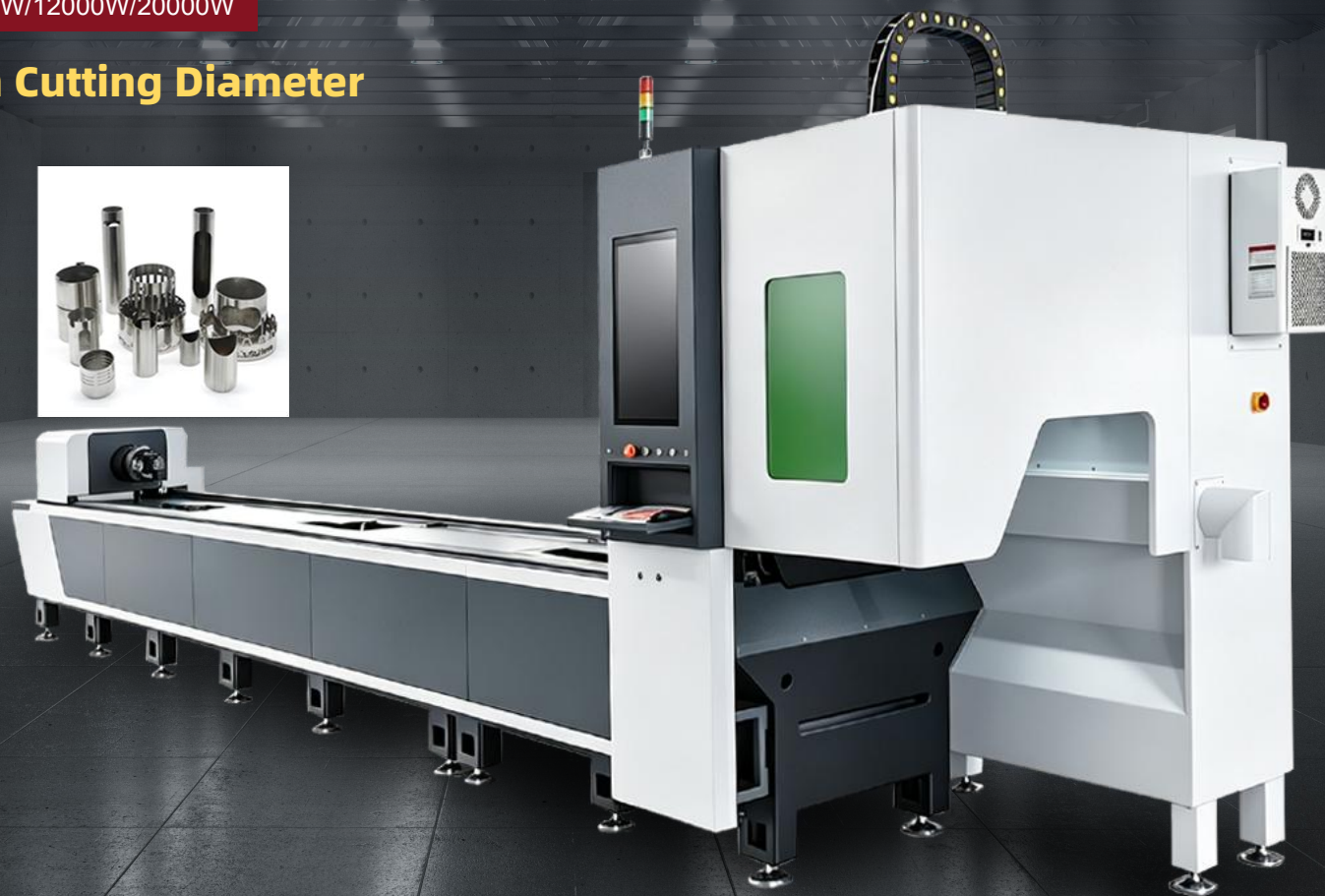
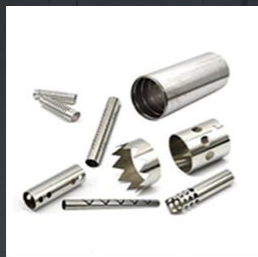


6024 FIBER LASER TUBE CUTTING MACHINE

3000W/6000W/8000W/12000W/20000W

φ10~240mm Cutting Diameter



6024 FIBER LASER TUBE CUTTING MACHINE

6024 Fiber laser tube cutting machines are advanced equipment designed for the precise and efficient cutting of metal tubes and pipes. Equipped with an upgraded thickened and heightened machine bed, the equipment delivers greatly enhanced structural stability during operation. These machines utilize high-powered laser beams to achieve clean, accurate cuts with minimal material wastage. They are widely used in various industries such as automotive, aerospace, construction, and manufacturing due to their ability to handle complex cutting tasks with high precision.



SELLING POINT

✓ HIGH PRECISION CUTTING:

The laser tube cutting machine ensures precise and clean cuts, reducing the need for post-processing. It can handle intricate designs and complex geometries with ease.

✓ HIGH STABILITY AND DURABILITY:

Upgraded thickened & heightened machine bed, ultra-rigid structure for stable high-speed cutting without vibration. The machine's stability during operation ensures consistent cutting quality.

✓ MULTIFUNCTIONALITY:

Capable of cutting a wide range of materials, including stainless steel, carbon steel, aluminum, brass, and copper. Suitable for cutting various shapes such as round, square, rectangular, and oval tubes.

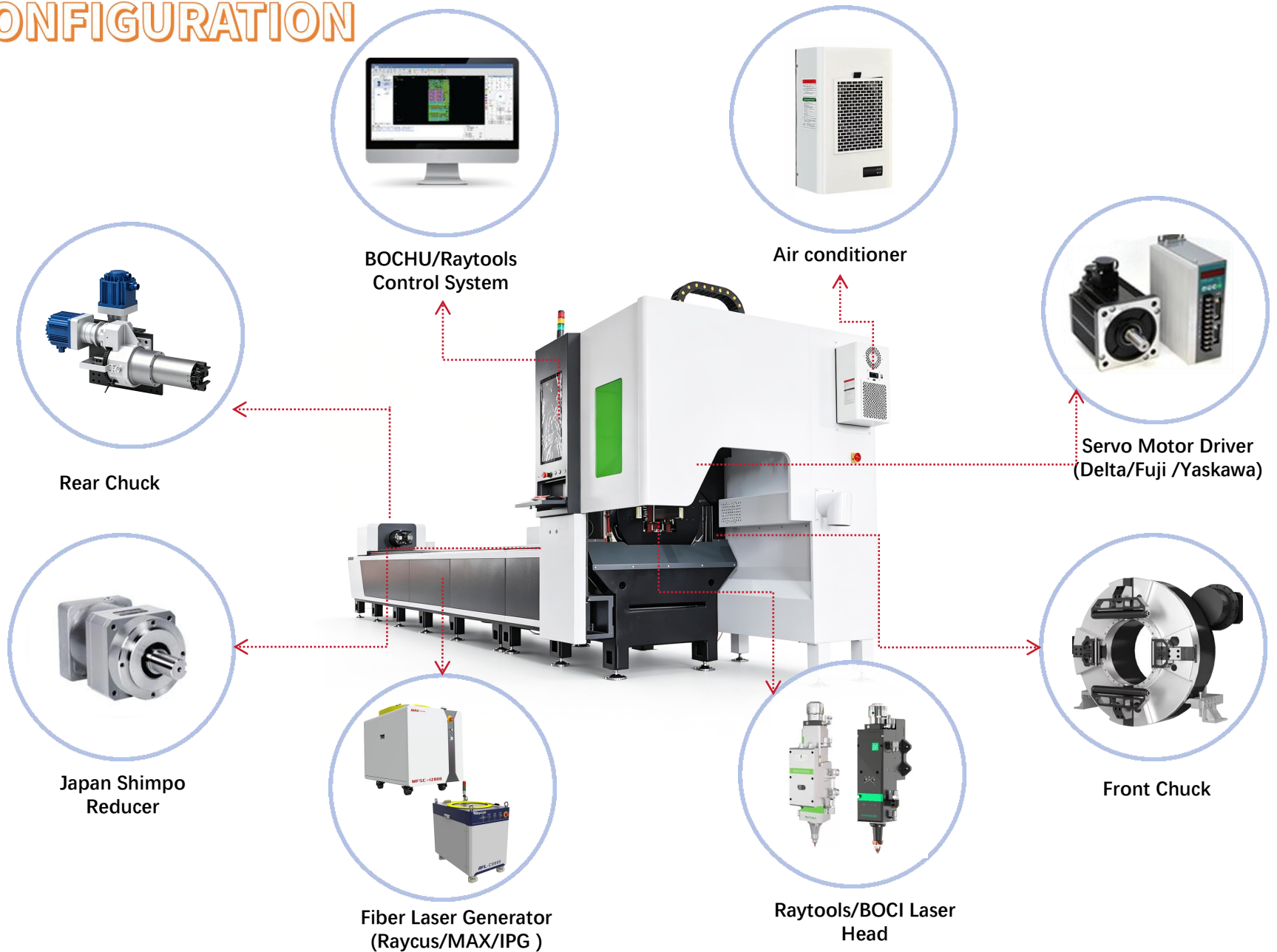
✓ EFFICIENCY:

Equipped with advanced automation features, it significantly reduces production time and labor costs. The machine can cut tubes and pipes at high speeds without compromising on quality.

✓ ENVIRONMENTAL FRIENDLINESS:

Produces less noise and emissions compared to traditional cutting methods, making it an environmentally friendly option.

CONFIGURATION

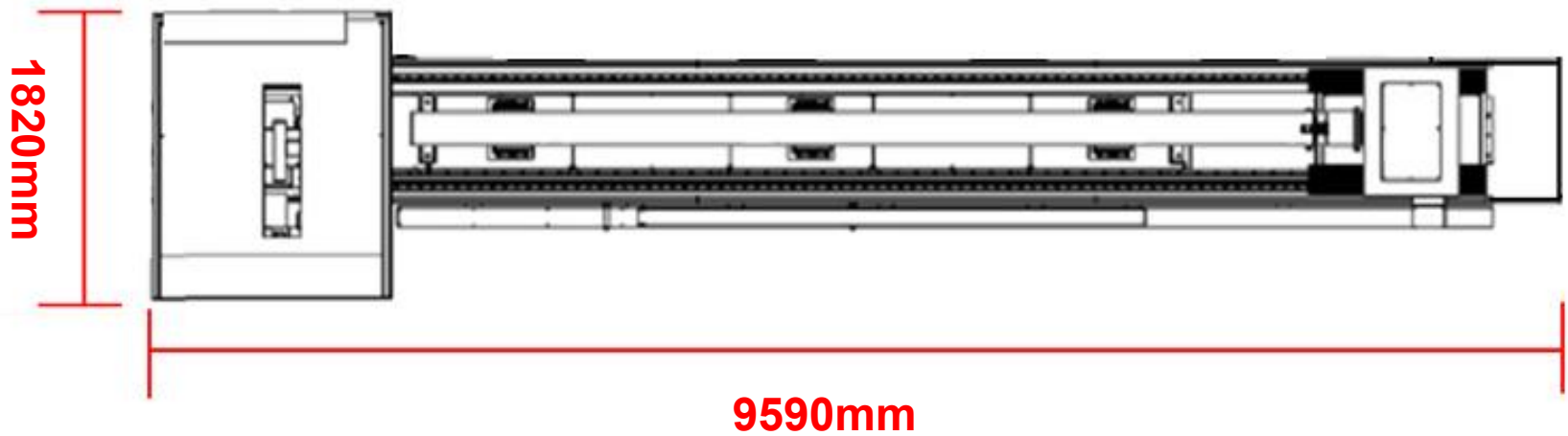
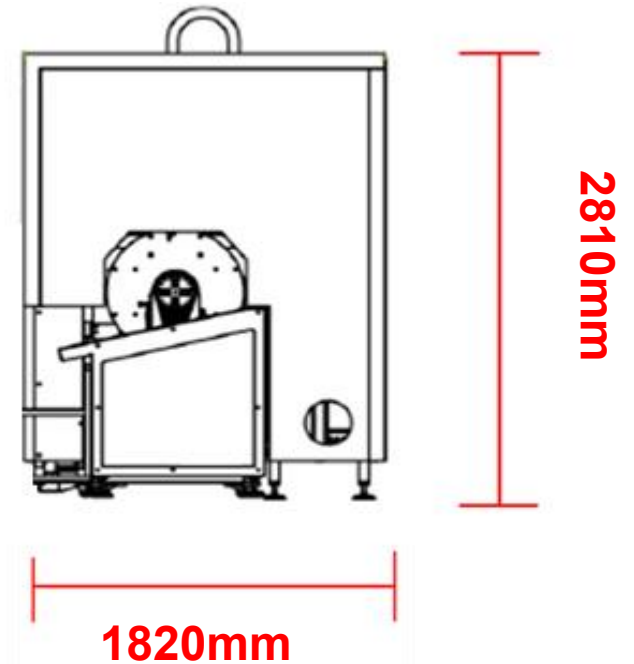


PARAMETER

Working Area	6000mm* ϕ10~240mm
Cooling System	Water Cooling
Laser Source	Raycus/MAX/IPG
Cutting Head	BOCI/Raytools
Voltage	380V 3Ph, 50Hz
Linear Guide Rail	HIWIN Rails
Rack and Gear	Taiwan YYC Rack
Servo Motors and Drives	Fuji/Yaskawa/Delta
Single tube support weight	300KG
Laser Power	3000W/6000W/8000W/12000W/20000W
Chiller	HanLi/S&A
Maximum Speed Acceleration	1.5G
Repeat the rotation accuracy	± 0.1mm
Positioning accuracy	± 0.1mm/m
Max Speed of Chucks	100r/min
X/Y Position Accuracy	0.05m/min

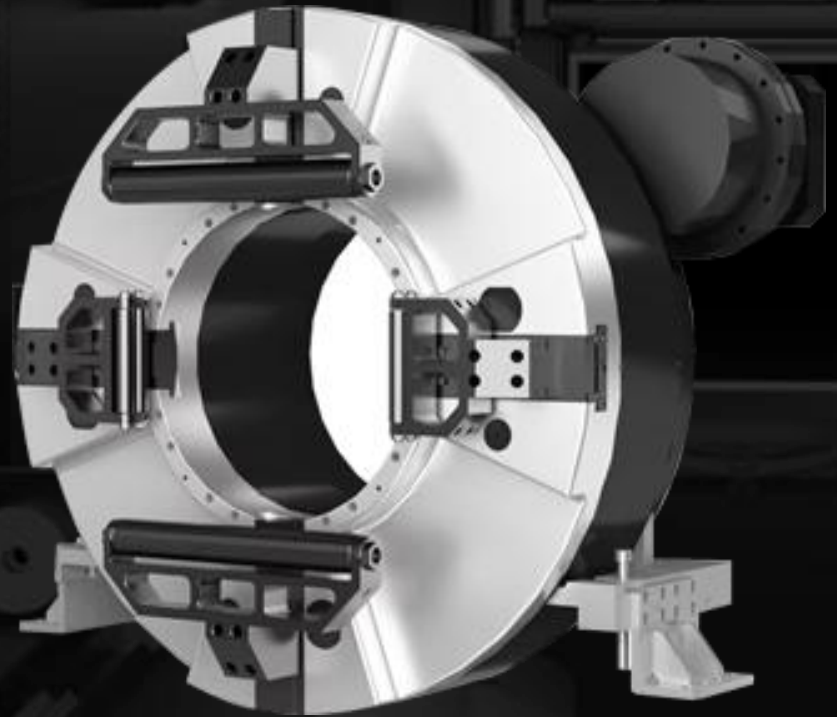
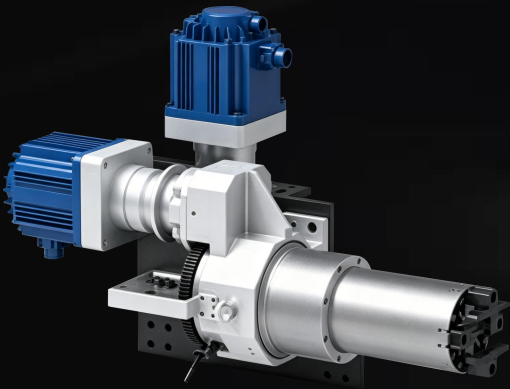
PRODUCT SIZE

Model name	Chuck size	Length	Width	Height
FST-6024	240mm	9590mm	1820mm	2810mm



PNEUMATIC CHUCK

Full stroke pneumatic chucks with automatic centre adjustment for easy operation; Full stroke pneumatic chuck with built-in cylinder, easy to install, clamping and releasing by side air intake, suitable for clamping all tubes; Four-jaw guide and guide mechanical transmission, to achieve higher straightness and stability of the four jaws, true self-centring effect, without the need to adjust the position of the four jaws, thus greatly reducing the adjustment of the labour costs, improve productivity, stability and wear resistance.



LASER SOURCE

Adopting 3000W-20000W fibre laser sources from IPG, RAYCUS, MAX and BWT; the fibre laser sources have high photoelectric conversion efficiency and are equipped with optimized second-generation fibre optic transmission system for more stable beam quality and stronger resistance to high response; the cutting boards have a narrow kerf and a bright cross-section to ensure more stable and precise cutting results for thick plates.



LASER CUTTING HEAD

1.Versatile Cutting: The laser head enables high-precision cutting of tubes, ensuring smooth, burr-free edges.

2.Auto-Focusing: Equipped with automatic focusing capabilities, the laser head adjusts the focus based on different materials and thicknesses, enhancing cutting efficiency and quality.

3.High power output: Provides stable high power output, suitable for cutting various types of pipes.

4.Superior Cooling: Advanced cooling system ensures the laser head maintains a stable temperature during prolonged operation, extending its lifespan.

5.Durability: Constructed with high-quality materials and craftsmanship, the laser head boasts long-lasting durability and high reliability.

6.Multi-Material Compatibility: Capable of cutting a wide range of metal materials, including carbon steel, stainless steel, aluminum, and copper, meeting diverse processing needs.

7.Modular Design: Simple, modular design makes the laser head easy to maintain and replace, enhancing equipment maintenance convenience.

8.Protective Lens: Equipped with high-quality protective lenses to effectively prevent damage from smoke and splatter during the cutting process.



HIGH STRENGTH SHEET BED

To support long-term continuous high-speed operation, the machine worktable is integrally welded from thick high-strength steel plates for superior rigidity, stable running and great durability. The whole worktable undergoes high-temperature stress relief treatment. The guide base is processed via multiple high-precision procedures to boost deformation and vibration resistance, sustaining consistent cutting precision and long service life in pipe processing.



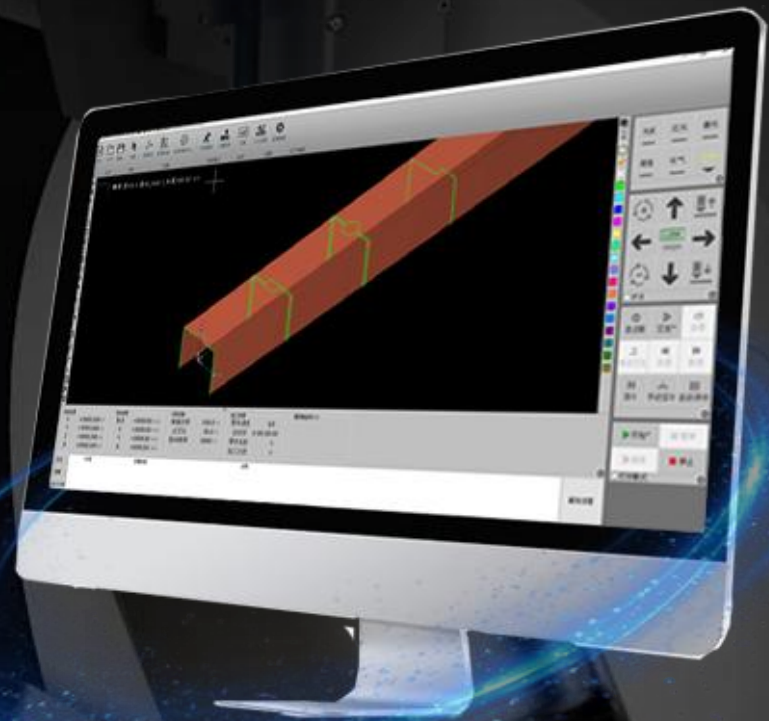


TubePro

Tube & Profile Cutting Software

- 1.Auto Find Tube Center in Production
- 2.Workpiece and Floating Coordinates
- 3.Seven-Axis Tube Delivering
- 4.Tube Holder
- 5.Corner Technique
- 6.Active Control at Corner Cutting
- 7.Quick Frog-Leap
- 8.Free Form Tube & Profile Production

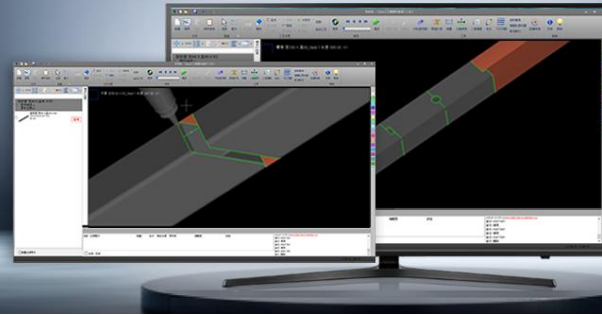
TubePro designed for professional tube cutting, supports production of tube and profile of various shape. It works with TubesT nesting software seamlessly to realize technique setting, advanced toolpath generation and nesting for standard and special production need.





TubesT

3D Tube Nesting Software



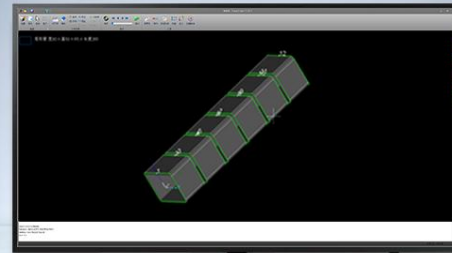
TubesT

3D Tube Nesting Software

TubesT is a 3D tube nesting software designed for CypTube/TubePro laser cutting system. From parts drawing and modification, full type compensation, strategic nesting to report generation, using TubesT will meet and exceed your production needs.



TubesT-Lite 三维套料软件



TubesT-Lite

3D Tube Nesting Software

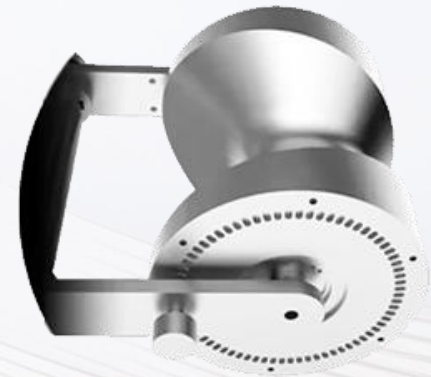
TubesT-Lite is a free software to generate toolpath for FSCUT tube cutting system. It's designed for CypTube/TubePro, can import part from external igs file, draw the part of standard shape and array-nest the part on the tube.



Support profiles of U/T/H/L shapes and free form shapes toolpath generation

FOLLOW-UP SUPPORT DEVICE

The follow-up support system moves synchronously during cutting. It reliably supports long, thick and irregular pipes to eliminate sagging, shaking and deformation for straight, precise cuts, perfectly suited for long pipe processing with superior stability and accuracy.



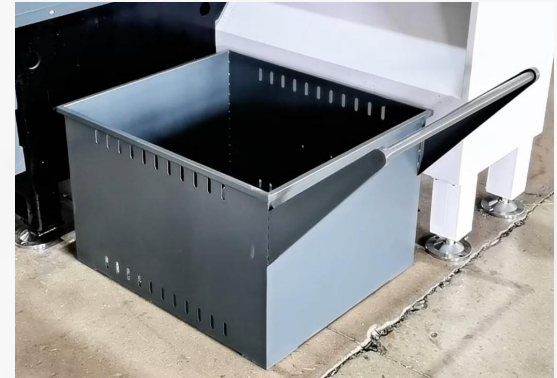
SERVO MOTORS AND DRIVER

Imported Yaskawa, Fuji servo motors and drivers are adopted, featuring high precision, high speed, large torque, large inertia, stable and durable performance, which ensures the high speed and acceleration of the whole machine



MOBILE UNLOADING TROLLEY

Dedicated pipe receiving trolley for laser tube cutters. Cushions falling tubes against scratches and deformation. Roller design eases material transport and reduces manual labor.



AIR CONDITIONER

Industrial constant-temperature air conditioner stabilizes cabinet temperature, shields core electric parts from heat and moisture, extending service life and lowering failure risks.



CUTTING SMOKE & DUST REMOVAL SYSTEM

Fume extractor clears cutting smoke and dust to secure laser precision. Multi-layer filters protect machine components with easy maintenance.



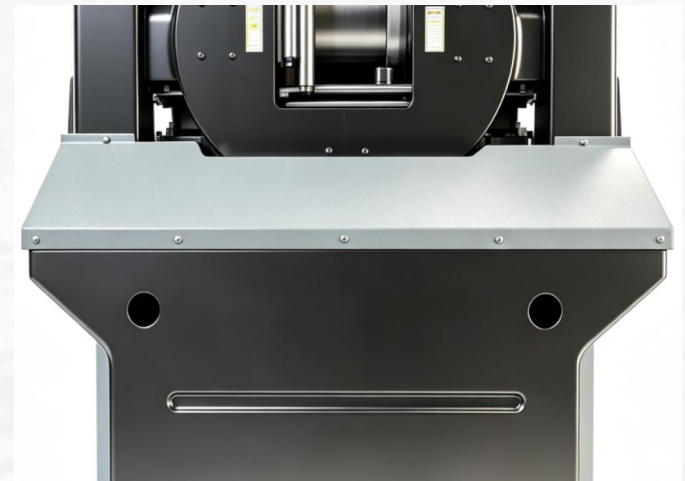
PNEUMATIC VISIBLE LIFTING PROTECTION DOOR

Pneumatic lifting transparent safety door allows clear internal viewing, automatic smooth opening and full laser safety protection.



BUFFERED UNLOADING SUPPORT PLATFORM

This buffered unloading platform cushions falling cut pipes. It supports round, square and special steel profiles, works with receiving trolleys and lowers scrap rates.





VOLTAGE STABILIZE

Stable voltage to ensure smooth operation of equipment.(Optional)



AIR COMPRESSOR

It is a essential tool for cutting stainless steel and thin carbon steel materials. More cost saving.(Optional)

INTELLIGENT RECOGNITION

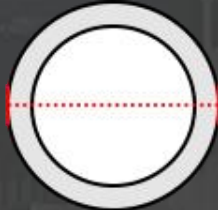
With contour recognition system, it can automatically identify standard round, oval, square and other special-shaped tubes.

Tubes realize non-inductive and high-efficiency detection, and realize the position deviation of the whole meter section's cutting accuracy within 0.15mm.



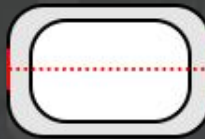
Angle

□ 15mm-165mm



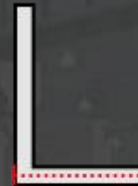
Round tube

□ 10mm-240mm

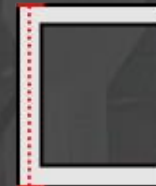


Rectangular

□ 15mm-165mm



Angle



Channel

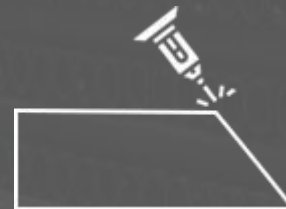


Other Shapes

Processing round tubes, square tubes, rectangular tubes Single tube load bearing up to 300kg.

Our machines can be upgraded to bevel cutting, 3D cutting and zero tail material.

This machine tail material is about 20cm



Bevel Cutting



20cm

Applicable Materials:

Suitable for stainless steel, carbon steel, aluminum alloy, galvanized sheet and other metal materials.

Applicable Industries:

Fiber laser cutting machines are widely used in the Construction & Steel Structure, Construction Machinery, Oil & Gas, Shipbuilding & Offshore Engineering, Automotive Manufacturing, Fitness Equipment, Agricultural Machinery, Power Engineering, and Rail Transportation industries.



10 YEARS PROFESSIONAL ODM/OEM MANUFACTURER OF LASER EQUIPMENT

30,000m²+

30,000-square-meter
standardized workshop.

27+

We currently hold 27
technical patents.

300+

We produce more than
300 laser equipment
every month.

4+

We own four separate
trademarks.



天人合一
以信为本

用仁义道德头现企业可持续发展
用我们的产品为顾客创造幸福

福斯特激光

以厚德 润天下

Liaocheng Foster Laser Science & Technology Co., Ltd.

Liaocheng Foster Laser is a laser equipment company with over 20 years of technical experience, integrating R&D, production, sales and after-sales service. We focus on the manufacturing of laser equipment such as fiber laser tube cutting machines, flat laser cutting machines and laser welding machines. With a modern production base, our products have passed CE and other international certifications, exported to more than 60 countries worldwide, and won high recognition from customers at home and abroad for stable quality.

Our flagship three-chuck fiber laser tube cutting machine adopts a side-mounted triangular frame bed, featuring strong load-bearing capacity, high rigidity, stable operation and good shock resistance. Equipped with the latest pneumatic three-chuck, it supports independent clamping and opening, synchronous rotation and movement. Thanks to the unique chuck layout design, it truly achieves zero tail material cutting, greatly reducing raw material waste. Bevel cutting is optional, and no secondary processing is required for welding.

The equipment can be equipped with Raycus, Max, IPG laser sources with power ranging from 2000W to 12000W, matched with imported servo motors and precision transmission structures, ensuring high precision, fast speed and long-lasting stable performance.

It is equipped with a dedicated auto-focus cutting head and wireless handle control, supporting semi-automatic feeding and unloading, which is easy to operate. It can cut profiles such as round tubes, square tubes, angle steel and channel steel, and is suitable for materials such as carbon steel, stainless steel, aluminum alloy and galvanized sheet, widely used in automobile, shipbuilding and other industries. We always provide cost-effective laser tube processing solutions for global customers with high-quality equipment, professional technical support and comprehensive after-sales service.





TRADEMARK

10+

United States

Mexico

Britain

Brazil

Italy

Germany

Foster Laser has successfully registered trademarks in 10+ countries, which means the company has obtained legal protection for trademarks in these countries. These registrations not only ensure exclusive use of the company's brand and prevent others from infringing or imitating it, but also provide strong support for the company's expansion in the international market.

International Certification Shows Brand Strength

1.Strict Quality Control Standards

2.Authoritative Certification

3.Brand Guarantee



PACKAGING

1



Machine cleaning and
Protective oil processing

2



Wrapping with
protective film

3



Forklift moving goods

6



Transportation

5



Container Sealing

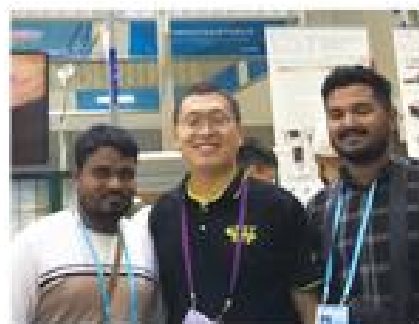
4



Container loading

EXHIBITION

Partners come from all over the world
With 10 years of export experience





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: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.

Q:What is the payment terms?

A:The payment terms we accept include:Western Union,T/T,VISA,Online 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.