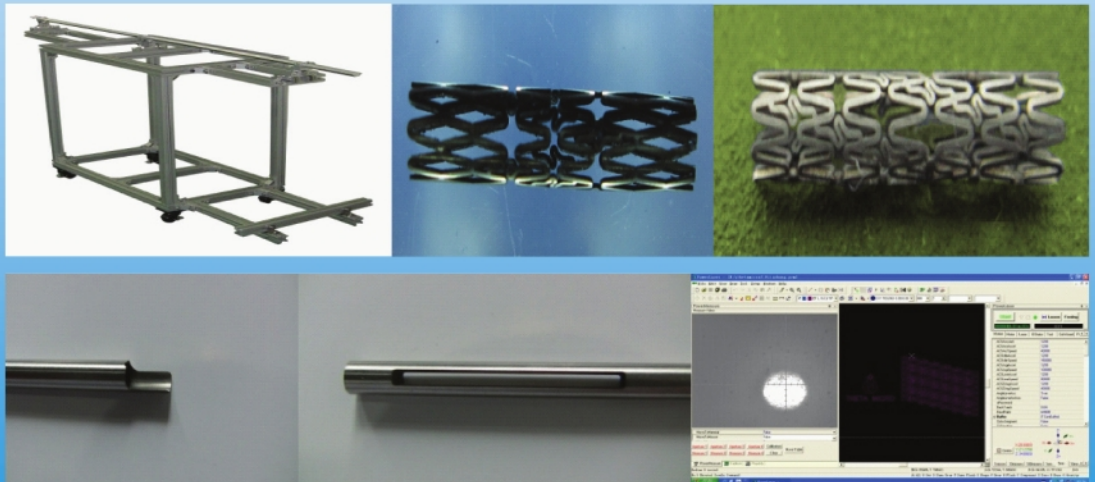
Website: www.thetalaser.com

Application Range:

- Micromachining of metal and polymer stents
- Micromachining metal and polymer thin-wall tubular materials

Technical Specifications:

Model	TLS-HT1200
Max. Running Speed	2000mm/s (X axis); 300rpm (θ axis)
Location Accuracy	$\pm 2\mu\text{m}$ (X axis); $\pm 15\text{arcsec}$ (θ axis); $\pm 3\mu\text{m}$ (Z axis)
Repeatability Accuracy	$\pm 0.5\mu\text{m}$ (X axis); $\pm 6\text{arcsec}$ (θ axis); $\pm 0.5\mu\text{m}$ (Z axis)
Min. Kerf Width	14 μm
Tube Types	High Molecular Polymer Tubes, and other nonmetal tubes; SS, Niti, CoCr, Me, Fe and other kinds of metal tubes.
Tube Length	<3m
Tube Wall Thickness	0~0.5 $\pm 0.01\text{mm}$
Tube Diameter	0.5~18 $\pm 0.01\text{mm}$
Process Range	0~200mm
Waste Tube Length	160mm (drying cutting), 200mm (wet cutting)
Laser Type	Fiber lasers, Picosecond lasers, Femtosecond lasers,
Laser Wavelength	1064nm $\pm 10\text{nm}$
Average Power	<500KHz
Laser Frequency	M2<1.5
Beam Quality	< $\pm 3\%$ (continuously running 8hours)
Input Data format	DXF, Gerber, HPGL, Sieb&Meyer, Excellon, OBD++, PCB
Input Voltage	220VAC $\pm 10\%$, 50/60Hz, 3P, 20A, 3.5KW
Compressed Air Pressure	0.8Mpa~1.0Mpa
Process Gas Pressure	<2Mpa (<20Kg)
Operating Temperature	20 $\pm 3^{\circ}\text{C}$
Operating Humidity	10%~50%RH (no condensation)
Floor Load	2000Kg/M ²
Size (L×W×H)	2250mm×1350mm×1650mm
Weight	2800Kg



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