

**Model: LCM-JSQG-13090 (650W)**

**Name: Steel / SS Metal Laser Cutting Machine**



Overview	Specifications	Packing list	Warranty	PDF	Video
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**Applicable Metal:** brass, carbon steel, stainless steel, copper, titanium and ceramics etc.

This metal laser cutting machine has great advantages in metal - cutting. It will work immediately when switched on, which is energy - saving and quite convenient to operate.

The metal laser cutter is mainly used for the thin stainless iron & steel cutting in the sheet metal industry and the letters' cutting (Like stainless steel and titanium letters) in the sign industry.

## Main Configuration

Maximum Working Area: 51.2" x 35.4" (1300mm x 900mm)

Maximum Cutting Speed: 1.2" (30mm) / s (Software control) (Speed adjustable)

Laser Power: YAG 650W

Maximum Cutting Thickness: 6mm stainless steel, 8mm steel, 3mm aluminum and brass.

Power Supply: 3PH - AC380V  $\pm 10\%$ , 50Hz / 60Hz

The cutting line width can reach 0.1mm - 0.8mm. The laser wavelength is 1064nm.

Laser pulse width can be 0.02 - 0.15ms (Continuous adjusting). Laser pulse frequency is 1 - 500Hz (Continuous adjusting).

It adopts the imported **Taiwan precision ball screw transmission system**, which assures the laser is high speed, smooth and no shake. So the machine has features of narrow kerf width, high process speed, and high precision.

**The core laser parts** are imported from Germany or USA. We adopt laser power supply capacitor, IGBT and imported condenser in order to assure machine can be running for long - term.

Adopts servo motor driving system, it makes the machine stable and high speed.

Adopts high quality water cooling system, with dust proof device and air conditioning, which make the machine running stable.

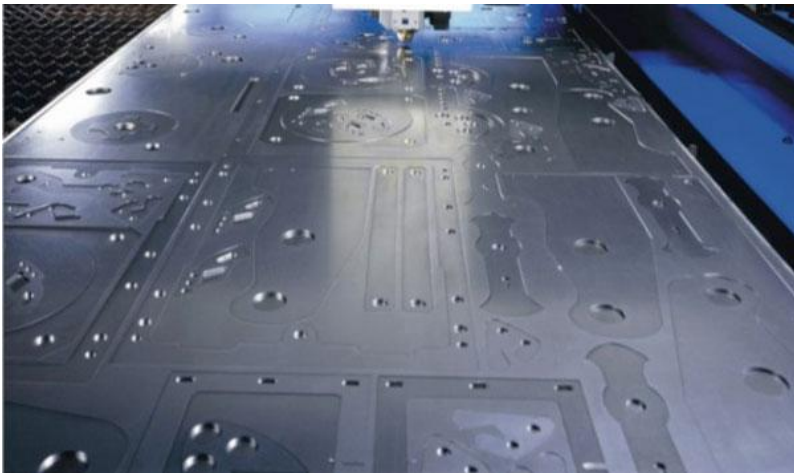




## Features

- ◆ The steel / steel stainless metal laser cutter is updated machine.
- ◆ It adopts ND: YAG medium, special designed flying light route system, high precision ball screw gantry structure working table

- ◆ Stable light route with high precision and quick process speed.
- ◆ The cutting machine can achieve smooth edges, with few hot distortion and small cutting slot from the straight side.
- ◆ It adopts CNC controlling technology with professional software, which can supports AI, BMP, PLT, DXF file formats, and it is easy to operate.
- ◆ Gantry design. The short distance between the material and the optical laser let it does not lose energy during transmission, ensuring the same result in the entire cutting area.
- ◆ Laser cutting is a mode of non - touch processing. The size of the laser spot is smaller than 0.1mm after focus, so there is no design limit on the laser process.
- ◆ The cutter can achieve a clean and smooth cutting edge so you don't need to post process the material after cutting.
- ◆ The LCD screen control system makes it is easy to operate, just need to connect the computer with the machine using a USB cable and download the images.
- ◆ The laser lens choose USA high focus, high penetrability, high quality focus lens.



**Large format metal plate cutting**



**Automatic typesetting**

## Metal Laser Cutter - Wearing parts

Specifications	Item	Qty(pc)	Unit price(\$)	Price(\$)
	laser gun set	1	\$499	\$499
45 degree, 1064nm, Dia. 48 x 4	All - mirror	1	\$160	\$160
	Half - mirror	2	\$160	\$320
Dia. 20 x 4	Output mirror	1	\$160	\$160
3.5X	Expander lens	1	\$339	\$339
	Filter element	1	\$20	\$20
	Xenon lamp tube 250W	8	\$140	\$1120
Dia. 48 F=80	Quartz protection glasses	8	\$14	\$112

**P. S.: You'd better buy these wearing parts together with machine.**

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### Specifications

Model Name		<b>LCM-JSQG-13090 (650W)</b>
Travel Method		Stationary table, Gantry style
Control Method		X, Y axis motorized controlled
Travel Amount	X-axis	1300mm (51.2")
	Y-axis	900mm (35.4")
	Z-axis	18mm (It's standard) customized by requirements

Feed Rate	X-axis	2500mm (98") / s <sup>2</sup>
Rapid Speed	Y-axis	2000mm (79") / s <sup>2</sup>
	X-axis	800mm (31.5") / s
	Y-axis	600mm (23.6") / s
Maximum Worksheet Loading Capacity		300kg
Repeatability Positioning Accuracy		0.01mm
Least Command Increment		0.002mm
Drive Feed Method		Position control / AC servo motor
Machine Table Height		600mm (23.6")
Power Supply (Only for machine)		380V, 50Hz
<b>Laser Oscillator</b>		
Laser Oscillation Method		Lamp pump YAG
Laser Output	Output (Rated)	650W
	Stability	3%
	Frequency	1 - 300HZ
Output Beam	Wavelength	1064nm
	Mode	Multi mode
	Diameter	0.1mm after focus
<b>CNC Control Unit</b>		
CNC Unit		Yaskawa AC servo motor
CNC Control Method		Semi - close loop control
Control Functions		X, Y Controlled (Simultaneously controlled)
Input Method		USB, Net port, memory stick
Least Input Increment		0.02mm

Minimum Position Detection Accuracy		0.02mm
Program Storage Capacity		128M flash memory in machine
Operating Modes		Windows xp support
Display Function		Cutting process, Position information, Parameters, Design monitor
I/O Interface		RS232C
Display		5 inch screen display

### 500W / 650W Metal Laser Cutter Maximum Cutting Thickness and Speed

Material	Cutting Thickness	Punching Dia.	Max. Cutting Speed (650W)	Min. Line Width	Auxiliary Gas
Stainless Steel	1mm	0.2mm	24-30mm/s	0.3mm	Air
	2mm	0.3mm	15-20mm/s	0.4mm	Air
	3mm	0.4mm	10-15mm/s	0.5mm	Air
	4mm	0.5mm	6-9mm/s	0.5mm	Air
	5mm	0.6mm	5-8mm/s	0.6mm	Air
	6mm	0.7mm	3-5mm/s	0.8mm	Air
Steel	1mm	0.2mm	25-30mm/s	0.3mm	Air
	2mm	0.3mm	18-22mm/s	0.4mm	Air
	3mm	0.4mm	13-17mm/s	0.5mm	Air
	4mm	0.5mm	10-15mm/s	0.5mm	Air
	5mm	0.6mm	6-10mm/s	0.5 - 0.8mm	Air
	6mm	0.7mm	4-7mm/s	0.6 - 0.8mm	Air
	8mm	1mm	1-3mm/s	1 - 0.8mm	Air
Aluminum	1mm		15-20mm/s		Air

	2mm		10-15mm/s		Air
	3mm		4-8mm/s		Air
	1mm		15-20mm/s		Air
Brass	2mm		10-15mm/s		Air
	3mm		3-7mm/s		Air

**Remark: Use Oxygen, the cutting speed can improve up to 20 - 30%.**

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**Terms & Condition of Purchase:** After we receive PO from customer with stamp, we give PI for customer.

**Lead Time:** After receiving customer's deposit, within 20 - 30 days.

**Wooden Box:** There are total three wooden boxes.

<b>Machine Dimension</b>	121" x 87" x 52" (3060mm x 2200mm x 1330mm), main body 59" x 34" x 55" (1500mm x 860mm x 1400mm), water chiller 34" x 30" x 75" (860mm x 770mm x 1900mm), power cabinet
<b>Machine Weight</b>	1430Lb (650kg), main body 462Lb (210kg), water chiller 352Lb (160kg), power cabinet
<b>Package</b>	Fumigation free package
<b>Packing Size</b>	124" x 91" x 60" (3160mm x 2300mm x 1530mm) , main body 62" x 37" x 61" (1580mm x 940mm x 1560mm) , water chiller 37" x 33" x 81" (940mm x 850mm x 2050mm) , power cabinet
<b>Gross Weight</b>	1650Lb (750kg), main body 561Lb (255kg), water chiller 440Lb (200kg), power cabinet





## Accessories



## Optical lens



**Water chiller**



**Fume extractor**



**Power cabinet**



**Wooden package**

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Comprehensive guarantee for one year except the wearing parts

24 - hour technical support by email or calling

User - friendly English manual for machine using and maintaining

### **Spare Parts Supports**

We provide all replacement parts for all machines we sold, if you have a parts that break beyond warranty period, you could order it directly from us at reasonable prices. We would post the new parts with step by step instructions in PDF format on how to replace the parts to you.

**If you want to buy any parts from us, please tell us the names or pictures of the parts.**

### **Satisfaction Guarantee**

For the items other than consumable products sold via [www.Sign-in-China.com](http://www.Sign-in-China.com), we provide 12 months warranty after shipment. All the extra parts for equipment can be purchased from [www.Sign-in-China.com](http://www.Sign-in-China.com). Further, for our VIP customers, the period of warranty shall be extended to 18 months.

We offer 14 days 100% satisfaction guarantee on all our machines. If you are not satisfied after receiving an item, Sign-in-China.com promises that, within 14 days after actual delivery of such an item, you are allowed to return the item to us and get complete refund, provided the returned item does not affect its subsequent re - selling and you also undertake the charge of returning delivery.

**More information, please look at the document of [Training & Warranty & Service Policies](#).**



## Samples Display



Metal round pipe cutting



Elevator panel cutting



Metal components cutting



Metal plate cutting



Case and cubical cutting



Kitchen ware cutting