

## **EAGLE – Fiber Metal Cutting Machine – LF1530**



### **FIBER LASER SOURCE – ADVANTAGES - NO ALIGNMENT REQUIRED**

The LF1530 is a perfect standard fiber laser cutting machine, at the same time, it's also the industry explosion product. It is a necessary machine for thick metal plate processing, with stable performance and easy operation, which can improve the overall processing productivity and product accuracy. In addition, it adopts a high-end configuration, details show the advantages of the product, creating low pollution and low noise production environment for you.

#### **Specific Advantages**

- (1) Sustain improving and flexible fiber laser cutting machine with mature technology.
- (2) Keep classic model, the best combination of high quality and low cost.
- (3) High photoelectric conversion efficiency, maintenance-free optical path, fully upgraded human machine interface cutting parameter library.

(4) High-speed cutting of metal plate, intelligent operation interface can provide the best application solution.

**TECHNICAL SPECIFICATIONS**

<b>Model</b>	<b>LF-1530</b>
<b>Laser power</b>	<b>20000W</b>
<b>Working size</b>	<b>2600x12200x100 mm (102.4x480.3x3.9inch)</b>
<b>Metal sheet size</b>	<b>2600x12200x100 mm (102.4x480.3x3.9inch)</b>
<b>Travel speed</b>	<b>120m/min (394feet/min)</b>
<b>Accelerated</b>	<b>1.2G</b>
<b>Positioning accuracy</b>	<b>±0.05 mm/m (±0.0006inch/feet)</b>
<b>Repeatability</b>	<b>±0.03 mm/m (±0.00036inch/feet)</b>
<b>Load weight</b>	<b>1200 kg (2646lbs)</b>
<b>Machine weight</b>	<b>4000 Kg (8818lbs)</b>
<b>Machine dimension</b>	<b>32000x4800x2250mm(105x15.8x7.4feet)</b>
<b>Electricity</b>	<b>480V±5%/ 50-60Hz/100A</b>
<b>Power consumption</b>	<b>≤90 kw</b>
<b>Max. Plate Cutting thickness</b>	
<b>Carbon Steel</b>	<b>60 mm</b>
<b>Stainless Steel</b>	<b>40 mm</b>
<b>Aluminum</b>	<b>35 mm</b>
<b>Red copper</b>	<b>20 mm</b>
<b>Brass</b>	<b>12 mm</b>

**EQUIPMENT CONFIGURATION**

<b>Gear rack</b>	<b>Taiwan - Hiwin</b>
<b>Reduction gears</b>	<b>Japan - Shimpo</b>
<b>Motor system</b>	<b>Japan - Yaskawa</b>
<b>Motion System</b>	<b>Taiwan - Hiwin</b>
<b>Cutting head</b>	<b>BOCI</b>
<b>Control system</b>	<b>HypCut</b>
<b>Valve system</b>	<b>Japan - SMC</b>
<b>Electricity system</b>	<b>Germany - Schneider</b>
<b>Photoswitch</b>	<b>Japan - Omron</b>
<b>Industrial Computer</b>	<b>Lenovo - Advantech</b>
<b>Water Chiller</b>	<b>Tongfei</b>

**EAGLE –Fiber Metal Cutting Machine – LF1530**

**1. 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.

High Power Multi-Module Laser series adopt water cooling and modular design. The compact design, highly-integrated system, free of maintenance, high reliability, high beam quality and high beam stability are the ideal laser source for laser cutting, laser welding, laser cladding, surface heat treatment, etc. With the fiber laser QBH output head, the laser source can be integrated with robot or machine tool to do application in laser cutting field, new energy, construction machinery, automobile parts, aerospace, etc.

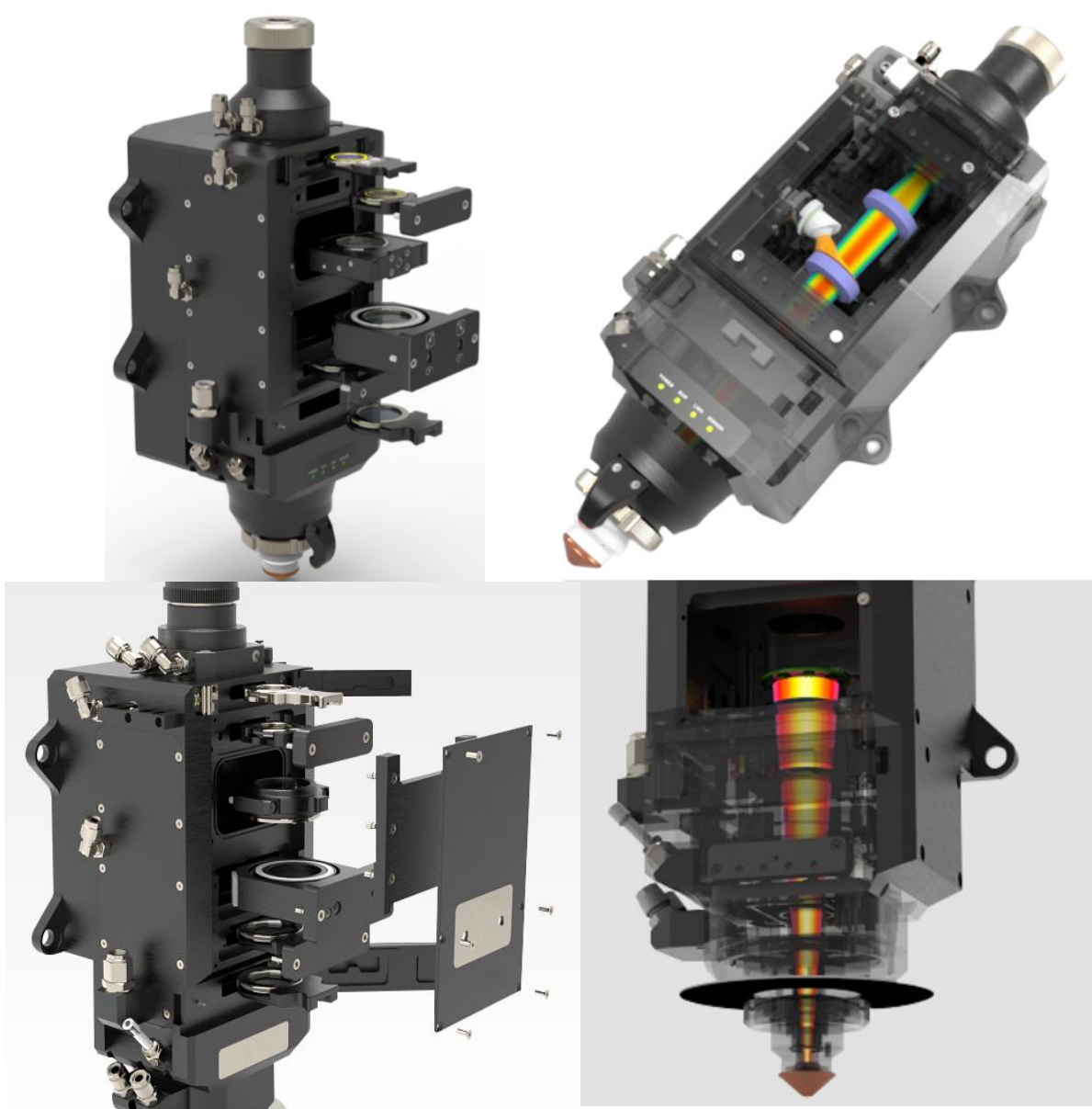


<b>Laser power</b>	<b>20000-30000w</b>
<b>Wavelength</b>	<b>1080±5 nm</b>
<b>Cable length</b>	<b>20m or Customized</b>
<b>Interface</b>	<b>LOE</b>
<b>Guide beam</b>	<b>Red</b>
<b>Polarization</b>	<b>Random</b>
<b>Power Tunability</b>	<b>10%~100%</b>
<b>Modulation Frequency</b>	<b>≤50 kHz</b>
<b>Weight</b>	<b>815(±5) kg</b>
<b>Voltage</b>	<b>3P, 400-480, 50/60 Hz</b>
<b>Power consumption</b>	<b>&lt; 60 kw</b>
<b>Storage temp.</b>	<b>-10~+60°C</b>
<b>Working temp.</b>	<b>10~40°C</b>
<b>Relative Humidity</b>	<b>10%~80%</b>

## **2. FIBER LASER CUTTING HEAD:**

BLT 6 Series smart cutters are especially developed for ultra-high power laser equipment (max of 40kw). Brand new beam path design and optimized optical lens bring you great performance with stable cutting, simple installation and setup, and double dust prevention. The Smart Piercing and Auto Recut features,

meeting the highly demanding standard of air as well as N2 high-power cutting, considerably improve efficiency and yield.



### **3. SOFTWARE AND WORKING CONTROL:**

The LF1530 Cutting System FSCUT8000 is including and for an independent work is equipped with an Industrial Controlling Computer (ICC). The operator can work on the station itself as a completely computer system. Inside the ICC, powerful laser control system – Hypcut has been preinstalled and ready to use. The operator is allowed to design the graphic through this software or use the graphic library coming along with the software. It also supports ai, dxf, plt, gerber and other graphic data formats, and accepts the International Standard G Code generated by MATER CAM, Type3, WENTAI and other software.

FSCUT8000 is EtherCAT bus system designed for ultra high power fiber laser above 8KW, featured by out of box service, easy to install and adjust, full solution functions. It supports customization, automation and informatization solutions, is the leading edge EtherCAT laser cutting control system on the market.



#### **4. EASY MAINTENANCE AND SAFE LASER SYSTEM:**

Fiber energy is transferred from the laser source to the cutting head, through flexible optical fiber cable. It doesn't require mirrors for optical reflection; nor is optical path alignment required. Also, the lens at cutting head is sealed inside the mechanism chamber. Therefore, no dust or particle will be accumulated on the lens after jobs. Our Fiber Cutting laser system has eliminated the trouble of optical light alignment and removed the optical mirrors. That saves a lot of money in consumable parts and labor.

#### **5. EMERGENCY STOP BUTTON AND SAFETY SENSORS:**

Safety is the priority in our mind. LF1530 is an open flatbed working station. Our laser machines are equipped with security sensors and safety features disabling the equipment in case of inappropriate use or unsafe operational conditions, as well as the ability for the machine operator to IMMEDIATELY and completely shut down the entire machine in the event such a situation or circumstances arise. There is an emergency stop button right on the ICC monitor when user needs to. Other than the button, LF1530 also comes with a remote controller which allow operator to control the location of laser head and starts the job through the controller.

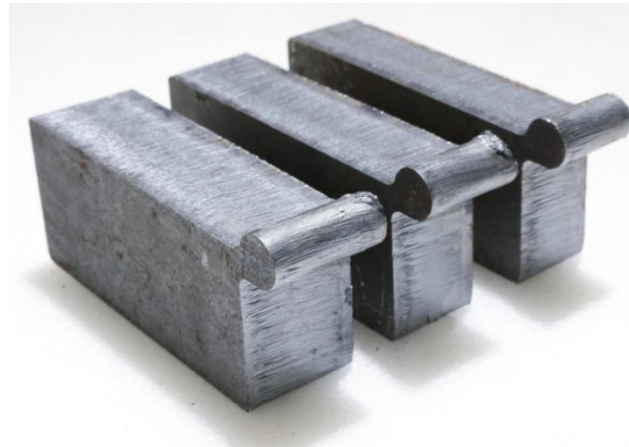
#### **6. WATER CHILLER INCLUDED:**

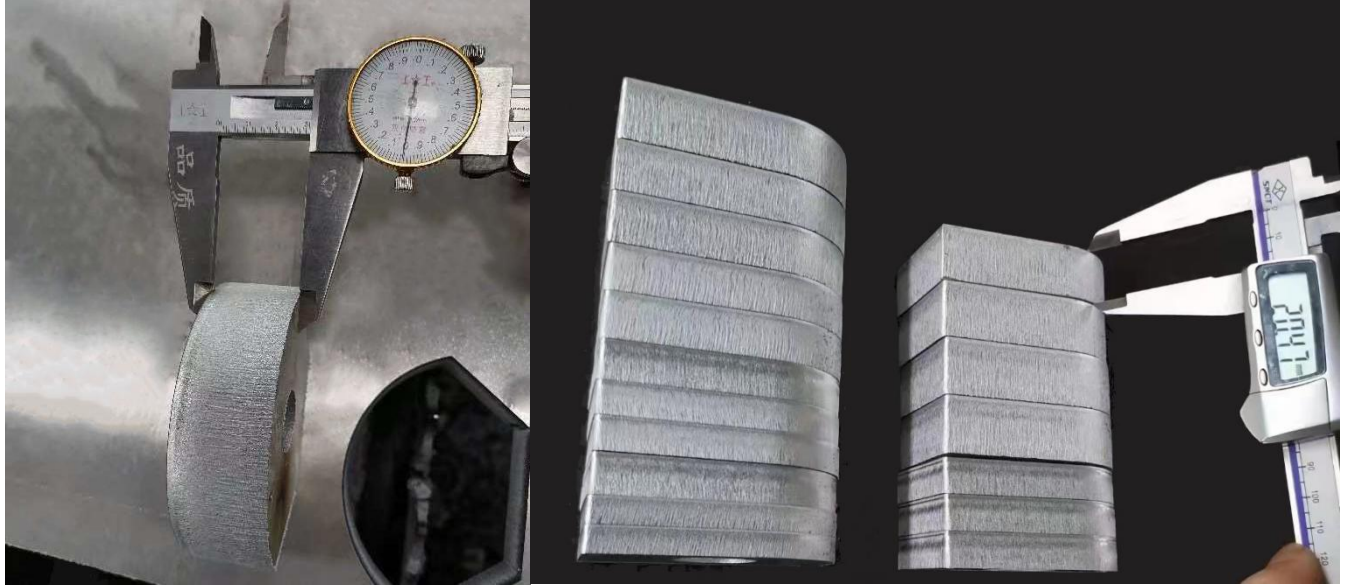
LF-1530 Fiber Cutting Machine is using water cooling laser source. Each machine is equipped with one water chiller to keep the unit under best performance.



**7. APPLICATIONS AND SAMPLES:**

Application Industries includes Metal cutting, electrical switch manufacturing, elevator manufacturing, household appliances, kitchen utensils and appliances manufacturing, tool processing, and other mechanical processing manufacturing industry.





## 8. EQUIPEMENT INSTALLATION REQUIREMENTS:



### **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,**

**MACHINING CAPACITY for Aluminium-20000W**

Material	Thickness(mm)	Speed (m/min)	Laser power(W)	Gas	Air Pressure	Nozzle	Focus Position	Height
Aluminium	1	60-80	20000	N2	8	3.0S	0	0.5
	2	50-60			8	3.0S	0	0.5
	3	30-45			8	3.0S	-1	0.5
	4	30-40			8	3.0S	-1	0.5
	5	20-25			10	4.5S	-2	0.5
	6	15-22			10	4.5S	-2	0.5
	8	14-20			10	5.0S	-3	0.5
	10	8.0-10			10	5.0S	-3	0.5
	12	7.0-8.0			10	5.0S	-4	0.5
	14	4.0-6.0			12	5.0S	-5	0.5
	16	3.0-4.5			14	5.0S	-6	0.5
	18	2.3-3.0			14	5.0S	-6	0.5
	20	2.0-2.3			16	5.0S	-7	0.5
	25	1.0-1.5			18	6.0S	-8	0.5
	30	0.6-0.8			20	6.0S	-8	0.5
35	0.4-0.7	25	6.0S	-8	0.5			