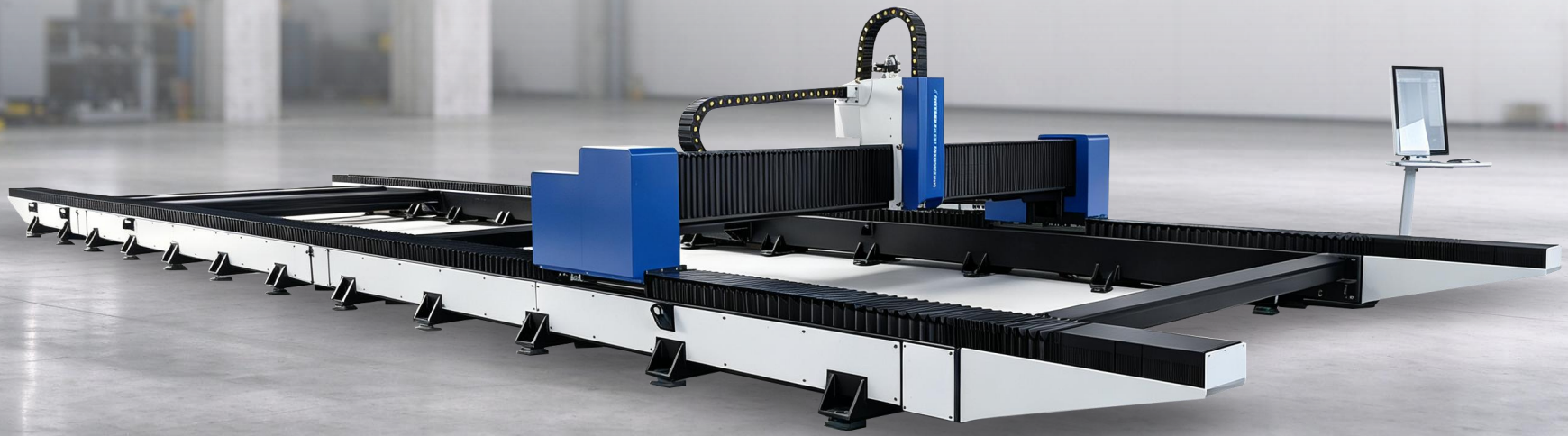
FOSTER LASER · LARGE-FORMAT GROUND RAIL

13035 LARGE-FORMAT GROUND RAIL GANTRY FIBER LASER CUTTING MACHINE

Built for large steel structures. This large-format ground-rail cutting machine supports oversized metal plate processing workflows.



KEY ADVANTAGES

Product Selling point

Expandable Modular Worktable

Extra-large gantry fiber laser cutter with expandable modular worktable. Freely adjustable working area supports direct cutting of extra-wide, extra-long and heavy plates without pre-cutting, boosting production continuity and efficiency.

Heat-isolated Worktable Structure

Its worktable separates the cutting zone from the transmission system to block heat transfer and avoid bed thermal deformation, ensuring stable performance under prolonged heavy loads.

6kW–40kW High Power Compatible

Compatible with 3kW–40kW high-power lasers. Optional intelligent bevel cutting head achieves ±45° bevel cutting in one pass with no secondary finishing, offering thick-plate deep penetration and high-precision cutting for complex parts.

Dust Collection & Safety Protection

It comes with an intelligent dynamic dust removal system and safety light curtains for efficient fume extraction, better workshop conditions and enhanced operator & equipment safety.

Single-tube Welded Heavy-duty Bed

Built with internal stiffeners and fully stress-relieved, this bed delivers reliable rigidity for heavy plate and large-format cutting.

Bochu Bus CNC & Smart Cutting Head

Fitted with original Bochu bus laser CNC system and high-power smart cutting head, supporting auto-focus, capacitive height tracking, status monitoring, anti-collision protection and modular maintenance.



Raytools/BOCHU
Laser Head



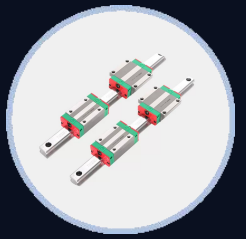
Fiber Laser
Generator
(Raycus/MAX)



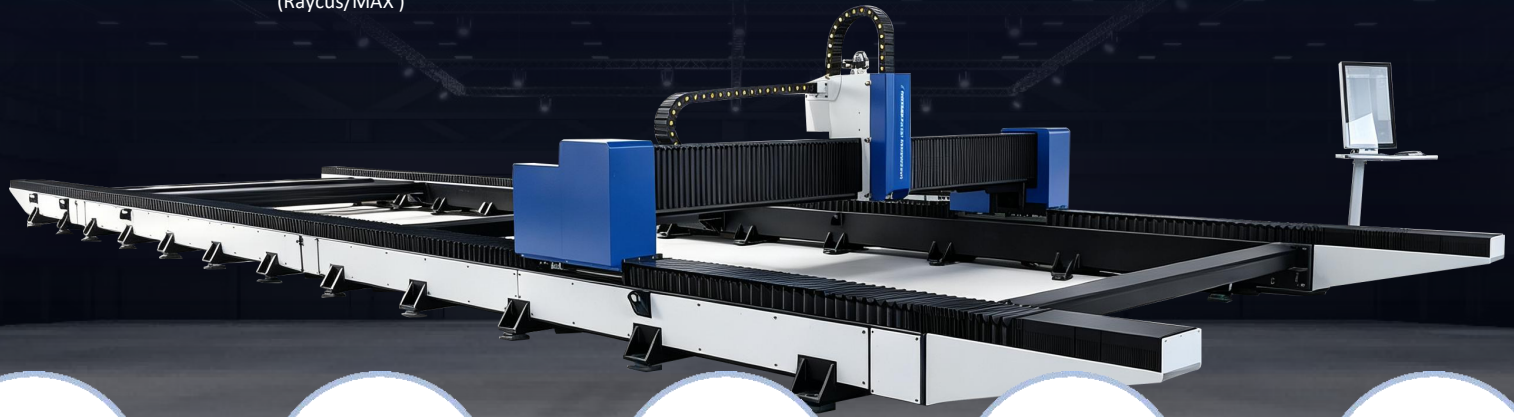
Water chiller
(Hanli/Teyu)



Servo Motor Driver
(Delta/Fuji /Yaskawa)



Hiwin Linear Guide Rails





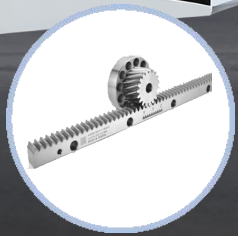
Control System
(Raytools/BOCHU)



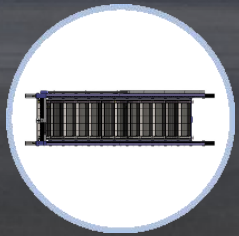
Japan Shimpo reducer



Cast Aluminum Beam



TAIWAN YYC Rack



Expandable Modular
Worktable

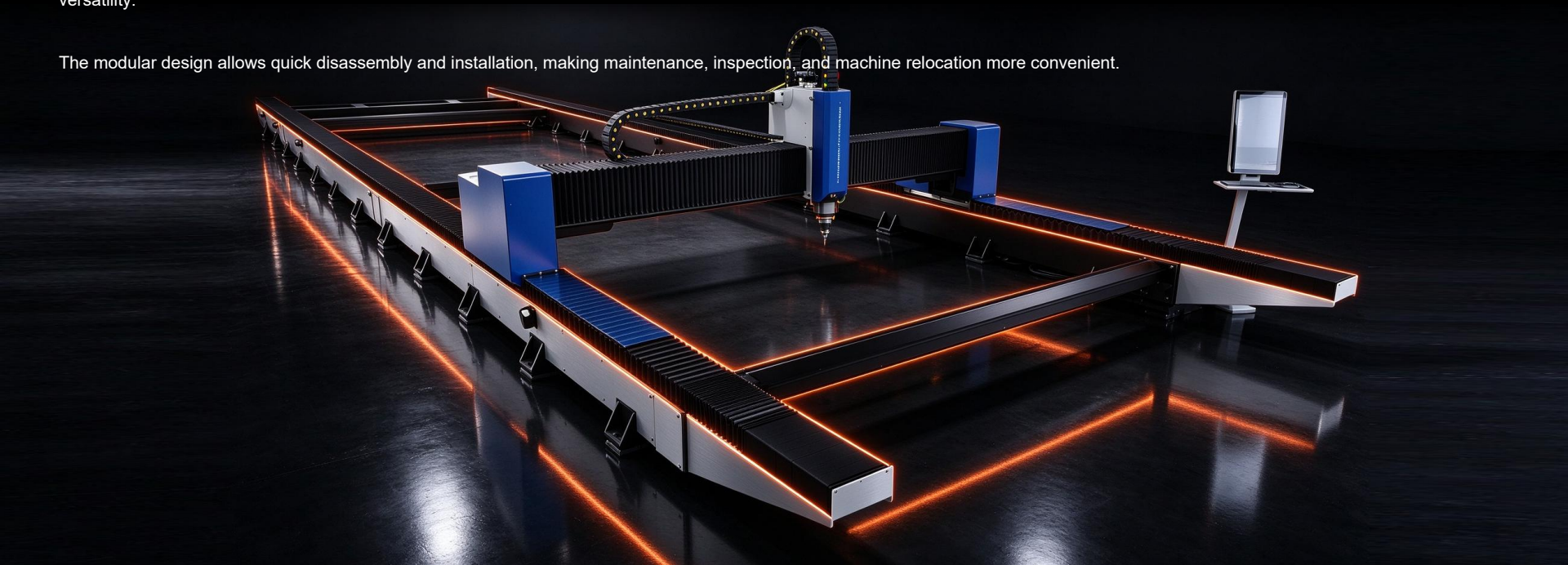
EXCHANGE TABLE

Independent modular worktable

The laser cutter adopts a high-rigidity bed base welded with reinforced steel tubes. After professional stress-relief treatment, the structure effectively minimizes deformation during long-term operation. With excellent load-bearing capability and structural stability, it provides reliable support for maintaining consistent cutting accuracy over extended production cycles.

Featuring an expandable modular design, the worktable can accommodate sheets of various sizes while enhancing overall machine stability, operational flexibility, and production versatility.

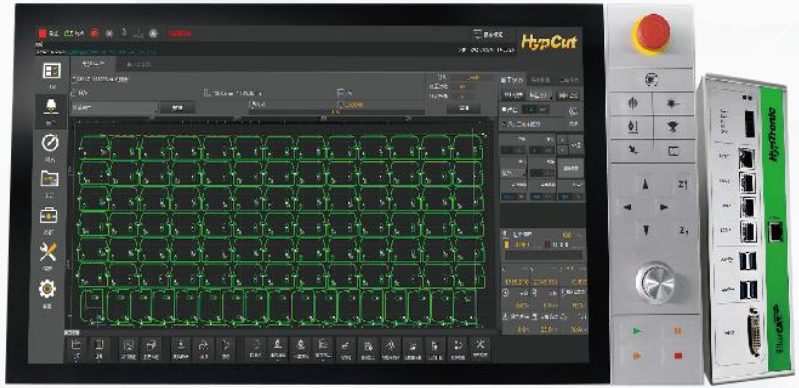
The modular design allows quick disassembly and installation, making maintenance, inspection, and machine relocation more convenient.

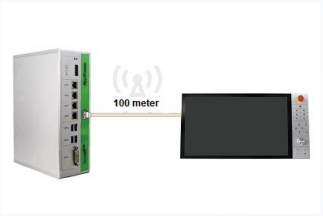


SOFTWARE

HypCut
Sheet Cutting Software

HypCut is customized software developed for high-power laser cutting. A professional process is provided for high-power laser cutting, which can realize intelligent production. It supports the planning and scheduling to assist production management; its modular design provides users with more concise and efficient operations and assists users in quickly completing production.





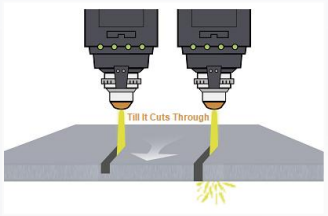
01.BC-LINK Communication

Independently developed BC-LINK Communication, carry display signal, IO and USB signal to 100 meters away.



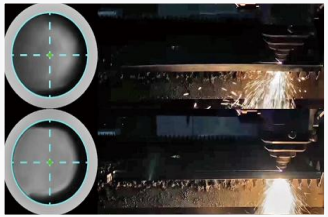
02.Slag-free Cutting

Gently end processing according to cutting techniques to get a smooth inner and intact



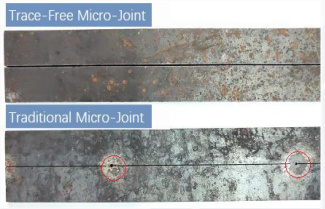
03.Auto Recut

Automatically do recut when real-time in-head sensor detected plasma



04.Cutting Path Monitor

Monitor cutting quality by BLT internal sensor, real-time adjust parameters to improve performance and efficiency



05.Smooth MicroJoint

Smooth cutting section and easy unloading ensure high efficiency

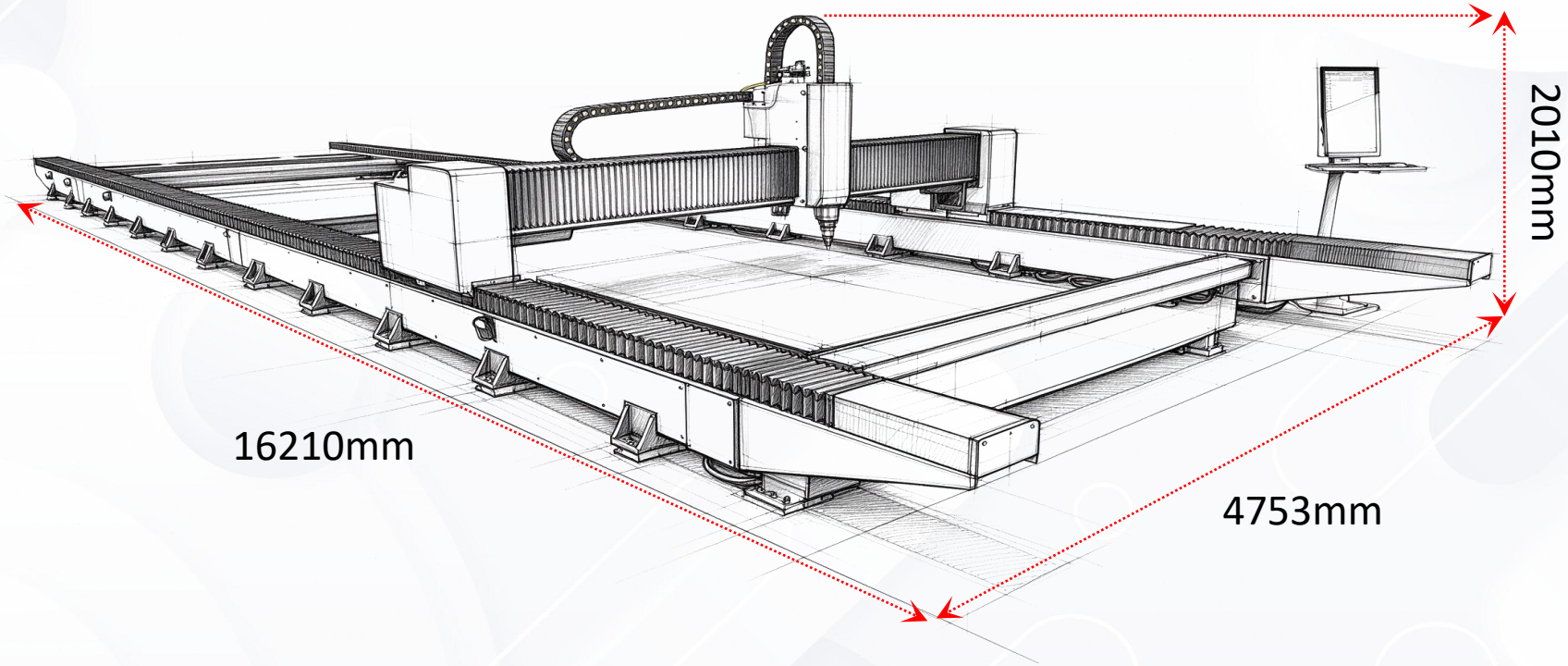
SPECIFICATIONS

13035 Large-Format Ground Rail Gantry Fiber Laser Cutting Machine

Model	13035 Large-Format Ground Rail Gantry Fiber Laser Cutting Machine	Working Area	13000×3500mm / 14000×3000mm
Laser Source	Raycus / MAX / IPG	Control System	BOCHU / Raytools
Laser Wavelength	1080nm	Max Acceleration	1G
Laser Power	3KW / 6KW / 12KW / 20KW/40KW	Compatible Software	AutoCAD, CorelDraw, etc.
Graphic Format	DXF / PLT / AI / LXD / GBX / NC code	Power Supply	380V 3Ph, 50/60Hz
Cooling Mode	Water Cooling	Fiber Source Lifespan	≥100,000 hours
Max Running Speed	80m/min	Ambient Temperature	0-45℃
Positioning accuracy	±0.05mm	Machine Dimensions	16210×4753×2010mm
Repeat Positioning accuracy	±0.03mm	Weight	Approx. 5.9T

FST-13035

Model	Length	Width	Height	Weight
FST-13035	16210mm	4753mm	2010mm	Approx. 5.9T



Configuration



Laser Source

Equipped with a Raycus 20,000W fiber laser source, the machine delivers excellent beam quality, stable power output, and efficientcutting performance for various metal sheet applications. The laser power can also be customized from 1,500W to 40,000W, withoptional laser sources from leading brands including Raycus, MAX, and IPG, allowing flexible configuration according to different processing requirements.



Laser Cutting Head

Equipped with a BOCI laser cutting head, featuring closed-loop automatic focusing, collision protection, and real-time multi-sensor monitoring. It supports intelligent lead-out control and burr-free cutting while allowing protective lens replacement in as little as five minutes, minimizing downtime and maximizing productivity.



Water Chiller

The machine is equipped with a TEYU 20,000W laser chiller featuring dual independent temperature control circuits. With temperature control accuracy of up to ±1℃, it efficiently removes heat generated by the laser source and cutting head.The chiller integrates multiple safety protection functions, including water flow monitoring and over-temperature alarms, ensuring reliable operation of the high-power laser system.

CONFIGURATION

Safety light curtain system

Safety light curtain system

Equipped with a safety light curtain system that immediately stops operation whenever personnel enter the protected area, ensuring a safer working environment and enhanced operator protection.



CONFIGURATION

Yaskawa Servo Driver

Yaskawa Servo Driver

The machine adopts Yaskawa servo motors, providing high positioning accuracy, fast bus communication response, and smooth high-speed movement. With precise motion control and stable long-term performance, the servo system ensures consistent cutting dimensions and reliable processing accuracy throughout continuous operation.

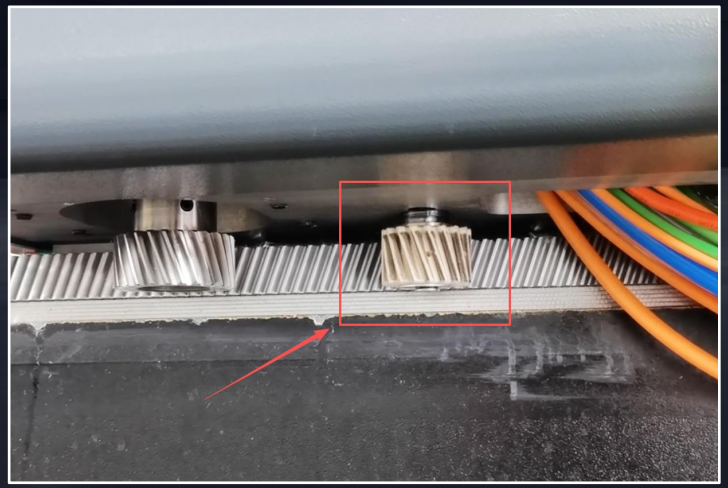


CONFIGURATION

Felt wheel

Felt wheel

Wear-resistant felt wheels automatically wipe dirt and dust off guide rails while evenly applying lubricating oil during operation. They protect rails from abrasion, avoid jamming, extend rail service life and ensure smooth machine movement.

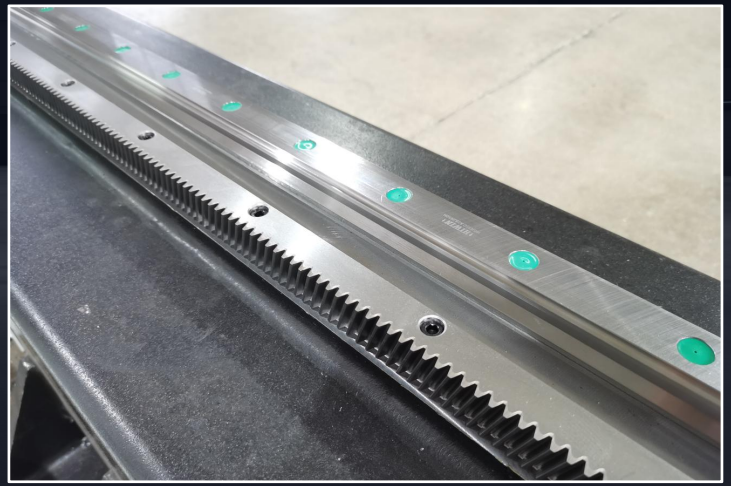


CONFIGURATION

High-precision transmission system

High-precision transmission system

The machine adopts high-precision linear guide rails combined with precision-ground helical racks, featuring minimal transmission clearance, smooth movement, and excellent positioning accuracy. Even during high-speed cutting operations, the transmission system maintains stable performance, ensuring long-term cutting precision without deformation.



CONFIGURATION

Air compressor

Air compressor(Optional)

An air compressor is a core pneumatic device that compresses atmospheric air into high-pressure compressed air. It provides auxiliary air blowing for laser cutting machines for slag removal and lens protection. Compressed air features safety, explosion-proof performance, convenient delivery and low maintenance costs.



CONFIGURATION

Voltage Stabilize

Voltage Stabilize(Optional)

A voltage stabilizer automatically stabilizes fluctuating input voltage and outputs constant, safe rated voltage. It protects precision industrial equipment such as fiber laser cutting machines from damage caused by voltage surges, drops and instability. It ensures stable laser power, consistent cutting quality and extends the service life of electrical components.



APPLICATION

Applicable material：

Fiber Laser Cutting Equipment is suitable for metal cutting with Stainless Steel , Mild Steel Plate, Carbon Steel, Alloy Steel Plate, Spring Steel, Iron Plate, Galvanized Iron, Galvanized Sheet, Aluminum Plate, Copper Sheet, Brass Sheet, Bronze Plate, Gold Plate, Silver Plate, Titanium Plate, Metal Sheet, Metal Plate, etc. Different cutting thickness depends on different laser power selection in sheet metal laser cutting machine.

Application industry：

Used in sheet metal processing, aviation, aerospace, electronics, electrical appliances, subway parts, automobiles, grain machinery, textile machinery, engineering machinery, precision parts, ships, metallurgical equipment, elevators, household appliances, craft gifts, tool processing, decoration, advertising, metal processing, kitchen processing and other manufacturing and processing industries.











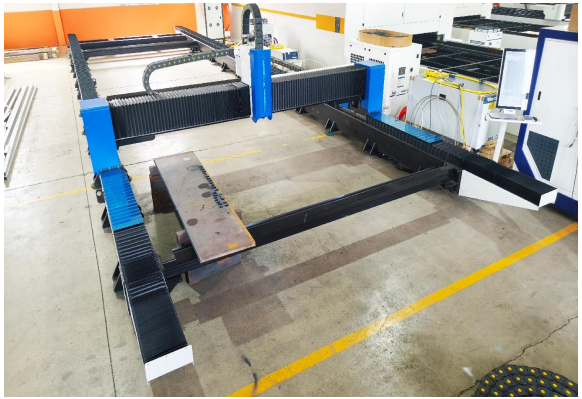





W03


W03


W03







Exhibition











Packaging


01 Machine cleaning and Protective oil processing


02 Wrapping withprotective film


03 Forklift moving goods


04 Transportation


05 Container Sealing


06 Container loading

ABOUT FOSTER LASER

10 YEARS PROFESSIONAL ODM/OEM MANUFACTURER OF LASER EQUIPMENT

30,000m²	27+	300+ /month	4+
Standardized workshop	Technical patents	Laser equipment	Registered trademarks

Liaocheng Foster Laser Science & Technology Co., Ltd. A professional manufacturer dedicated to the research and production of laser equipment, covers an area of over 30,000 square meters. We mainly produce laser engraving machines, laser marking machines, laser cutting machines, laser welding machines, laser cleaning machines.

Since its establishment in 2004, Foster Laser has always adhered to the Customer centric . By 2023, Foster laser equipment has been exported to more than 100 countries and regions, including the United States, Brazil, Mexico, Australia, Turkey, and South Korea, winning the trust and support of customers. The company's products have CE, ROHS and other test certificates, a number of application technology patents, and provides OEM services for many manufacturers.

Foster Laser is equipped with a professional R&D team, sales team, and after-sales team, which can provide you with a perfect purchasing and usage experience. The company can customize products, logos, exterior colors, etc. according to demand. Meet your customization needs.

Foster Laser, looking forward to your visit.



WIPO
WORLD
INTELLECTUAL
ORGANIZATION

TRADEMARK

10+

United States
Mexico
Britain
Brazil
Italy
Germany

International Certification Shows Brand Strength

1.Strict Quality Control Standards

2.Authoritative Certification

3.Brand Guarantee















FAQ:

Q: How can I choose the most suitable machine?

A: In order to recommend you the most suitable machine model, please let us know the following details:

1.What is your material? 2.The size of material? 3.The thickness of material?

Q:When I got this machine,but I don't know how to use it. What should I do?

A:We will send operation video and manual for the machine. Our engineer will do training online. If needed, we can send our engineer to your site for training or you can send the operator to our factory for training.

Q:What is the payment terms?

A:The payment terms we accept include:Western Union,T/T,VISA,Onlina Bank Payment.

Q:How about the shipping ways?

A:Transport by sea is the normal way;If special requirement,need to be final confirmed on both sides.

Q:If some problems happen to this machine, what should I do?

A:We provide two years machine warranty. During the two-year warranty, in case any problem for the machine, we will provide the parts free of charge (except for artificial damage). After the warranty, we still provide whole lifetime service. So any doubts, just let us know, we will give you solutions.