

# JQ-1325-300W FIBER LASER CUTTING MACHINE



|                |  |
|----------------|--|
| Working area:  | 1300mm*2500mm  |
| Laser power:   | 300W Raycus fiber laser device.  |
| laser head     | Cypcut laser head , with auto sensor, which could adjust focal distance automatically. |
| Cooling system | CW-6100 water chiller, could well protect the laser device.                            |

## Part one: Machine Technical Parameters

|                                    |  |
|------------------------------------|--|
| ▶ Machine Model                    | JQ-1325-300W                                   |
| ▶ Max. working area                | 1300*2500mm/51in*98in                          |
| ▶ Laser                            | Raycus Brand 300-wa fiber laser                |
| ▶ Cu ng thickness                  | 0.2-3mm stainless steel / 0.2-4mm carbon steel |
| ▶ Laser wavelength                 | 1060nm   |
| ▶ Rated power                      | 10-100%  |
| ▶ X,Y-axis loca on accuracy        | ±0.01mm  |
| ▶ X,Y-axis repeat loca on accuracy | ±0.01mm  |
| ▶ X,Y-axis fast moving speed       | 30m/min  |
| ▶ X,Y-axis max. cu ng speed        | 20m/min  |
| ▶ Min. cu ing line width           | 0.02   |
| ▶ Max. cu ng speed                 | 10m/min  |
| ▶ Whole machine flo                | 4.0*2.5*1.5m                                   |

### Part two: Machine introduction

With high quality fiber laser generator, high precision "HIWIN" rack transmission and advanced automatic NC system, this product is getting high and new technology in one which by laser cutting and high precision machinery NC technology. Getting high speed, high precision, high efficiency and low cost together perfectly, this product can be the best choice for bulk metal materials cutting job.

### Part three: Machine features:

- 1, High speed, high precision, high efficiency and low cost
- 2, Easy on operation, fiber optical path, without tediously adjustment on optical path
- 3, Compact structure, good sealing, strongly adaptable to changes in the environment.
- 4, With the perfect automatic nesting system which can save time, save the materials, the sheet utilization ratio up to 95%

### Part four: Applicable materials and industry

Suitable for stainless steel, carbon steel and some other metal materials precise cutting, applicable for aerospace technology, rocket, plane, robot, elevator, steamship and automobile manufacturing and metal parts processing industry for metal plate, advertisement, kitchen ware, bit tool, hardware etc.

This will make sure Laser device and the machine inner working area temperature and humidity good for the laser device.

#### X-Axis

- 1) Ball-screw transmission
- 2) Max moving speed 12m/min



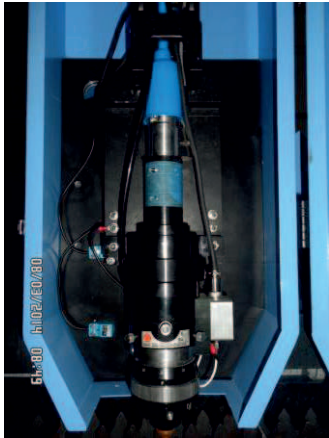
## Part five: JQ-1325-300W Fiber Laser Cutting Machine Features:

### 1. High-performance Raycus Brand 300-watt laser device from China has photovoltaic conversion rate higher than 24%.

The machine has advantages of high laser beam quality, narrow line width, simple structure, high reliability and less affected by the environment during usage. Its theoretical working life time is over 100,000 hours. It is a ideal choice for industrial cutting.



### 2. Auto focusing laser cutting head (cutting head with metal



### sensor) from Cypcut, has high sensitivity and good stability.

Our fiber laser cutting machine uses Cypcut Brand auto focusing cutting head. Cutting head laser nozzle locking ring touch the metal sheet materials surface, cutting head move up and down, and it can achieve same focal cutting. The cutting head has high sensitivity, stable running and good reliability. When cutting metal sheet, there is no obvious sparks flying phenomenon, and avoids the lower sensitivity and failure caused by air dielectric changing and electromagnetic field interference which affect working piece cutting quality and cutting head collision damage. (Traditional ranging cutting head can not avoid this). This mechanical following system adopts machine advanced

equipment which can ensure stability and sensitivity.

### 3. Power supply controlled by control cabinet, touch screen operation system, easy to operate.

Control cabinet a unique design, including the entire operation system, change the past, independent power operation of complex design, and can control the system on the current, frequency, pulse width and other parameters.



### 4. Japanese Panasonic servo motors and drivers to improve the cutting speed and stability.

X, Y axis are built with two 1500W Panasonic servo motors, the moving parts of Z-axis equipped with a 200W Panasonic servo motor, the combination ensure the stability and efficiency. Max moving speed 10m/min. Max available cutting distance 1300mm.



Servo system ensures the possibility of realizing extreme precise positioning with the excellent dynamic response acceleration property and closed loop control method, mechanism operate smoothly, reliably and free of maintenance; location accuracy:  $\leq \pm 0.04\text{mm}$



### 5. The combine of high precision rack drive system and advanced feed system.

The movement system adopts the drive system of high precision rack and servo motor, and this assure the high precision of the cu ng. Serrate pla orm and trim strip are very suitable for cu ng metal sheets. The user can put in and take out the materials faster and easily.



There is a up-down li ing cylinder in the serrate pla orm, which helps to load metal sheet easily. This special worktable can meet special requirements, enlarge the applica on of this machine, and operate more easily.



### 6. High power and big refrigerating capacity CW-6100 water chiller.

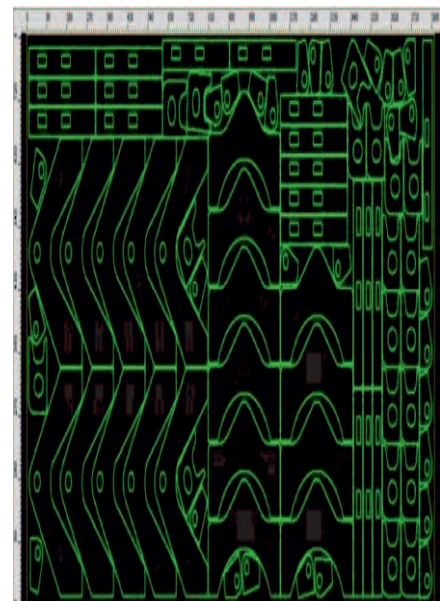
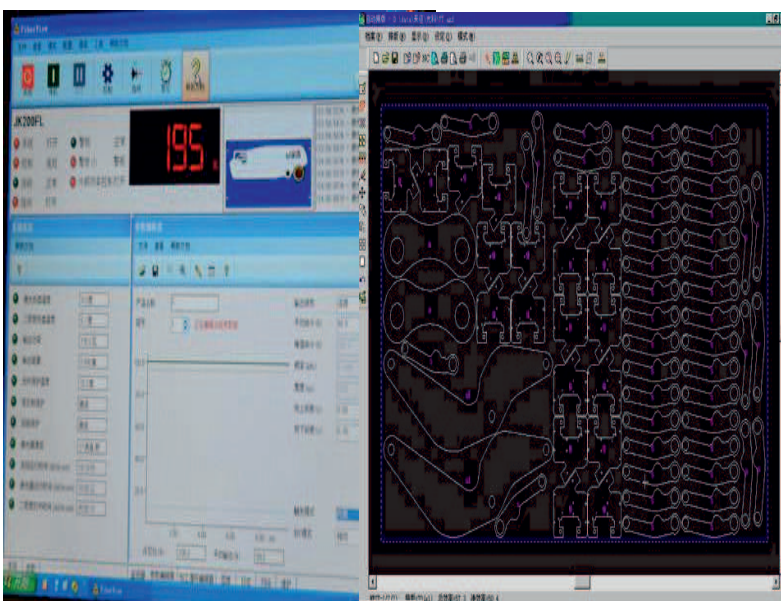
We use high power water chiller, and it can cool the laser system con nuously, adjust the temperature automa cally, ensures working for a long me. The temperature of the water can be kept within plus-minus 5 degree. The constant temperature of water can keep the laser power stable, work more steady and fast.



### 7. Control system

Raycus LASER device controlling computer, English version Windows xp system, installed laser device needed control so ware. op mize

cu ng so ware,touching screen controller,nes ng op miza on system, support intersec ng line cu ng, easy opera on and automa c programming, ups func on will protect your machine and computer when suddenly power off.





## Part six: Advantages of JQ-1325-300W

- **High precision in cutting. Excellent in stability.**

Adopting the high precision ball rack in transmission system. The optimized CNC control system, which can meet the processing demand in high precision accessory. The mutation system is excellent, that suit for the long hours constantly working.

- **High quality in cutting edge**

Adopting the Cypcut follow-up cutting head system with high sensitivity and stability. The cutting head moving with the variation of the plate. The cut-off point position will remain unchanged. The kerf is flat and smooth enough no need to handle it again. Meanwhile, the machine can be use to cut both of the flat materials and curving materials .

- **Cutting large format and suitable for cutting more material.**

The machine can cut metal sheet within the thickness of 6mm and not larger than the size of 1300mm x 2500mm. The applicable materials include: ordinary carbon steel, stainless steel, titanium, etc.

- **With drawer to collect the garbage, easy to change the gas valve.**

- **High performance-price ratio**

- **Low cost for using**

- **Higher cutting speed and efficiency**

- **Low fees for the future maintain:**

This laser machine is with simple structure, easy to operate with high stability.

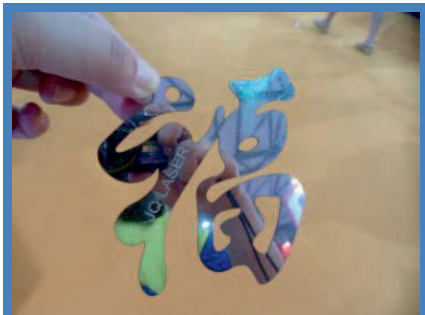
## Part seven : sample pictures



3 mm stainless steel



2 mm stainless steel



0.5 mm stainless steel

1mm stainless steel



4 mm carbon steel



0.5mm Titanium plate





Part eight: machine packing pictures

