

## LASER CUTTING MACHINE

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### **DMD Series**

### **Double-Drive High Speed Fiber Laser Cutting Machine**



### Performance

DMD series fiber laser cutting machine has many unique advantages in laser cutting applications. Excellent beam quality, suitable for high-speed and high-precision cutting. Small size, higher integration. The laser output power is stable and the equipment reliability is high. High efficiency, low energy consumption and low cost. Good dynamic characteristics and high efficiency.



### **Sample Display**









### **Tubesheet Welded**

- The bed adopts tube plate combined with welding structure (Internal aircraft metal honeycomb structure, mortise and tenon structure welding)
- It has higher rigidity, torsion resistance and deformation resistance
- The unique structure design has the ability to resist the deformation caused by high cutting heat
- Stress relief annealing after welding to ensure no deformation of the bed after 20 years of use



























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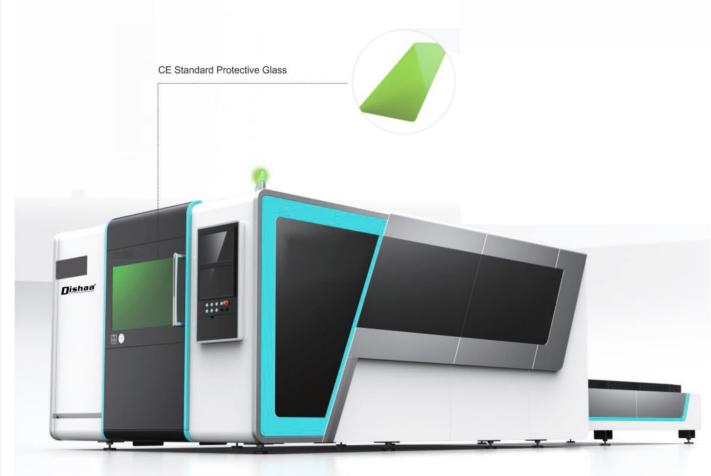
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Model	DMD-3015	DMD-4015	DMD-4020	DMD-6020	DMD-6025	DMD-8025
Cutting Range	3000*1500mm	4000*1500mm	4000*2000mm	6000*2000mm	6000*2500mm	8000*2500mm
Laser Power	< 3000W	< 3000W	< 6000W	< 12000W	< 12000W	< 12000W
Max. Positioning Acceleration	10m/s <sup>2</sup>					
Positioning Accuracy	±0.02mm/m	±0.02mm/m	±0.02mm/m	±0.02mm/m	±0.02mm/m	±0.02mm/m
Reposition Accuracy	±0.03mm	±0.03mm	±0.03mm	±0.03mm	±0.03mm	±0.03mm

<sup>\*</sup>The displayed parameters are for reference only, the actual parameter information is subject to the actual product



# DMP Series Exchange Worktable Fiber Laser Cutting Machine



### Performance

The new closed design, double table fast exchange, while processing edge cutting, fast, small slit, smooth section, easy operation, low energy consumption, suitable for large quantities of continuous processing, highlighting cutting competitive advantage.



# Dishaa

### Sample Display









### **Brand Laser Head**

- Without manual focusing, the software can automatically adjust the focus lens and control the height of the upper and lower parts, so as to realize the automatic piercing and cutting of plates with different thickness. The software can memorize the focal length of different plates, and the operation is simpler, which is ten times of the manual speed.
- The precision is 0.01mm, which is suitable for different types of plates
- Double water cooling of collimating lens and focusing lens reduces the temperature of cutting head and improves the service life of cutting head.





























Model	DMP-3015	DMP-4020	DMP-6020	DMP-6025	DMP-8025
Cutting Range	3000*1500mm	4000*2000mm	6000*2000mm	6000*2500mm	8000*2500mm
Laser Power	< 20000W	< 20000W	< 20000W	3000-20000W	3000-20000W
Max. Positioning Acceleration	20m/s <sup>2</sup>				
Positioning Accuracy	± 0.02mm/m				
Reposition Accuracy	± 0.03mm				

<sup>\*</sup>The displayed parameters are for reference only, the actual parameter information is subject to the actual product



### **DMDR Series**



### Performance

Tube sheet integrated cutting, easy to exchange, can not only cut flat plate, but also meet the needs of users to cut round tube, square tube and forming box.

- •It can cut multiple intersecting line holes with different directions and diameters on the main pipe
- •It can cut the oblique section end face at the end of the pipe
- •It can cut the intersection line end of branch pipe intersecting with annular main pipe
- •It can cut square hole, waist hole and round hole on round pipe

The steel pipe can be cut off

- •It can cut various graphics on the surface of square pipe
- •It can cut steel plates of different specifications
- •It can cut and cut holes on the forming box





### **Sample Display**









### **Brand Laser**

Fiber laser adopts air-cooled compact structure design, semiconductor fiber as laser generation medium, green environmental protection, simple mechanical structure, constant optical path, basically maintenance free, stable cutting performance.



























Model	DMDR-3015	DMDR-4020	DMDR-6020	DMDR-6020
Cutting Range	3000*1500mm	4000*2000mm	6000*2000mm	6000*2500mm
Pipe Cutting Length	6000mm	6000mm	6000mm	6000mm
Chuck Diameter	220/320mm	220/320mm	220/320mm	220/320mm
Laser Power	<6000W	< 6000W	< 6000W	< 6000W
Max. Positioning Acceleration	10m/s <sup>2</sup>	10m/s <sup>2</sup>	10m/s <sup>2</sup>	10m/s²
Positioning Accuracy	± 0.02mm/m	± 0.02mm/m	± 0.02mm/m	± 0.02mm/m
Reposition Accuracy	± 0.03mm	± 0.03mm	± 0.03mm	± 0.03mm

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### **DMPR Series**



### **Professional Laser Cutting Control System**

It adopts "CypCut plane cutting software", which is a set of software specially developed for the laser cutting industry. It is easy to use and has rich functions, which is suitable for various processing occasions. It can quickly set lead, micro-connection, compensation and other processes. With the batch modification function, it can quickly complete the setting of the whole board process. It supports floating coordinate system and workpiece coordinate system, supports photoelectric edge finding and capacitive edge finding, and quickly corrects the board. deviation angle.



### **Technical Parameters**

Project	Unit	DMPR-3015	DMPR-4020	DMPR-6020	DMPR-6025	DMPR-8025
Sheet Cutting Range	mm	3000*1500	4000*2000	6000*2000	6000*2500	8000*2500
Laser Power	w	≤10000W	≤30000W	≤30000W	≤30000W	≤30000W
Tube Length	mm	6000~12000	6000~12000	6000~12000	6000~12000	6000~12000
Cut Pipe Diameter	mm	200~360	200~360	200~360	200~360	200~360
Acceleration	m/s²	20	20	20	20	20
Positioning Accuracy	mm/m	±0.02	±0.02	±0.02	±0.02	±0.02
Repeatability	mm	±0.03	±0.03	±0.03	±0.03	±0.03

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# Dishaa®

### Laser Cutting System Shared By Plate and Tube



### **Laser Cutting Head**



Optimized optical configuration and smooth and efficient airflow design, Significantly improve cutting quality and efficiency;

Automatic focusing, reducing human intervention, focusing accuracy of 0.05mm;

Collimation adds protective lenses to effectively protect the collimating lenses;

Quick and easy replacement of protective lenses;



### **Tube Clamping Rotary Chuck**

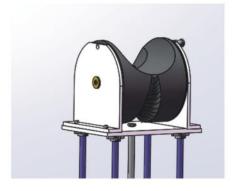


### Chuck

- ① Automatic centering of the chuck, automatic clamping, no need to replace the jaws for the full stroke
- ② The moment of inertia of the chuck is small, and the positioning accuracy is high
- The chuck has high precision for repeated card loading







### Variable Diameter Support System

The system is equipped with multiple lifting support mechanisms with rotatable pipe diameters. And realize the function of automatic lifting and changing diameter



# ASER CUTTING WITH TUBE CUTTING

### **Equipment Main Configuration List**

No.	Project	Configure Content Or Description	Place of Origin
		Rack And Pinion	Taiwan YYC
1	Machine Tool System:	Reducer	French Motoreducer
	Gantry Double Drive Structure	Beam Structure	DISHAA
		Motor System	Fuji, Japan
		Guide	Taiwan HIWIN/Japan SMG
2	Laser Generator	Maxphotonics Fiber Laser	China
3	Cooling System	Laser Supporting Water Cooling System	China
4	Cutting Head System	Raytools	China Raytools
5	Workbench Form	Fixed Workbench	DISHAA
6	Sheet Metal Form	Half-enclosed Sheet Metal Housing	DISHAA
7	Control System	BoChu	ShangHai
8	Exhaust System	Large Flow Fan	China
9	Gas Distribution System	Throttle Valve, Pressure Reducing Valve, Electric Proportional Valve	Japan, etc.
10	Computer	Dual-core Cpu 2.6ghz + Memory 1g + Hard Disk 250g + 19-inch Screen	Industrial Computer
11	The Composition Of The	Optical Fiber Cutting Head Lens	Optical fiber dedicated
11	<b>Cutting Head System</b>	Capacitive Sensor + Amplifier (Built-in) + Adjustment Box	China
		Contactors, Air Switches, Etc.	Schneider
12	Electrical System	Photoelectric Switch, Etc.	Omron
	Composition	Terminal	Weidmüller, Germany
		Tanks Chain	China
13	Appendix	Protective Lens + Single And Double Layer Nozzle +	DISHAA
		Ceramic Ring + Nozzle Connecting Line	S.O. IrVi