

# HIGH PRECISION LASER CUTTING MACHINE L6 SERIES

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XYZ adopt TAIWAN high  
precision ball screw  
transmission, Taiwan linear guide

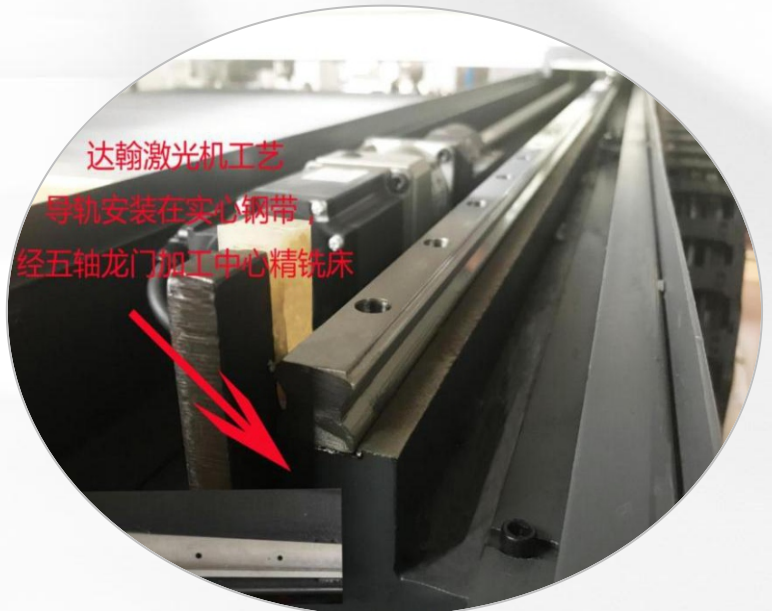


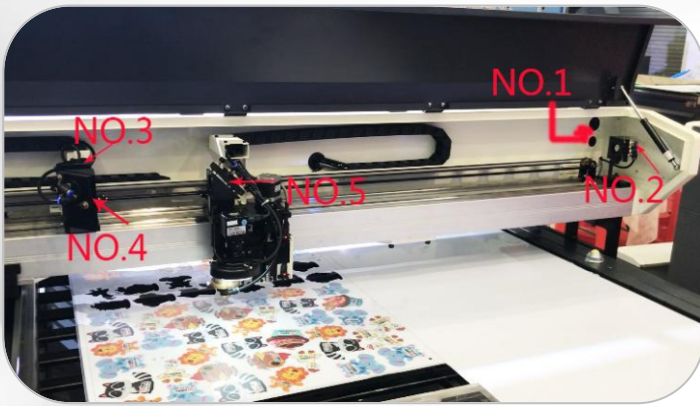
adopt Japanese Mitsubishi servo  
motors & drivers.

High speed, high precision

**MACHINE BODY technology:**

- 1) Machine body baked at 600°C heat treatment then a further 24 hours cooling in the oven; ensure to last 20 years without the table twisting making this machine a viable long term investment.
- 2) Solid steel as base, and finish-milling by 5 axes CNC center, very high precision
- 3) Linear guide installed on this solid steel base, hardly no gap; make sure Y axis more stable and higher accurate, **no-deformation**.

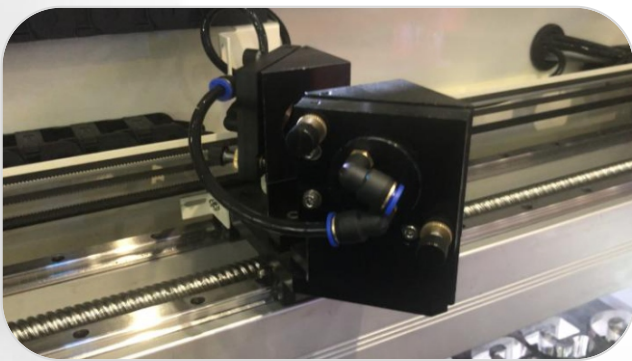




4. **Constant light path Patent design** , composed of **five** reflective mirrors: the distance between laser beam output to the focus head is always the same, whatever the machine move. **More advanced than common light path composed of 3 mirrors or fake 5 mirror light path. .**



5. L6 adopts **Dielectric film high reflection mirrors, big size  $\Phi = 38\text{MM}$** . Compare to common Si or Mo mirror of size 30mm diameter, Our factory's reflections mirrors has advantages of well light reflection, long life.

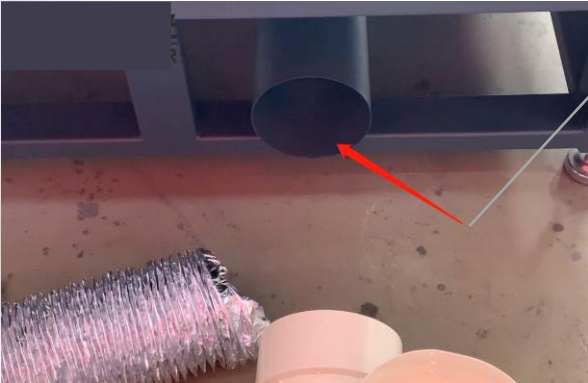


6. Each mirror holder has **air cooling device**, help to reduce the heating phenomenon, prolong the life of mirrors, also improve the quality of light path.



7. Machine body is strong enough. It can hold any type of laser tube. **There are American metal tube, Chinese glass CO2 150W single tube, 300W folded laser tube, or 400W beam combination tube.** Whatever which type of tube, we provide very good after-sale guarantee.

## Strong Smoke exhaust design



- ① Standard down smoke exhaust design  
3 sides of machine body have vent, with  
powerful exhaust fan

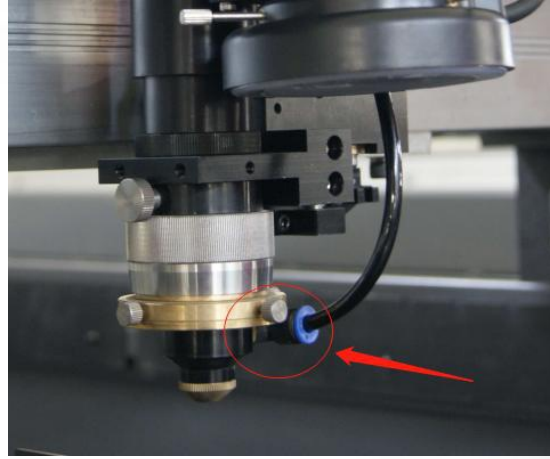


- ② optional choose upper smoke  
exhausting design, much better to  
discharge smoke



- ③ optional choose head smoke  
exhausting design, discharge smoke  
very well.

## Full range of blower design



Much better to cool while cutting



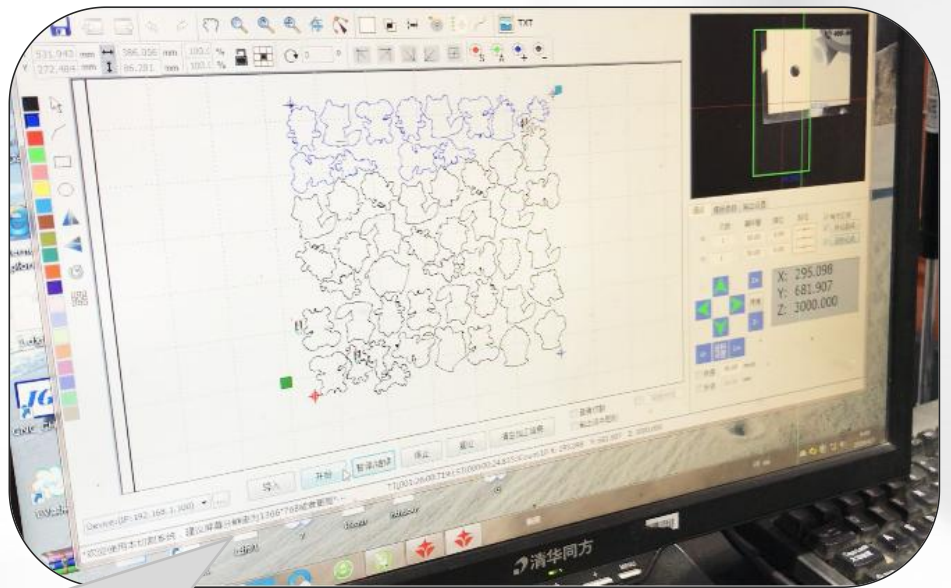
Side blowing  
Reduce the material cutting  
overheating fire phenomenon.  
For the bottom of the painting of  
acrylic cutting, the effect is better.

## Computer desk (Computer is not included.)



Convenient to place  
the computer  
Neat and secure.

## CCD Camera System



This machine original optional equips CCD camera system, for contours cutting.

It is matched to UV printer. Customer just need to print 4 mark points on the sheet, the machine can automatically read the points and recognize the pictures place, and cut what you want to cut. It is very useful.

## L6 parameter and main configuration

ITEM NO.	L6-1325
Max working size	125x250 CM
Overall size(CM)	365×199×130
Laser Power	300W(folded laser tube)
Positioning accuracy	±0.01mm
Cutting thickness (150W)	Acrylic ≤ 30mm; Wood/MDF≤ 8mm; plywood≤ 15mm, etc.
Cutting thickness (300W/400W)	Acrylic≤ 40mm; Wood/MDF≤ 15mm; plywood≤ 20mm, etc.
Electricity	220V/50HZ/60HZ, ± 5%; Exhaust fan: 380V, 3ph.
Environment	Temperature 0-40 °C, Humidity ≤ 80%, no condensation.
Electrical consumption	150W: 2KW; 300W : 3.5KW
Weight	900KG
Voltage stabilizer	200W needs 5KVA Voltage stabilizer; 300W-400W : 10KVA Voltage stabilize. Prepared by users themselves.
Unload way	Forklift with extension jib, prepared by users themselves.
CCD Contours cutting	<b>Standard equiped</b>
Machine body	Industrial machine body, Precision machined
Drive	XYZ High precision ball screw transmission & Linear guide
Servo	Japanese Mitsubishi servo motors.
Light path	Constant light path composed of five reflective mirrors
Reflecting Mirror	Dielectric film high mirrors and lens from USA.
Focus Lens	Short focus & long focus , two pcs of lens
Mode of ventilation	Two ways: Upper (on gantry) and below (under the machine)
Feeding way	fixed platform
Working platform	Standard configured Aluminum bars . Honeycomb platform is another option.
Cooling system	Industrial water chiller, Automatic refrigeration
Files support	Files from autoCAD, coreldraw, etc. such as *.dxf, *.ai format.



## Max cutting speed (Unit: mm/s)

### Acrylic sheet

Need air gas for cooling, air pressure 0.2MPA-0.4MPA.

Power / Thickness	2MM	5MM	8MM	10MM	20MM	30MM	40MM	50MM
200W Speed	60	35-40	15	12	2	1	/	/
300W/400W Speed	120	50-60	23	15-20	3-7	2-4	1-2	1

### Plywood

Need air gas for cooling, air pressure no less than 0.6MPA.

Power / Thickness	2MM	5MM	9MM	12MM	15MM	20MM
200W Speed	60	25-35	10-15			
300W/400W Speed	120	55--70	15-20			10

### High density MDF

Need air gas for cooling, air pressure no less than 0.6MPA.

Power / Thickness	2MM	5MM	9MM	12MM	15MM	20MM
200W Speed	20-30	15-25	5-10			
300W/400W Speed	45-55	35-45	15-20			

## **Requirements and matters needing attention of users at work site**

### **I environmental standards of equipment sites**

1. There should be a necessary safety distance between the equipment and between the equipment and the wall of the plant. The specific distance should be changed according to the actual situation of the customer, but it should not be less than the technical safety distance.
2. The factory ground shall be cement ground or reinforced concrete ground, and the carrying capacity shall be more than twice the weight of the equipment, and the flatness shall be  $\pm 3\text{CM}$ .

### **II standards for the selection of electricity**

1. The equipment shall use the standard  $220 \pm 5\text{V}$  50Hz single phase four-wire alternating current. The actual specifications of the purchased machines shall prevail.  
In case of voltage instability or power mismatch a voltage regulator or transformer may be used to meet the above standards.
2. Plant wires, safety leakage switches and other corresponding plant supporting facilities shall guarantee the carrying capacity of 1.5 times of the maximum installed power of the equipment
3. The factory must have a separate good grounding position to install the normal grounding for the equipment

### **III requirements for cooling water**

1. Deionized water or distilled water must be used. If you can't do that, you can use bottled water instead. But cannot use mineral water, otherwise it will affect the service life of the laser;
2. In the frozen area in winter, the chiller shall be placed in an environment above  $0^{\circ}\text{C}$ .

### **IV installation environment requirements for chiller, air compressor and freeze dryer:**

1. The cold dryer and air compressor can be placed outdoors. The surrounding environment must be dry, with less dust and rain protection.
2. If the chiller, air compressor and freeze-dryer are placed in the room, it must ensure that there is little dust and good ventilation, and the hot air generated by the chiller must be discharged out of the room.

### **V The main cutting auxiliary gas used by laser cutting machine is air.**

Make sure the air is clean and dry.

Air is from air compressor.

for cutting acrylic, just a small air pump is fine.

If for cutting wood/mdf/plywood, need higher pressure air, bigger than 0.8MPA is fine.

# LASER L6 QUOTATION

NO.	Commodity	Specification / Item NO.	Quantity	Unit Price / US\$	Amount / US\$
1	Laser cutting machine	L6-1325-300W	1	16,950.00	16,950.00
2	Voltage stabilizer (Optional)	10KVA for 300W			
3	Reflecting mirror (Optional)				
4	Focus lens (Optional)				
5	Limit sensor (Optional)				
6	Industrial computer (Optional)				
7	Installation cost i.e. visa, air ticket, hotel, food etc. need to be borne by customer				
<b>Total in US dollars</b>					16,950.00

**Remark:**

- 1, Currency: US dollars
- 2, Lead-time: 1-2 weeks after payment
- 3, Trade term: EX-work China
- 4, Payment term: T/T, 50% as deposit, the balance should be paid before shipment.
- 5, Shipping time as per actual.
- 6, Bank information:
  - A/c Holder's Name: **Quantum Digital Technologies FZC**
  - Bank Name : **RAK Bank**
  - A/c No. : **0242933076001**
  - IBAN : **AE220400000242933076001**
  - Branch & SWIFT Code: **SHARJAH & NRAKAEAK**