



# YOSOON LASER EQUIPMENT CO., LTD



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## **COMPANY PROFILE**

Suzhou Yosoon Laser Equipment Co., Ltd. focuses on the application and development of the laser industry and has 10 years of laser industry experience. Our strong development and technical strength allowed Yosoon to create its own complete laser equipment production base.

Suzhou Yosoon Company integrates R&D, production, sales and service. It is an equipment factory specializing in the production of laser cutting machines, laser welding machines and laser marking machines.

Tailor-made a complete set of laser processing solutions, maintenance and full service for domestic and foreign customers.

Our aim is: "Customer first, reputation first".



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## YS-Star series single platform fiber laser cutting system>>



#### **Product introduction:**

YS-Star series laser cutting system integrates the latest generation of fiber lasers, combined with the company's independent design of independent control cabinet CNC machine tools, the machine bed adopts a high-strength integral welded body, after high-temperature secondary annealing heat treatment process, it has good rigidity and stability; The beam adopts a patented cast aluminum beam, which has the advantages of high strength, light weight and good rigidity; it is driven by imported high-speed rack and pinion transmission, with high precision and fast speed; mainly for the rapid and precise cutting of metal plates below 50mm.

#### **Technical features:**

- -Excellent beam quality, smaller focused spot, higher work efficiency and better processing quality
- -Extremely high cutting speed: 2~3 times of the same power CO2 laser cutting machine;
- -Extremely high stability: The world's top imported fiber laser is used, with stable performance, and the service life of key components can reach 100,000 hours;
- -Very high electro-optical conversion efficiency: fiber laser cutting machine has 3 times higher photoelectric conversion efficiency than CO2 laser cutting machine, energy saving and environmental protection;
- -Very low cost of use: the power consumption of the whole machine is only 20-30% of that of similar CO2 laser cutting machines;
- -Very low maintenance cost: no laser working gas; optical fiber transmission, no need for reflective lenses, which can save a lot of maintenance costs;
- -Convenient operation and maintenance: optical fiber transmission, no need to adjust;

#### **Application areas:**

It is widely used in metal crafts, hardware products, precision machinery, auto parts, glasses, jewelry, nameplates, electronics, toys, advertising and other industries.

#### Technical parameter:

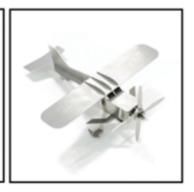
recrimed parameter.					
model	YST3015	YST4015	YST4022	YST6025	YST13025
Working area	3000*1500mm	4000*1500mm	4000*2200mm	6000*2500mm	13000*2500,mm
Laser power	≤3000W				
Host area (length, width and height)	2400*4400*1800 mm	2400*5500*1800 mm	3200*6100*1800 mm	3400*9000*1800 mm	16050*3510*180 0mm
Processing area	3020*1520mm	4020*1520mm	4020x2200mm	6020x1520mm	6020x2520mm
Z working distance	100mm				
positioning accuracy	±0.03mm/m				
Repeatability	±0.02mm				
Maximum acceleration	1.2g				
Laser medium .	Mirror-doped double-clad fiber				
Positioning speed	lOOm/min				
Linkage speed	141m/min				
cooling method	Double cycle water cooling				
Minimum cutting line width	0.1mm				
Cutting material thickness	<50mm (Carbon	steel) <50mm (s	tainless steel) <20	mm (aluminum) <	<20mm (copperノ
Power configuration	380V/50Hz (60Hz)				
Continuous working time	24 hours				

## Sample display:



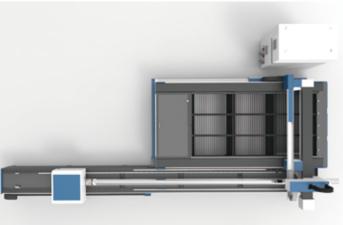






#### YS-SUPER SERIES PLATE AND TUBE INTEGRATED FIBER LASER CUTTING SYSTEM>>





#### **Product introduction:**

YS-Super laser pipe cutting machine can cut rectangular pipes, square pipes, oval pipes, round pipes and special-shaped pipes, as well as angle steel, channel steel and other profiles at high speed. It has the characteristics of high speed, high precision and high cost performance.

#### **Technical features:**

- -Independent research and development of the plate and tube integrated machine, which realizes the cutting of square tubes, round tubes and plates with one equipment, which greatly saves cost space;
- -Fully servo-driven front and rear electric clamping chuck, clamping diameter 010-320mm, the chuck uses extended jaws;
- -Save tailings, adjustable speed, convenient operation, low noise, high speed, and high precision;
- -Can cut intersecting lines, the best choice for professional production of pipes, steel structures and pipelines;

#### **Application areas:**

sheet metal processing, aviation, aerospace, electronics, electrical appliances, subway accessories, automobiles, food machinery, textile machinery, engineering machinery, precision accessories, etc.

#### Technical parameter:

model	YSP4015	YSP4022	YSP6022	
Laser	IPG、Trumpf、Raycus、KPL			
Machine size	9350x4050x2200mm 9350 x4300 x2200mm		9000x4260x 1850mm	
Processing area	4000x1500mm	4000x2200mm	6000x2250mm	
The scope of work	X 4050mmY 1530mm Z 360mm	X 4050mm Y 2240mm Z 360mm	X 6050mmY 2250mm Z 360mm	
positioning accuracy	±0.03mm/m			
Repeatability	±0.02mm			
Best speed	1.0g			
Laser medium	Mirror-doped double-clad fiber			
Positioning speed	80m/min			
Linkage speed	113m/min			
cooling method	Double cycle water cooling			
Laser output power	1500 · 6000W			
Minimum cutting line width	0.1mm			
Cutting material thickness	0.2mm-20mm			
Power configuration	380V/50Hz(60Hz)(customizable)		e)	
Continuous working time	24 hours			
Cut lettuce range	Hole diameter 15-320mm			

#### Sample display:







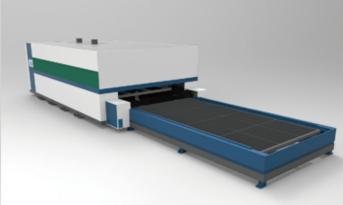






#### YS-THOR SERIES FULLY ENCIRCLED SWITCHBOARD FIBER LASER CUTTING SYSTEM>>





#### **Product introduction:**

YS-Thor series high-speed and high-power fiber laser cutting machine integrates the latest generation of high-efficiency fiber lasers. Aiming at the market pain points of low-end machine tools with slow air movement, low hole cutting efficiency, and machine tool performance that cannot show the advantages of high-power lasers, the third-generation gantry-type CNC machine tool is independently optimized and designed, with high cutting efficiency, strong ability, and low operating cost. The machine body is reliable and stable, easy to operate, and intelligent; the machine bed adopts a high-strength monolithic welded body, which has undergone multiple high-temperature annealing failure treatments, and has been precision processed by a large gantry bed with good rigidity and stability; it adopts cast aluminum beams, And through advanced heat treatment technology, it has the advantages of high strength, light weight, good rigidity, etc.; it is operated by imported high-speed rack and pinion transmission, with high precision and fast speed; the main and auxiliary bed adopts parallel exchange, which can be exchanged within 12s. High efficiency, it is a sharp tool for thin plate cutting. Mainly for high-speed precision cutting of metal plates below 50mm.

#### Technical features::

- -The machine adopts a high-strength integrally welded body, which is annealed at high temperature to eliminate tress without deformation:
- -Imported high-precision ball screw/pinion and rack drive, high-precision linear guide rail;
- -Driven by imported servo motor, equipped with imported high rigidity precision reducer;
- -The machine tool is equipped with an automatic lubrication device, and the cutting area is equipped with a dust and smoke exhaust device;
- -Laser modular structure, high performance, maintenance-free;
- -Professional cutting software is easy to operate, convenient and flexible, and can design various graphics and text cutting at will.

#### **Application areas:**

sheet metal processing, aviation, aerospace, electronics, electrical appliances, subway accessories, automobiles, food machinery, textile machinery, engineering machinery, precision accessories, etc.

#### Technical parameter:

model	YSH3015	YSH4020	YSH6022	YSH6025	YSH8025	YSH10025
Laser power	3000-15000W	3000-15000W	3000-15000W	3000-15000W	3000-15000W	3000-15000W
Processing area	3050x1550mm	4050x2050mm	6050x2050mm	6050x2550mm	8050x2550m m	10050x2550 mm
Processing plate size	3000x1500mm	4000 x2000mm	6000x2200mm	6000x2500mm	8000x2500mm	10000x2500mm
X axis travel	3050mm	4050mm	6050mm	6050mm	8050mm	10050mm
Y axis travel	1550mm	2050mm	2250mm	2550mm	2550mm	2550mm
Z axis travel	250mm	250mm	250mm	250mm	250mm	250mm
X, Y axis single axis maximum positioning speed	100m/min	100m/min	100m/min	100m/min	100m/min	100m/min
X, Y axis maximum linkage speed	140m/min	140m/min	140m/min	140m/min	140m/min	140m/min
Maximum positioning acceleration	1.5G	1.5G	1.5G	1.5G	1.5G	1.5 <b>G</b>
positioning accuracy	±0.03mm/m	±0.03mm/m	±0.03mm/m	±0.03mm/m	±0.03mm/m	±0.05mm/m
Repeatabilit y	±0.02mm	±0.02mm	±0.02mm	±0.02mm	±0.02mm	±0.03mm
Main machine weight	约 7000kg	约 9000kg	约 14000kg	约 15500kg	约 25000kg	约 29000kg
Machine size	9650x3200x230 0mm	11780x3600x24 10mm	15400x4000x24 30mm	15400x4500x26 00mm	20095x4500x26 00mm	24095x4500x26 00mm

### Sample display:









## YS-E Series Economical Fiber Laser Cutting System>>



#### Product introduction:

YS-E series single-table fiber laser cutting machine integrates the latest generation of fiber laser, combined with the company's independent design of cantilever independent CNC machine tools, the machine bed adopts a high-strength integral welded body, after high temperature secondary annealing heat treatment process, large gantry iron bed precision Processing, with good rigidity and stability; the beam adopts a patented cast aluminum beam, which has the advantages of high strength, light weight, and good rigidity; it is driven by imported high-speed rack and pinion transmission, with high precision and fast speed; mainly for below 50mm Fast and precise cutting of sheet metal.

#### **Technical features:**

- -Excellent beam quality: smaller focused spot, higher work efficiency and better processing quality;
- -Extremely high cutting speed: 2~3 times of the same power C02 laser cutting machine;
- -Extremely high stability: The world's top imported fiber laser is used, with stable performance, and the service life of key components can reach 100,000 hours;
- -Very high electro-optical conversion efficiency: fiber laser cutting machine has 3 times higher electro-optical conversion efficiency than CO2 laser cutting machine, energy saving and environmental protection;
- -Very low cost of use: the power consumption of the whole machine is only 20-30% of that of similar CO2 laser cutting machines;
- -Very low maintenance cost: no laser working gas; optical fiber transmission, no need for reflective lenses, which can save a lot of maintenance costs;
- -Product operation and maintenance is convenient: optical fiber transmission, no need to adjust the optical path.

#### **Application areas:**

It is widely used in metal crafts, hardware products, precision machinery, auto parts, glasses, jewelry, nameplates, electronics, toys, advertising and other industries.

#### Technical parameter:

model	YS-E3015			
Working area	3000x1500mm			
Laser power	1000W			
Machine size	2400*4400*1800mm			
Processing area	3020*1520mm			
Z working distance	100mm			
positioning accuracy	±0.03mm/m			
Repeatability	±0.02mm			
Maximum acceleration	1.2g			
Laser medium	Mirror-doped double-clad fiber			
Positioning speed	lOOm/min			
Linkage speed	141m/min			
cooling method	Double cycle water cooling			
Minimum cutting line width	0.1mm			
Cutting material thickness	<50mm (Carbon) <50mm (Stainless steel) <20mm (aluminum) <20mm (copper)			
Power configuration	380V/50Hz (60Hz)			

#### Sample display:









### YS-Wind Series Fiber Laser Cutting System>>



#### **Product introduction:**

As an advanced metal processing method, laser cutting technology is an advanced metal processing method. In the process of pipe processing, the automatic laser pipe cutting machine equipment can efficiently complete various types of pipe processing, and the processing effect is better than traditional technology, which has been widely recognized by various industries.

#### **Technical features:**

- -Using a bus numerical control system based on the Windows operating system, a dedicated laser pipe cutting machine platform, and integrated laser cutting control dedicated function modules, powerful functions, good man-machine interface, and simple operation; -Professional pipe cutting software is one of the core technologies of CNC pipe cutting machine to realize "full-time cutting and high-efficiency cutting". It is the fundamental guarantee for effectively saving materials and improving cutting efficiency.
- -The capacitive sensing cutting head produced by PRECITEC in Germany has high sensing accuracy, sensitive response, and the most stable and reliable performance;
- -Unique floating escrow device, while the pipe is fed and rotated, the escrow device is always in contact with the surface of the pipe. The supporting force is set according to the pipe specification to ensure effective support, prevent the pipe from sagging, and reduce the axis of the pipe when the pipe rotates. Swing, improve processing accuracy;
- -Full-automatic whole bundle feeding function, which reduces the number of operators and improves processing efficiency;
- -Automatic identification system of pipe section, which can mix and feed multiple pipes, automatically prompts the type of pipes, automatically retrieves the process library, and prompts alternative processing procedures;
- -SMC high-precision servo proportional valve, which accurately controls the air pressure of the cutting pupal aid gas and the size of the clamping force of the chuck to achieve the best cutting effect;
- -The tube linear positioning speed can reach 100m/min, and the rotary positioning speed can reach 120m/min.

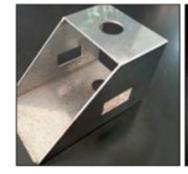
#### **Application areas:**

It is widely used in fitness equipment, construction machinery, home manufacturing and other industries.

#### Technical parameter:

Model	YS-W6522	YS-W6532	
Pipe processing range (length X pipe diameter)	6200mmx 4) 20-220mm; 6200mmxn20-150mm (Other tube types whose circumscribed circle is not more than 220mm)	6200mmx 4) 20-320mm; 6200mmxn20-200m (Other tube types whose circumscribed circle is not more than 300mm)	
Xi axis stroke	7477mm	7477mm	
X2 axis travel	595mm	595mm	
Y axis travel	400mm	370mm	
Z axis travel	400mm	400mm	
X, Y axis positioning accuracy	±0.03mm/m	±0.03mm/m	
X, Y axis repeat positioning accuracy	±0.05mm	±0.05mm	
A, B axis positioning accuracy	±30"	±30″	
A, B axis repeat positioning accuracy	±10"	±10"	
X, Y single axis maximum positioning speed	100m/m in	100m/min	
A single axis maximum positioning speed	100rpm	100rpm	
Machine weight	6800kg	7000kg	
Maximum load of a single pipe	400kg	400kg	
Most size (length X width X height)	Ilmx2.2mx3m	llmxl.3mx3m	
Number of phases/power supply quota/voltage frequency	3/380V/50HZ	3/380V/50HZ	
Total power protection level	IP54	IP54	

#### Sample display:









## **Bed features**

#### 1. Independent research and development of the body

The entire carbon structural steel dislocation honeycomb welding structure is subjected to stress relief annealing for rough processing, and then vibration aging treatment. Natural aging can completely eliminate the stress of welding and processing, and the surface roughness is good, and the non-installation surface does not require inexpensive Processing cost, high strength of the casting surface. It has good rigidity and high precision, and can be used for 20 years without deformation.



#### 2. Aviation aluminum portal

- 1. The third generation of cast aluminum beam-heavy steel die casting High mold cost but long life;
- 2. Aluminum water has good fluidity, uniform density and high strength;
- 3. Eliminate casting defects such as blisters;
- 4. Good surface roughness. The non-installation surface does not require low processing costs, and the cast skin is protected with high strength.
- 5. The die-casting wall thickness can reach 10mm without affecting the strength. Light weight, small inertia, and good dynamic performance.



#### 3. Dust isolation system

Independent research and development of forced cooling method, simple structure, thicker material, good sealing and exhaust effect, low energy consumption, improving the dust removal effect in this area, making the workpiece better, and also solving the problem of environmental pollution, providing operators and machines with Effective protection.



#### 4. Yaskawa Servo Motor

It adopts Japanese Yaskawa servo motor and adopts closed-loop control mode to ensure accurate positioning and dynamic response of the best acceleration, so that the automatic positioning mechanism can operate smoothly and reliably, and is maintenance-free.



#### 5. Automatic oil lubrication system

The automatic oil lubrication system can automatically lubricate guide rails, sliders, racks and gears. It can be set by time and travel distance. All running parts are oiled, which can prolong its service life, effectively extend the service life of the machine and reduce wear.

Super touch screen industrial computer.



## 6. The screen adopts high-definition capacitive touch screen, which is equivalent to the positioning accuracy of ipad

The powerful waterproof and breathable system makes the breathing and use of the space more smooth. The system allows the space to breathe and use it more smoothly.

#### High-definition plasma tempered glass makes the screen more refined and more comfortable

The super-large display menu layout is simple and intuitive, with built-in cutting parameters, which improves machining reliability.

The new trend of China's manufacturing industry-Raycus 12000W fiber laser.



#### 8.YYC gear rack

Standard world cutting-edge technology, YYC rack and pinion



## YS-W series economical fiber laser welding system>>

- 1. Wobble Hand-held welding head with auto wire fuction
- 2.Push-pull handle on top, easy to move
- 3.IPG Laser Source
- 4. Ultra-long Solder Connection Fiber
- 5.Seamless welding
- 6.S&A Water Cooler

