

ESTIMATE No.:

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E-mail:		Fax:	
Address:		Zip Code:	
City, State:		Country:	

**EAGLE -- Fiber Laser Tube Cutting Machine -- ET- 60G**



- **ET-60G** fiber laser tube cutting machine is a versatile and productive solution for cutting and hole making on square tubes, rectangular tubes, round tubes, oval tubes and profiles.
- It is widely used in kitchenware, lighting, automotive, fitness equipment, hardware and more industries requiring metal fabrication and tube processing machines.
- This laser tube cutting machine can load a single tube up to **374lb (170kg)** in weight, therefore providing a higher yield for metal fabricators.



- Sheet steel welded basement adopts annealing to relieve stress, reduces deformation and ensures good rigidity.
- It is processed by large gantry milling machine and CNC equipment, which could ensure the accuracy of basement.
- Thanks to the process of enforcement, the whole machine could resistant to high temperature and ensure the best steering stability.

## Equipment Configuration

Title	Specification	Origin
<b>Laser generator</b>	3000W Max	China
<b>Cutting head</b>	BM110-3D Raytools	China
<b>Precise rack</b>	Leitese	Germany
<b>Linear rail</b>	SMS	Taiwan (China)
<b>Reducer</b>	Faston	Taiwan (China)
<b>Servo motor</b>	Inovance	China
<b>Z axis ball screw</b>	HIWIN/TBI	Taiwan (China)
<b>Control system</b>	Cypcut	China
<b>Electrical control</b>	Schneider	France
<b>Gas control</b>	SMC	Japan
<b>Aluminum beam</b>	Junyi Laser	China
<b>Water cooler</b>	S&A	China
<b>Chuck device</b>	Kandini 230mm	China

## Technical Specifications

Title	Parameter
Effective area(L)	6000mm
Position precision	±0.05mm/m
Repeat position precision	±0.03mm
The max. speed	1.2G
Phase	3
Rated voltage/Frequency	380V/50HZ
Protect rate	IP54
Round pipe	20-230mm
Square pipe	20*20-200*200mm
Control system	Cypcut
Laser power	3000W
Min. tailing length	<150mm

## EAGLE -- Fiber Laser Pipe Cutter--ET- 60G

### FIBER LASER SOURCE:

Max Laser is a global leader of the high power laser source, it has ultra-high beam quality, output power and photoelectric conversion rate, lower maintenance cost, and consumption. It also has a series of outstanding characters: high reliability, compact structure, durability, and mobility.



The laser generator could realize the continuous processing for different metal materials with the help of 30% photoelectric transformation efficiency.

Constant BPP over full power range, excellent high beam quality and small laser facula to avoid the pollution of optical circuit.

It adopts modular design, which has a compact structure. It has a great number of advantages, like convenient settlement, low maintenance cost and energy-saving.

### **FIBER LASER CUTTING HEAD:**



The integrated and slim design enables it to obtain fast acceleration performance and cutting speed, no drift, fast response distance detection device.

Permanent monitoring goggles could completely prevent the dust in the light path, you could observe the operating status through the LED.

The bluetooth display device data and linking mechanical control could monitor the air pressure of the touching mouth (cutting gas) and the cutting head.

### **WATER CHILLER:**

Professional water cooling machine controls loop, and precise thermostat monitors the water temperature in real time and realizes fully automatic operation.

High performance and low noise, the internal water tank is made of stainless steel plate, and the external sheet metal is electrostatic sprayed to effectively prevent rust.

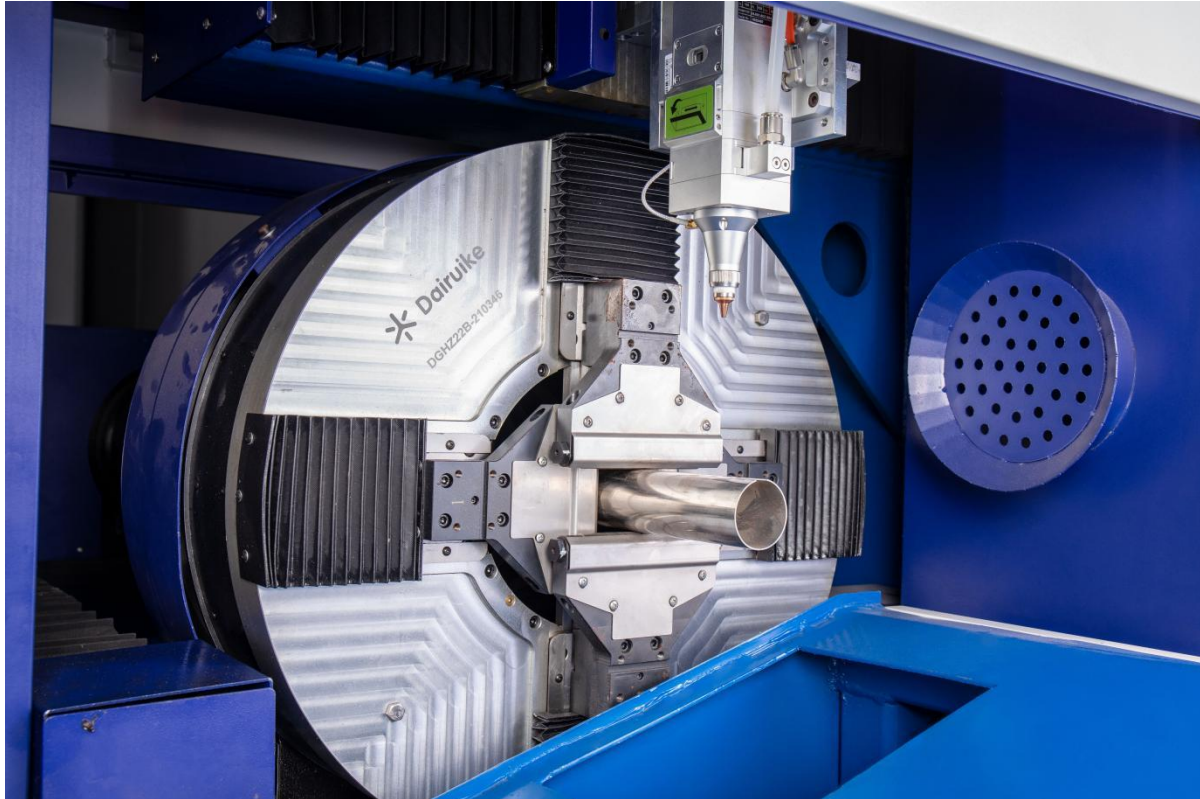
The cooling machine has a great cooling capacity and fast circulation speed. It is recommended to use pure water or deionized water to improve the efficiency and prolong the service life.



## MAIN COMPONENTS:

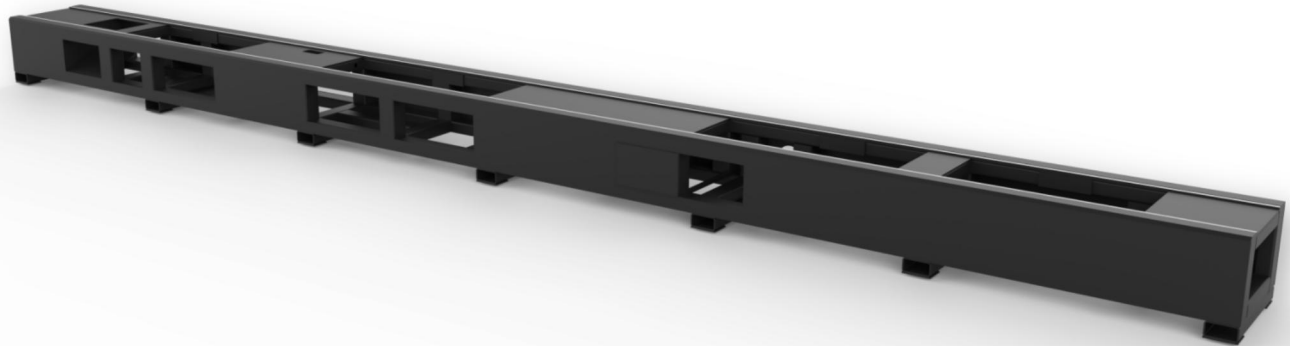


- **Wireless handle with Chinese and English language version, it could help you easily operate the machine.**
- **The handle has a magnetic back design, which can be placed on the side of the electric control cabinet or above the equipment, making the operation more intuitive and not easy to lose.**
- **Realize the lean management of factory operation from the source, reduce the process of workers returning to the front of the equipment for operation after loading and unloading, saving time and cost.**



- The use of high-precision six-stage grinding rack, low noise, good fluency, to ensure three-axis linkage operation.
- High-precision chuck is adopted, the sliding surface of the chuck is hardened and precision-ground, and directly lubricated, high-quality guarantees stable and reliable high-speed operation.
- The whole machine is equipped with the lubricating device, which can realize automatic oil filling, effectively prolonging the service life of the equipment.





- Thanks to the design of patented chamber-type smoke exhaust and dust removal device, the gas and dust could be exhausted during the process, and it could realize the green production in the true sense.

- Real-time tracking of room ventilation and dust removal, using a dedicated air duct system designed for airflow simulation, and the dust collection rate reached 75% after actual use (normally about 30%)

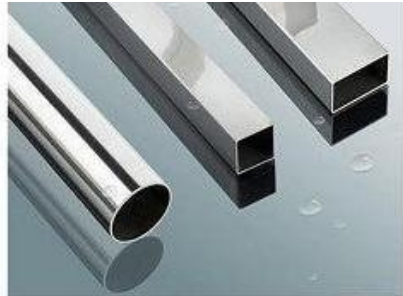
- Effectively reduce the metal dust content in the area where the equipment is used, maintain a clean space, and protect the working environment of the operator (pneumoconiosis) and the cutting head (contamination of the lens).

## Cutting capacity

Material	Thickness (mm)	Gas	1000W	1500W	2000W	3000W	4000W	6000W
			speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
SS	1	N <sub>2</sub>	18~20	25~30	25~35	25~40	30~54	30~60
	2	N <sub>2</sub>	5~6	8~10	10~12	18~20	18~24	30~36
	3	N <sub>2</sub>	2.8~3.5	4~4.5	4~6	8~10	10~15	15~20
	4	N <sub>2</sub>	1.2~1.5	1.5~1.7	2.8~3.2	3~4	7~8	11~14
	5	N <sub>2</sub>		0.8~1	1.6~2	3~4	5~5.5	7~8
	6	N <sub>2</sub>		0.8	1~1.2	2.2~3	3.6~4	5~6
	8	N <sub>2</sub>			0.5~0.6	1.2~1.5	1.5~2	3.8~4.2
	10	N <sub>2</sub>				0.5~0.8	1.2~1.6	1.8~2.2
	12	N <sub>2</sub>					0.8~0.85	1.2~1.5
	14	N <sub>2</sub>						0.9~1
16	N <sub>2</sub>						0.65~0.75	
Material	Thickness (mm)	Gas	1000W	1500W	2000W	3000W	4000W	6000W
			speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
CS	1	O <sub>2</sub>	14~16	22~24	20~25	25~30	35~40	40~50
	2	O <sub>2</sub>	6~8	8~10	13	13	20	25~30
	3	O <sub>2</sub>	3.4~3.7	3.6~3.8	4~4.2	3.5~4.5	4.2~4.5	4~4.5
	4	O <sub>2</sub>	2	2.5	3.5	3.5	3.8	3.8
	5	O <sub>2</sub>	1.6	2	2.5~3	2.5~3	2.5~3	3.2~3.7
	6	O <sub>2</sub>	1.4	1.4~1.5	2~2.5	2.2~2.8	2.4~2.8	2.8~3.4
	8	O <sub>2</sub>	1~1.3	1.2~1.3	1.2~1.5	1.6~2	1.8~2.1	2.5~2.8
	10	O <sub>2</sub>	0.8~0.9	1.0~1.1	1.1~1.2	1.1~1.4	1.2~1.4	1.4~2.2
	12	O <sub>2</sub>		0.8~1	0.9~1	0.9~1.1	0.9~1	0.9~1.8
	14	O <sub>2</sub>		0.6	0.8~0.9	0.8~0.9	1	0.8~1.3
	16	O <sub>2</sub>		0.5~0.7	0.7~0.8	0.7~0.8	0.7~0.8	0.7~1
	18	O <sub>2</sub>				0.65~0.7	0.65~0.7	0.65~0.75
	20	O <sub>2</sub>				0.55~0.65	0.55~0.65	0.6~0.7
	25	O <sub>2</sub>						0.4~0.5

Material	Thickness (mm)	Gas	1000W	1500W	2000W	3000W	4000W	6000W
			speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
Al	1	N <sub>2</sub>	15-20	18~20	18~24	25~40	25~40	30~50
	2	N <sub>2</sub>	5~5.5	6~8	7~9	11	15~18	20~30
	3	N <sub>2</sub>	1.2~1.4	2.5~3	3.3~4.2	8~10	8~10	12~16
	4	N <sub>2</sub>		0.8~1	1.5~2.5	4	4.5~5.5	10~12
	5	N <sub>2</sub>			1.2~1.5	1.5	2~3	6~10
	6	N <sub>2</sub>				1.6~2	1.5~2	4~5.5
	8	N <sub>2</sub>						1.2~2
	10	N <sub>2</sub>						0.8~1
	12	N <sub>2</sub>						0.5~0.7
	14	N <sub>2</sub>						0.4~0.6
Material	Thickness (mm)	Gas	1000W	1500W	2000W	3000W	4000W	6000W
			speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
Brass	1	N <sub>2</sub>	8~10	12	18~24	25~35	25~35	35~50
	2	N <sub>2</sub>	2~2.5	5~6	5~7	12~15	12~15	20~30
	3	N <sub>2</sub>	0.8~1	1.8~2	2~3	6~8	6~8	10~16
	4	N <sub>2</sub>				3~4	3~4	6~8
	5	N <sub>2</sub>					2~3	4.5~6.5
	6	N <sub>2</sub>						3~4
	8	N <sub>2</sub>						1.2~1.8
Material	Thickness (mm)	Gas	1000W	1500W	2000W	3000W	4000W	6000W
			speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)	speed (m/min)
Red copper	1	O <sub>2</sub>		6~8	10~12	15~20	18~20	25~35
	2	O <sub>2</sub>		1.4~1.6	5~6	8~10	10~12	12~15
	3	O <sub>2</sub>						2~3
	4	O <sub>2</sub>						1~2
	5	O <sub>2</sub>						1~2
	6	O <sub>2</sub>						0.6~0.8

**SAMPLE DISPLAY:**



**WARRANTY:**

**Mechanical, electronic components and Fiber Laser Source: 2 years against manufacturing defects.** Parts and components damaged due to improper usage and operation of the equipment are not covered under warranty. The complete warranty shall be available once the customer has accepted and received the training program and the purchase agreements are signed by the customer.

**6 months against manufacturing defects.** Laser optical components, like focus lens are considered consumables and are therefore not covered during the warranty period.

In order to ensure the customer experience, the best performance of the equipment and the complete warranty policy of our company, we urge following the instructions on the Safety Notice in the Operation Manual and follow the instructions of our technician on the installation of the laser machine. Failure to do so may render the warranty null and void.

**Installation and Training:** Technical support is offered via telephone, e-mail and other means. Installation and Training will be on-site. 18 hours of training (3 days of 6 hours) in the Installation Maintenance & Operation of the Laser Machine.

For any additional questions please do not hesitate to take contact us. We will do our best to provide any support.

**Cordially,**



**\*The pictures are for reference only, the details of the site may change, you can customize the machine according to your requirements!**