

Foster Laser

# FST-1080

## LASER CUTTING MACHINE

✓ Linear guide

✓ Ruida & LightBurn

✓ Saving freight



RDWorksV8



LightBurn



AutoCAD



CorelDRAW



# TWO-PART SPLIT MACHINE

Save space, save freight, through the narrow door

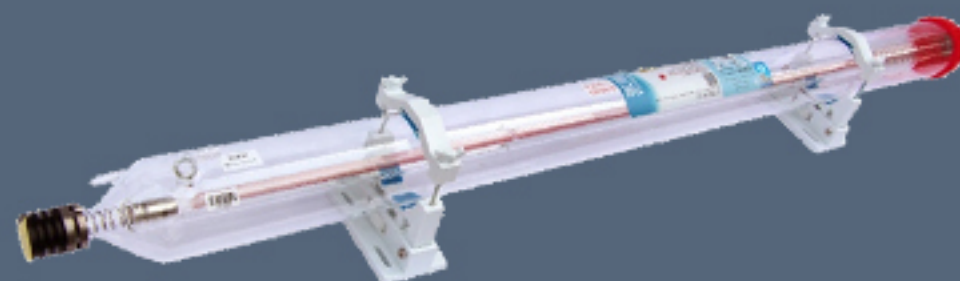


## RUIDA CONTROLLER SYSTEM

Offline use, Easy to operate

## FAMOUS LASER TUBE

EFR, RECI, CDWG, YONGLI, JOY (optional)



## HIGH COST PERFORMANCE

The same price, the best performance and quality

## THREE LINES LINEAR GUIDE

High accuracy, High speed



## PASS THROUGH DOOR

Front and back feed

# PRODUCT DETAILS

Laser cutting machine

Model	FST-1080
Worktable	Honeycomb / Aluminum knife
Engraving area	1000*800mm
Laser Power	60W/80W/100W/130W/150W
Engraving Speed	500mm/s Max
Engraving Depth	5mm
Cutting Speed	60mm/s
Cutting Depth (Acrylic)	0-15mm (acrylic)
Up and down work table	Ec Up and down 300mm adjustable
Minimum Shaping Character	1 X 1mm
Resolution Ratio	0.0254mm (1000dpi)
Power Supply	220V(or110V)+/-10% 50Hz
Resetting Positioning	Accuracy less than or equal to 0.01mm
Water protecting sensor and alarm	Yes
Operating Temperature	0-45°C
Operating Humidity	35-70°C
Graphic Format Supported	PLT/DXF/BMP/JPG/GIF/PGN/TIF
Operation System	windows xp, win7, win10
Software	RDworksV8
Control Configuration	DSP
Water Cooling(Yes/No)	Yes
Laser Tube	Sealed CO2 glass laser tube



# FEATURE

## Laser cutting machine

Foster laser CO2 Laser Engraving Cutting Machine with different working area, laser power or working table, which application is engraving and cutting on acrylic, wood, fabric, cloth, leather, rubber plate, PVC, paper and other kinds of non metal materials. 1080 laser cutting machine are widely used in clothing, shoes, luggage, computer embroidery clipping, model, electronic appliances, toys, furniture, advertising decoration, packaging and printing, paper products, handicrafts. Household appliances, laser processing and other industries.



- **CO2 LASER POWER:**

This laser engraving and cutting machine comes with a CO2 laser tube to cut through various materials and engrave your designs faster, deeper, and clearer.

- **RUIDA LCD DIGITAL CONTROLLER:**

The intuitive control panel with a digital display allows complete control of the laser head, pausing and stopping projects, adjusting laser power and speed settings, file viewing, and project framing via Windows-compatible RDWorks v8.

- **USB & ETHERNET PORTS:**

2 USB ports allow flash drive connectivity and a USB-to-USB PC connection. Plus, the ethernet connection is compatible with PCs.

- **VIEWING WINDOW:**

A transparent acrylic glass viewing window allows observation throughout the laser engraving process.

- **ADJUSTABLE LASER NOZZLE:**

The laser nozzle can extend downwards or be fully retracted, allowing more control over different focal distance setups.

- **WATER FLOW SENSOR:**

A pressure flow sensor monitors water flow throughout the laser engraving process and prevents the laser from firing if water stops circulating through the laser tube.

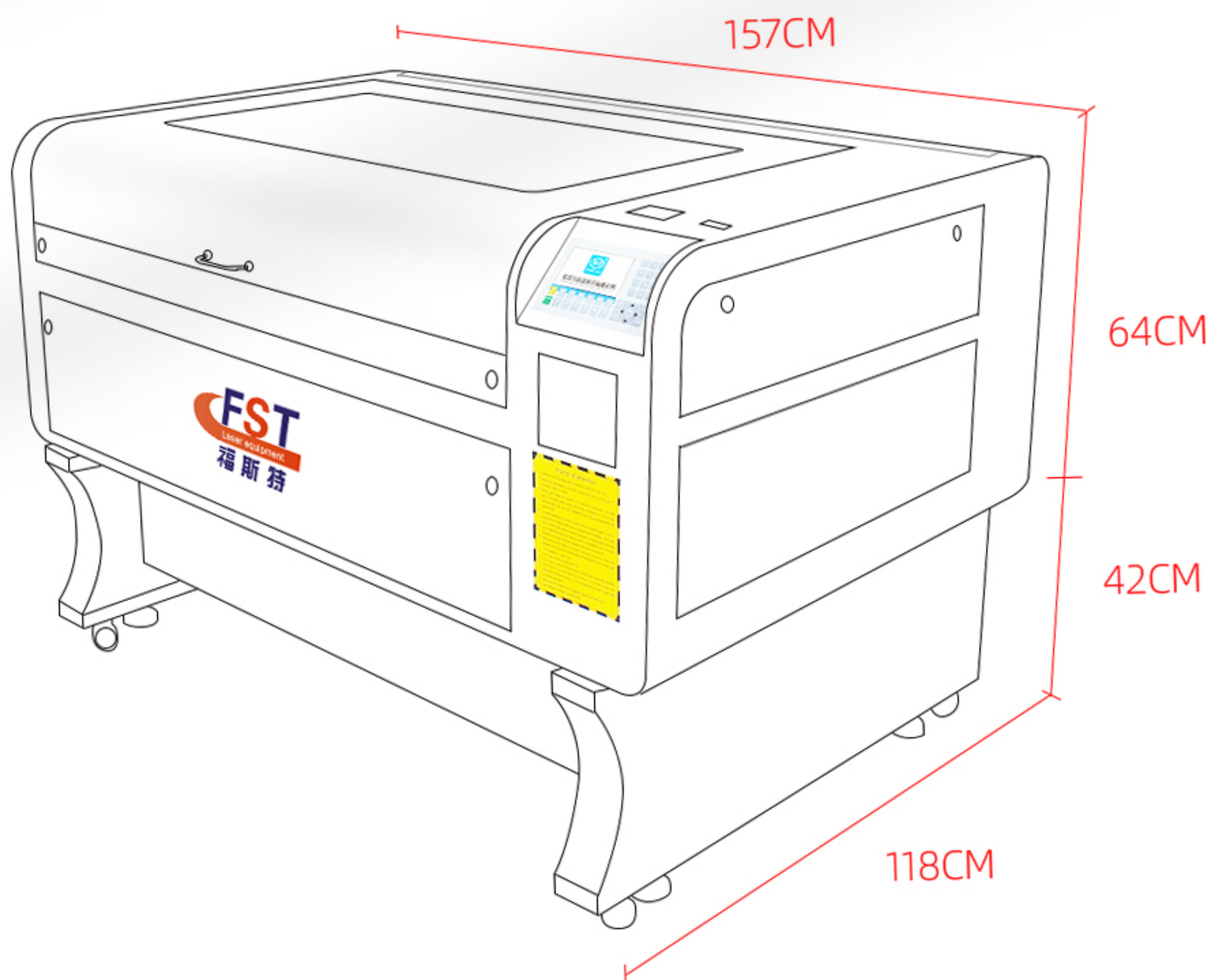
- **AUTOMATIC SHUTDOWN:**

The auto-shutdown safety feature stops the machine when opening the transparent window cover. Once closed, press the “Enter” button to continue operation.(Optional)



# DETAIL DISPLAY

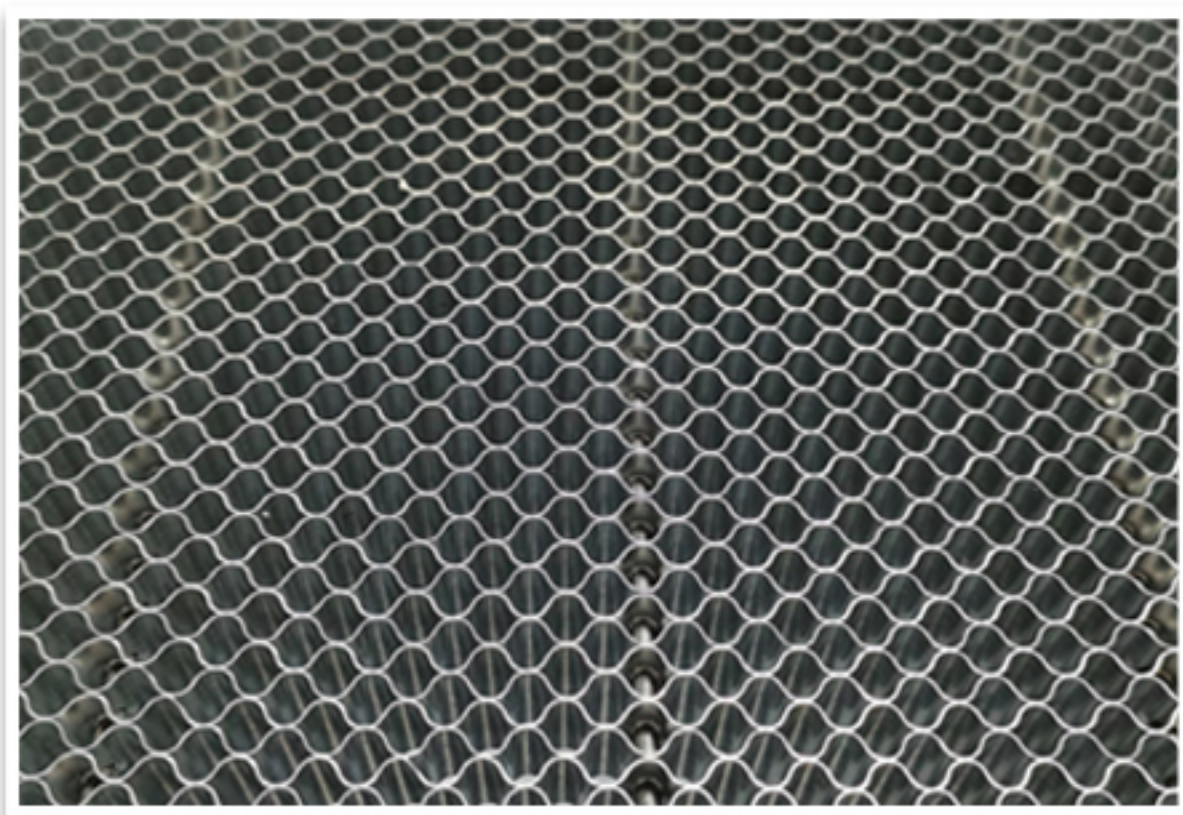
Laser cutting machine



## WORK AREA

1000x800mm

\* You can choose one or two. It depends on the needs of the customer.



Honeycomb worktable\*



Aluminum knife\*

## INDUSTRIAL LASER HEAD

High precision retractable laser head, easy to adjust focal length, equipped with red light positioning system, accurate positioning, reduce material loss. Auto-blowing to protect laser head and prevent the laser burning.



Autofocus (optional)

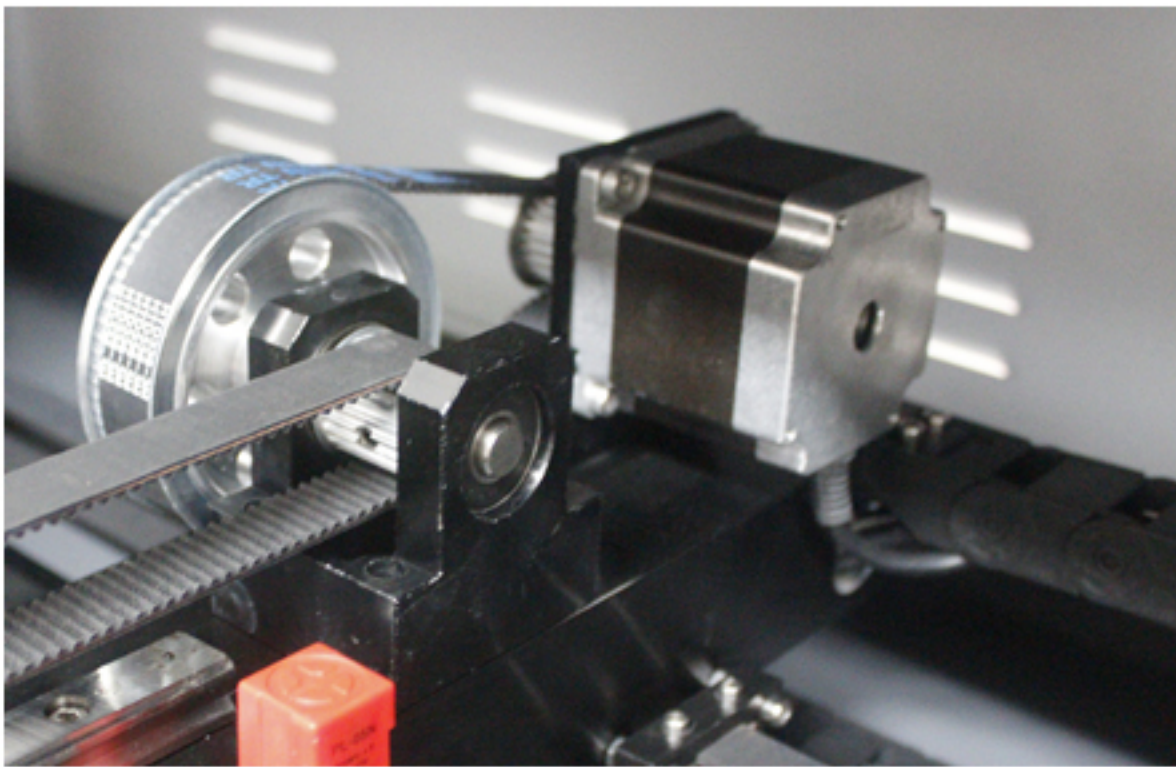


Laser is invisible, Red laser beam to determine the cut-off point



# LASER TUBE

Closed Co2 laser tube, long life, stable power. Installation of reinforcement settings, the laser tube is not easy to collide and cause damage when moving the machine. (EFR, RECI, CDWJ, YONGLI, JOY. Optional)



## BRAND STEPPER MOTOR

High operating accuracy,high temperature resistance,can bear the high temperature generated by high-speed operation,and low noise.



## MOTOR-DRIVER

- 1) self adaptive circuit
- 2) necessary accessories of off - line working



## USA II-VI LENS

Imported USA II-VI Lens, suitable for various environments, and has high precision and high speed.



## FAMOUS BRAND BELT

The brand belt, wear resistance, good stability, compact structure and low noise.



## LEADING CHAIN

The current lead and breather pipe are included in it. Thicker,more stable Keep the laser head from shaking



## CONTROL PANEL

**Free upgrade to  
RD-6445**



1. Adopt advanced laser engraving and cutting control system: Ruida RDC6442 control system, the control panel support different language include Chinese, English, French, Pyccko, Portuguese, Turkish, German, Spanish, Vietnamese, Korean, Italian.

2. Standard RDWorksV8 software: It support 15 different languages, include: Chinese, English, Japanese, French, German, Portuguese, Polish, Spanish, Russian, Korean, Vietnamese, Indonesian, Italian, Turkish, Arabic.

It can compatible with many other software, like Coreldraw, Photoshop, AutoCAD, TAJIMA, etc.

You can use these software to make designs, then import to Rdworks to cut or engrave.

3. RDworks software support files in different format: AI, DXF, PLT, DST, BMP, DSB, EPS, DAT, NC, RDB, GIF, JPG, JPEG, JPE, JFIF, PNG, MNG, ICO, CUR, TIF, TIFF, TGA, PCX, WBMP, WMF, EMF, JBG, J2C, JPC, PGX, RAS, PNM, PGM, PPM, SKA, RAW,

4. Storage: The main board has EMS Memory which enables the user to store more than 100 files.

5. Laser output control: Can regulate the laser power from 1-100% according to different material.

6. Interface: USB2.0 interface support connect to computer by USB cable, it also support offline work.



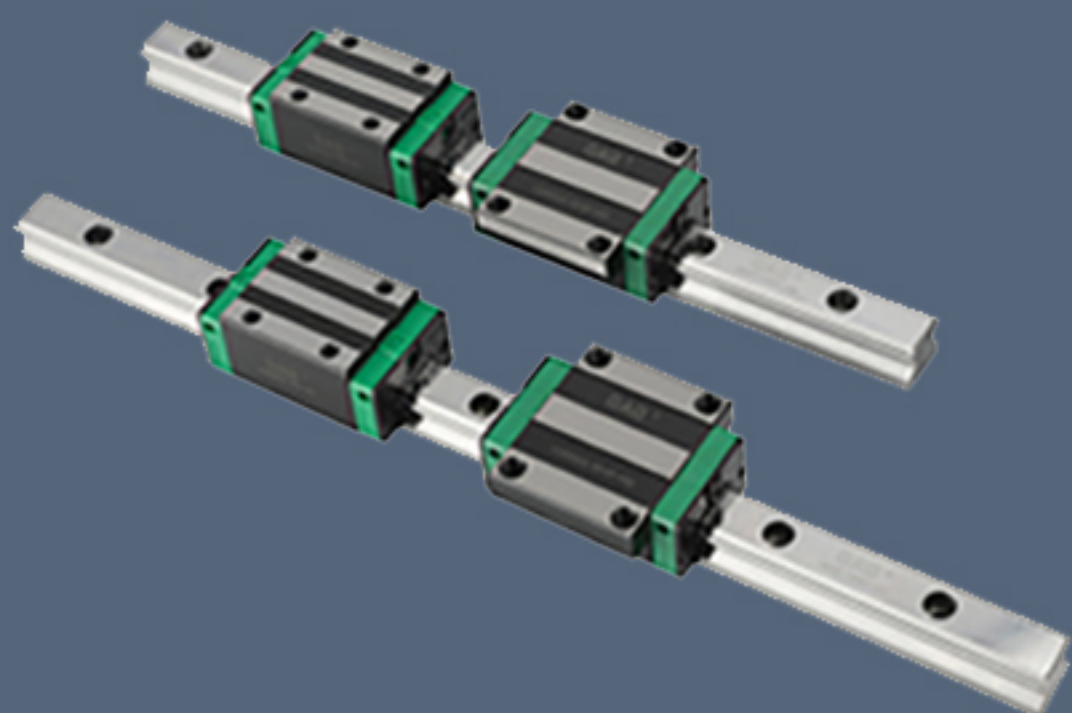
Wifi Control(optional)



Mobile App(optional)



Handle(optional)



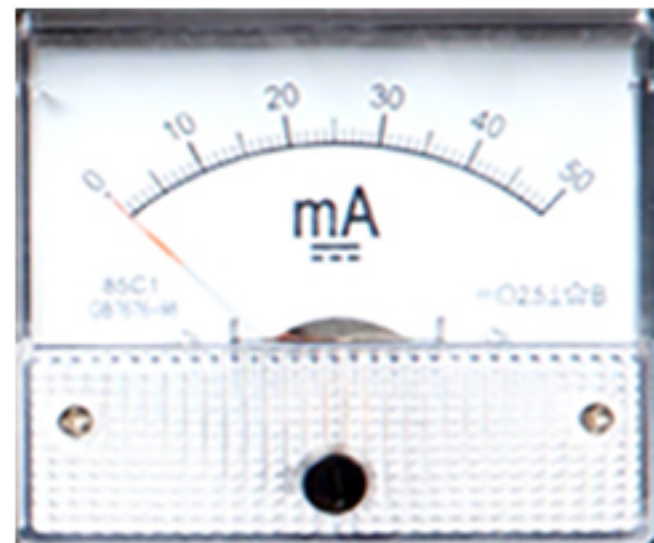
## LINEAR GUIDE

XY axis apply imported square rails. Ensures stable operation, high precision and long life.



# AMPEREMETER

The ammeter can detect whether the laser tube current is normal.(Optional)



Coreldraw



CAD



LightBurn

## SOFTWARE

CorelDRAW, AutoCAD, LightBurn supported

# WATER CHILLER

Best in china, it is for cooling the laser tube after water fill in the pipe when machine is working.



# EXHAUST FAN

Removes smoke and dust caused during engraving and cutting

# PLATFORM LIFTING

It allows you to process materials of various sizes, can be lifted in Z direction (up-and-down) to get more working space.(Optional)





# Our certificate

Foster Laser Technology Co., Ltd.





# PRODUCT ACCESSORIES

Laser cutting machine



Air Pump



Chimney



Water pump



Tool protection



Data Line



CD or U disk



Focal length ruler



Tool box



Power Cord



Cardan wheel



Instruction Manual

## Optional accessories



Simple rotary axis



Standard rotary axis



Roller rotary axis



Exhaust Fan



CCD Camera



S&A Water chiller  
CW-3000 / CW-5000



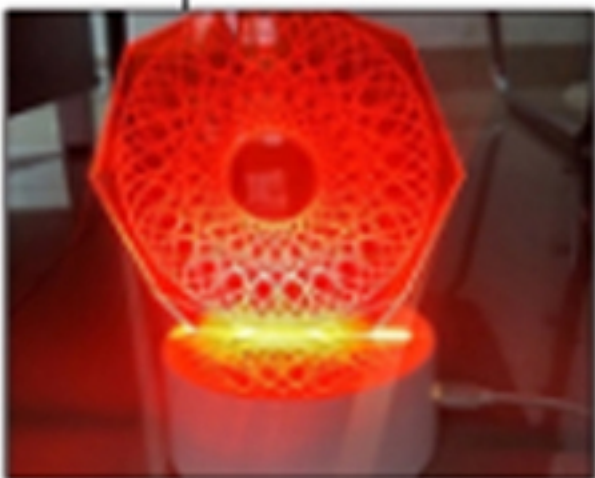
# PRODUCT APPLICATION

Laser cutting machine

## applicable materials:

Acrylic, leather, wood, rubber, double-color board, MDF, plywood, bamboo, paper, cardboard, marble, granite, stone, glass, fabric, textile, coated metal, painted metal, anodised aluminum etc.

ACRYLIC



GLASS



CERAMICS



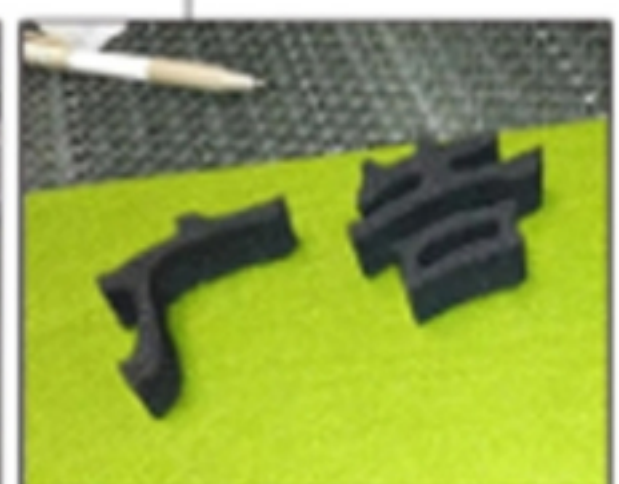
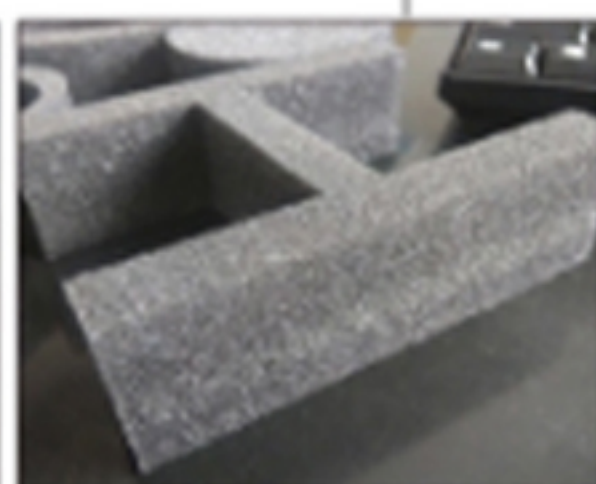
FELT



IRREGULAR SHAPE



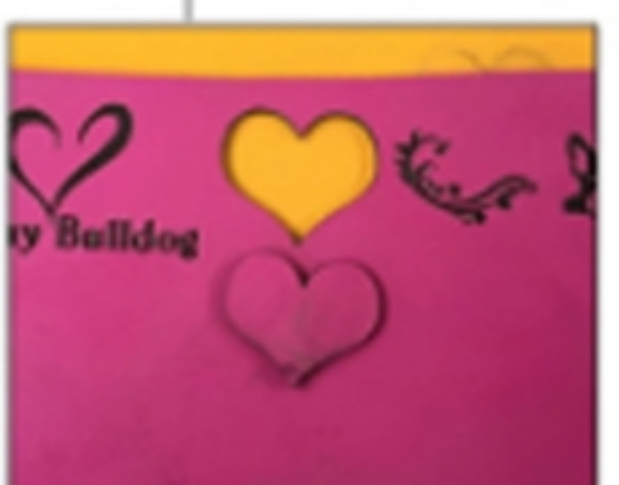
FOAM



STONE



LEATHER



PAPER



PLASTIC



SILICONE



TWO COLOR PLATES



WOOD



WOODCUT





# applicable industries:

Arts and crafts, advertising, decoration, wood working, leather manufacturing, packaging, printing, mould making, furniture, clothing and brand making etc.



Applicable material for reference					
Material	Engrave	Cut	Material	Engrave	Cut
Natural wood	√	√	Paper	√	√
Acrylic	√	√	Mylar	√	√
Glass	√	×	Press board	√	√
Double color plate	√	√	Rubber	√	√
Bamboo	√	√	Plywood	√	√
MDF	√	√	Fiberglass	√	√
Cloth	√	√	Painted metal	√	√
Leather	√	√	Plastic	√	√
Marble	√	×	Ceramic	√	×
Matte boards	√	√	Coated Metal	√	×
Stone	√	×	Other materials	Inquire us, we will test for you	

Cutting thickness of different laser power for reference			
Laser power (W)	Acrylic(mm)	Plywood(mm)	MDF(mm)
40W	3	2	1.5
60W	8	5	3
80W	12	8	6
100W	15	12	9
150W	25	20	15

\* The above data is for reference only



# PACKAGING DELIVERY

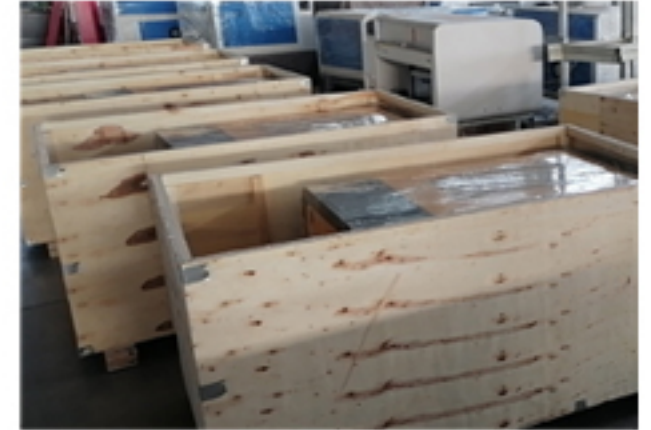
Laser cutting machine



Machine cleaning and  
Protective oil processing



Wrapping with  
protective film



Wooden box sealing



Container Sealing  
and Transportation



container loading



Forklift moving goods