

Stock code: **430549**

LASER CUTTING PRODUCT BROCHURE

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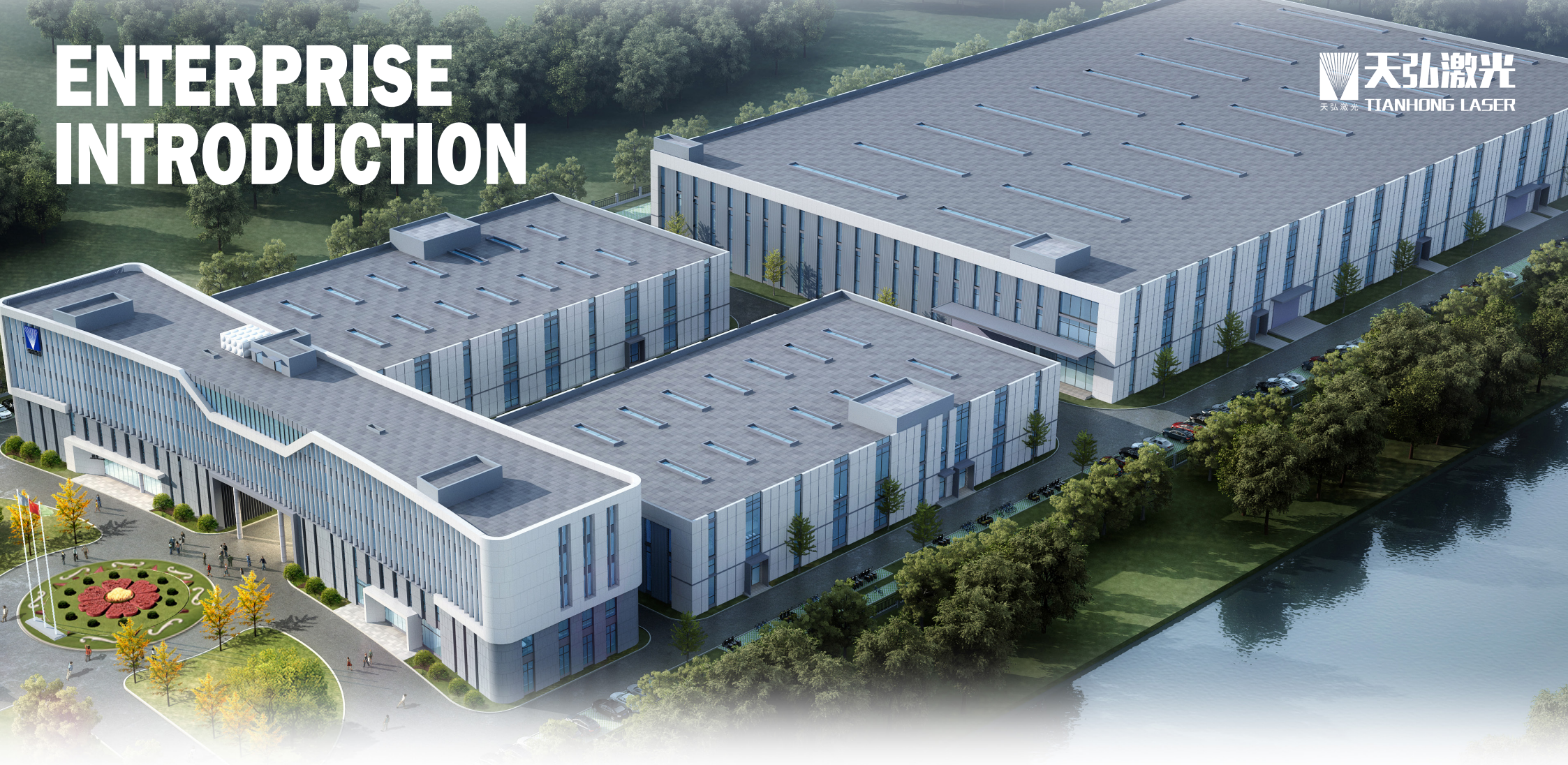
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*If you need more information about our company, or have better suggestions for the development of the company, welcome to tell us by phone, fax and email.
We will reply or contact you accordingly after understanding your needs.

ENTERPRISE INTRODUCTION



Tianhong Laser was founded in 2001 with a registered capital of RMB 72.32 million. The company focuses on the research and development, manufacturing and service of industrial digital intelligent equipment, and is a provider of digital intelligent equipment and automated production line with laser technology as the core, mainly providing "laser + machine vision + automation + MES" integrated solutions for downstream customers. Our products include high power laser cutting, laser tube cutting, precision laser cutting, laser welding, laser precision processing and other equipment and automated production lines, mainly used in sheet metal processing, steel industry, electrical industry, engineering machinery, aerospace, furniture industry, automotive manufacturing, new energy lithium, new energy photovoltaic, 3C semiconductor and other industries. The technology covers: software, mechanical, electrical, motion control, robotics, optical, image, material, laser, etc. Now we have Suzhou headquarters, Zhejiang company, Suqian company and Guangdong company respectively.

22th

Development History



180+

R&D Team



38+

Software Publications



160+

Patent



Development History



2001-2005

Tianhong Laser company was established;
Small and medium power laser marking
business started;
Laser welding machine business started.



2006-2010

Laser cutting machine business started;
It was awarded the honor of "National
High-tech Enterprise, Private Technology
Enterprise of Jiangsu Province".

2011-2015

Micro machining business started;
The 12th Five-Year Plan 863 Project
of the Ministry of Science and
Technology was completed;
It was recognized as a science and
technology enterprise of "Double
Hundred Project" in Suzhou
Industrial Park;
Intelligent automated robot production
line business started.technology
enterprise of "Double Hundred Project"
in Suzhou Industrial Park.



2016-2023

Suqian production base put into use;
Guangdong Tianhong was founded;
Zhejiang Tianhong base founded;
Start the new energy lithium electricity
industry business;
Become a national specialized "little
giant" enterprise.



Global Service Site

4 R&D and production bases

Equipment is exported to more than 30 countries and regions



Tianhong Laser
Suzhou Headquarters



Tianhong Laser
Zhejiang Company



Tianhong Laser
Guangdong Company



Tianhong Laser
Suqian Company

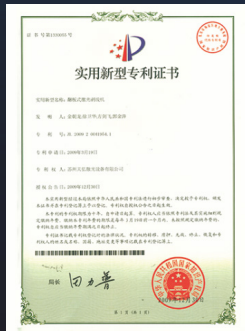


Enterprise Honor

High-tech enterprise
Trustworthy !

BETTER TIANHONG BETTER LASER

Technological force
Intellectual strength

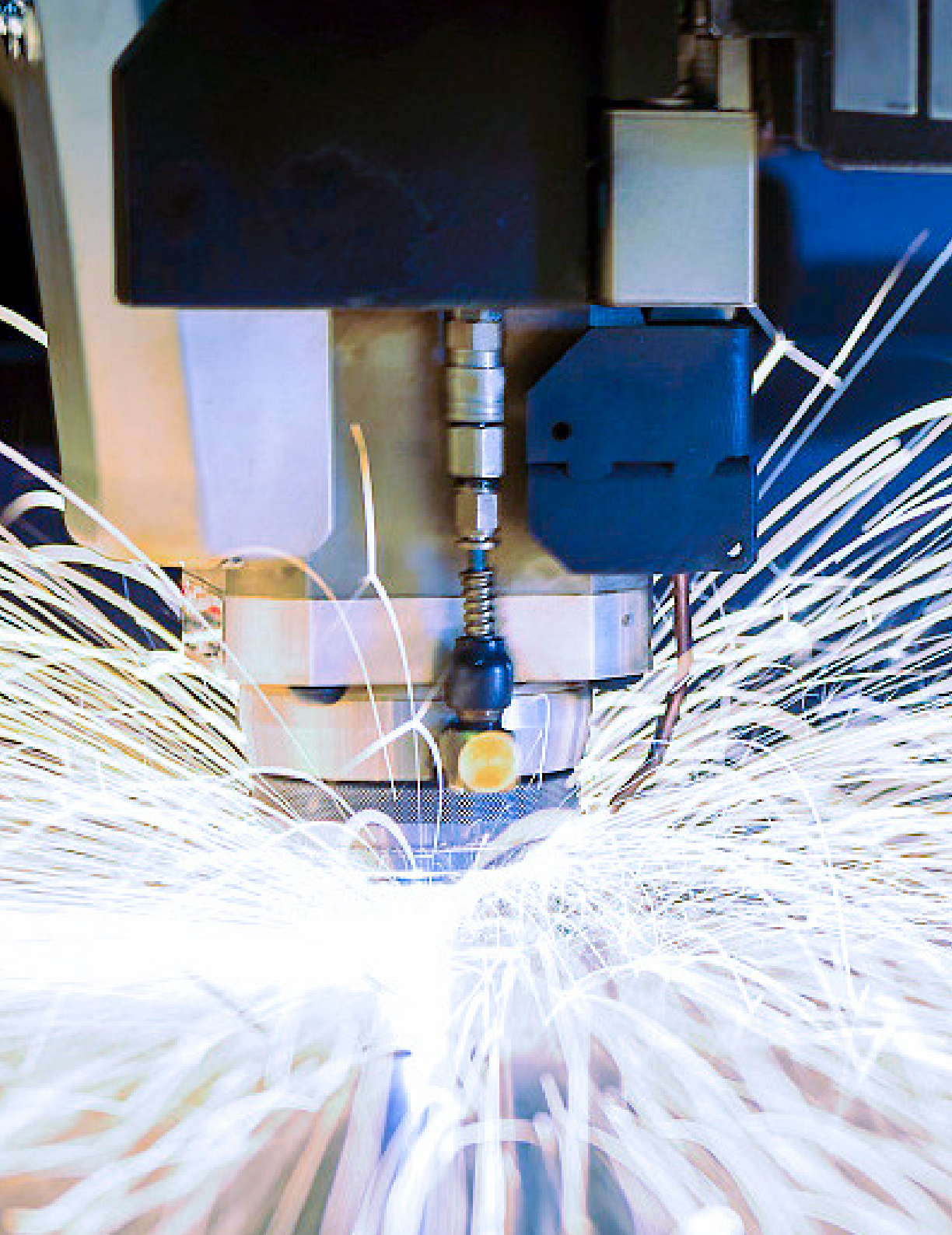


Invention Patent **14+**

Utility Patent **135+**



With optical, mechanical, software, electrical, motion control, programming, mechanics, flow science, materials science, MES and other aspects of professional personnel.



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PLATE LASER CUTTING MACHINE



High quality |
High precision |
High technology |



Double Exchange Laser Cutting Machine

Large format、High power



Model Characteristics

Lifting double exchange platform

Lifting double exchange platform, completing once $\leq 20S$
Greatly improve processing efficiency and save labor cost.

Semi-hollow Bed Design

The semi-hollow bed design reduces the heating area. The heat deformation is small, so that the bed is not deformed by high temperature, thus prolonging the service life of the product.

Model	TH-GPF3015V	TH-GPF4020V	TH-GPF6020V	TH-GPF6025	TH-GPF8025	TH-GPF12025
Laser power	1000-6000W	1000W-6000W	1500W-6000W	6000W-30000W	6000W-30000W	12000W-30000W
Z-axis path	250mm	250mm	250mm	350mm	350mm	350mm
Positioning accuracy	$\pm 0.03\text{mm/m}$	$\pm 0.03\text{mm/m}$	$\pm 0.03\text{mm/m}$	$\pm 0.03 \text{ mm/m}$	$\pm 0.03\text{mm/m}$	$\pm 0.03\text{mm/m}$
Repetition positioning accuracy	$\pm 0.03\text{mm}$	$\pm 0.03\text{mm}$	$\pm 0.03\text{mm}$	$\pm 0.03 \text{ mm}$	$\pm 0.03 \text{ mm}$	$\pm 0.03 \text{ mm}$
Processing format	3000*1500mm	4000*2000mm	6000*2000mm	6000*2500mm	8000*2500mm	12000*2500mm

Model Characteristics

Segmented dust extraction system

The middle of the bed is partitioned by a cross beam and partitioned by a small compartment. It adopts segmented dust extraction operation and automatically opens the corresponding dampers according to the location of the cutting head for more concentrated suction power and smoother air extraction.



Aviation aluminum T6

Adopt aviation aluminum T6 with high hardness, light weight and good dynamic performance; Adopt honeycomb compression structure design, strong resistance to deformation; extrusion molding process without air holes and sand holes. It is with high strength and is more durable.



Single platform Laser Cutting Machine Accurate and cost-effective



Model Characteristics

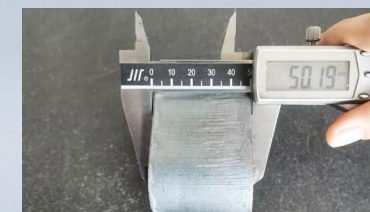
Small and practical

Practical and small, simple and integrated design, small footprint, flexible operation movement system, to provide users with a better user experience.

Blue and white color scheme

Use the Tianhong logo blue and white color scheme, the body appearance is simple and atmospheric.

Cutting Samples Display



Model	TH-GSF3015V	TH-GSF4020V	TH-GSF6020V	TH-GSF6025V
Laser power	1000-3000W	1000-3000W	1000-6000W	3000-12000W
Z-axis path	110mm	110mm	110mm	110mm
Positioning accuracy	±0.05mm/m	±0.05mm/m	±0.05mm/m	±0.05mm/m
Repetition positioning accuracy	±0.03mm	±0.03mm	±0.03mm	±0.03mm
Processing format	3000*1500mm	4000*2000mm	6000*2000mm	6000*2500mm

Model Characteristics

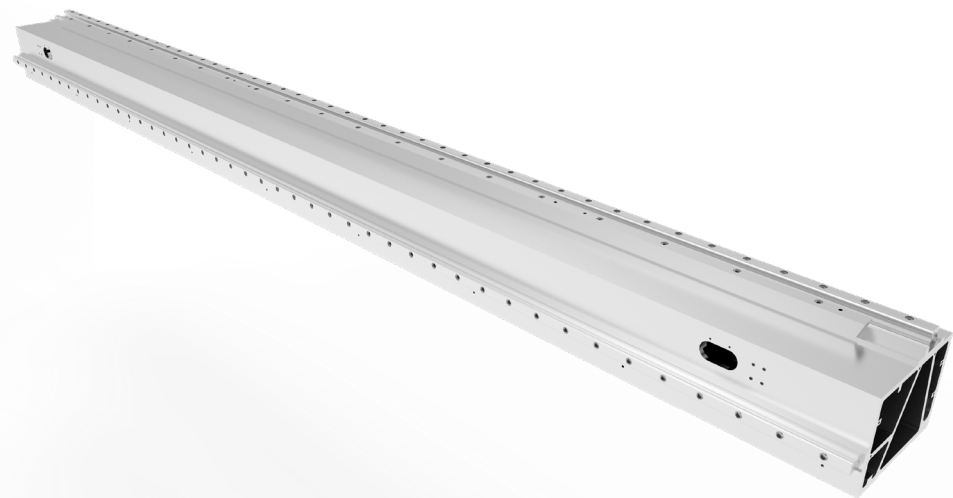
Segmented dust extraction system

The middle of the bed is partitioned by a cross beam and partitioned by a small compartment. It adopts segmented dust extraction operation and automatically opens the corresponding dampers according to the location of the cutting head for more concentrated suction power and smoother air extraction.



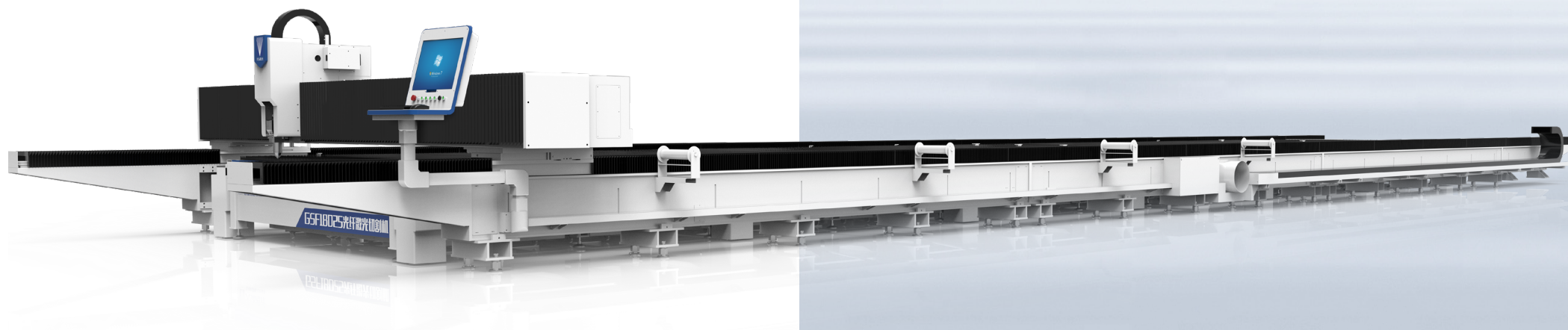
Aviation aluminum T6

Adopt aviation aluminum T6 with high hardness, light weight and good dynamic performance; Adopt honeycomb compression structure design, strong resistance to deformation; extrusion molding process without air holes and sand holes. It is with high strength and is more durable.



TH-GSF

Single platform Laser Cutting Machine
Large format and high power

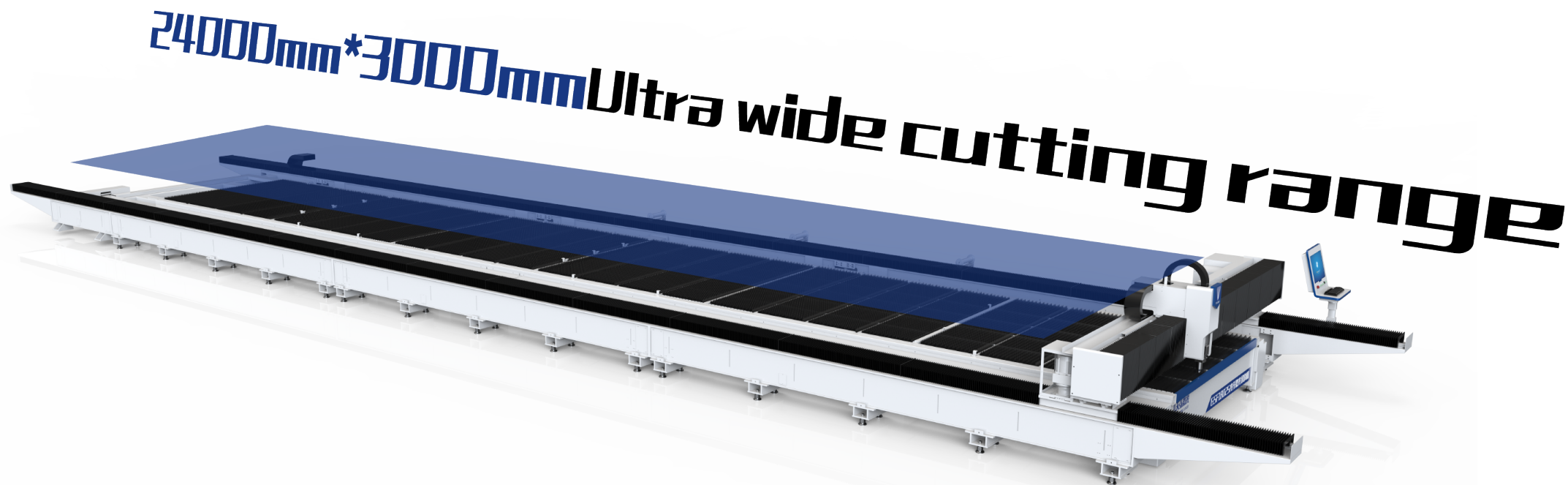


Model	TH-GSF6025	TH-GSF8025	TH-GSF12025	TH-GSF0606
Laser power	3000-12000W	3000-6000W	6000-12000W	1000-3000W
Z-axis path	110mm	110mm	110mm	100mm
Positioning accuracy	±0.05mm/m	±0.05mm/m	±0.05mm/m	±0.05mm/m
Repetition positioning accuracy	±0.03mm	±0.03mm	±0.05 mm	±0.03mm
Processing format	6000*2500mm	8000*2500mm	12000*2500mm	600mm*600mm

Model Characteristics

Customized processing, ultra-large format

Floor track type ultra-large format single platform laser cutting machine, can cut large sheets and plates; can be customized according to user requirements.



Split structure workbench

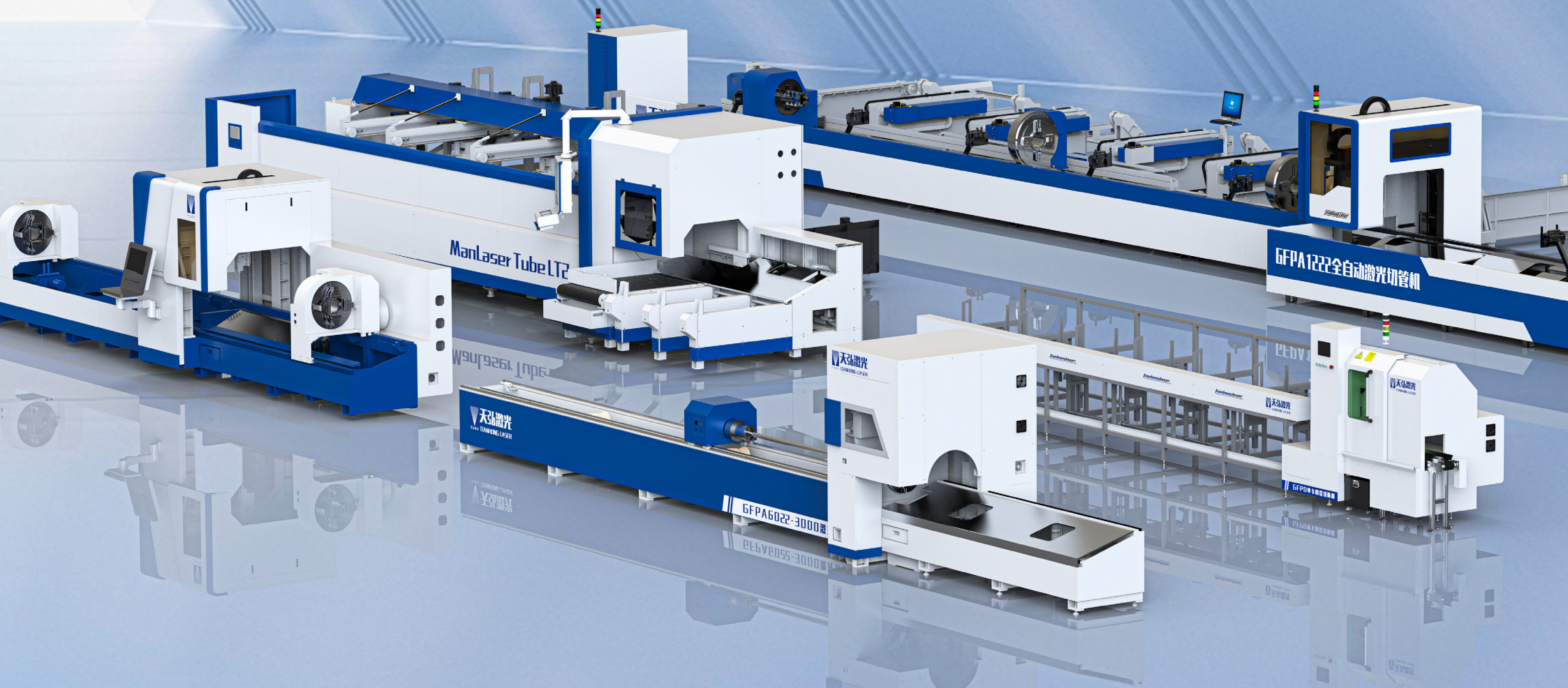
The processing heat generated by the split structure workbench during equipment operation will not affect the main bed.

Reduce manufacturing costs and facilitate transportation.



PIPE LASER CUTTING MACHINE

Cut the tube with the right way and storm!



GFPA Professional Tube Laser Cutting Machine Two-chuck



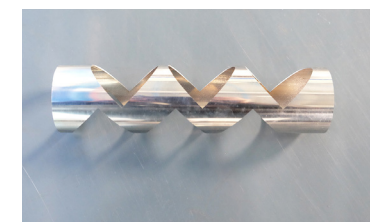
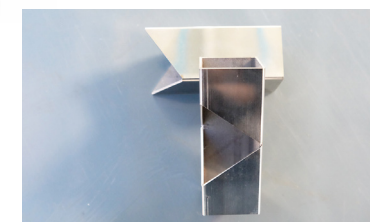
Model Characteristics

Entry-level preference, cost-effective

Entry-level tube cutting machine models, with automatic pneumatic two-chuck, stable and efficient operation; tube cutting with high-speed operation, high efficiency and without interruption.

The reducer wheel is used to support the tube when cutting and unloading, which can support the pipe up and down, left and right, thus avoiding the pipe from shaking and ensuring the accuracy.

Cutting Samples Display



Model	GFPA6016	GFPA6022	GFPA6032
Laser power	1000-4000W	1000-4000W	1000-4000W
Max. Tube clamping weight	≤ 120KG	≤ 170KG	≤ 400KG
X-axis and Y-axis positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
X-axis and Y-axis repetition positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
Chuck rotating speed	0-80r/min	0-80r/min	0-60r/min
Clamping tube range	φ10-φ160, □ 10-□ 110	φ10-φ220, □ 10-□ 155	φ10-φ320, □ 10-□ 225

GFPB Functional Tube Laser Cutting Machine Two-chuck



Model Characteristics

Patented technology to improve accuracy

Adopt the patented technology of self-centering four-jaw chuck to remove the rope pendulum effect and improve the accuracy of slender tube cutting.

Two chucks are equipped with automatic loading and unloading structure, which not only saves labor cost but also improves production efficiency.

Model	GFPB6016D	GFPB6022D	GFPB6032D
Laser power	1000-4000W	1000-4000W	1000-4000W
Max. Tube clamping weight	≤ 120KG	≤ 170KG	≤ 400KG
X-axis and Y-axis positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
X-axis and Y-axis repetition positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
Chuck rotating speed	0-80r/min	0-70r/min	0-60r/min
Clamping tube range	φ10-φ160, □ 10- □ 110	φ10-φ220, □ 10- □ 155	φ10-φ320, □ 10- □ 225

GFPB Short-tail Tube Laser Cutting Machine Three-chuck

Fully automatic pneumatic chuck with high accuracy

The machine processes different sizes of tubes without pausing to wait for production, which not only reduces the difficulty of manual operation, but also ensures the high efficiency of processing and production.



Model	GFPB6016F	GFPB6022F	GFPB6032F
Laser power	1000-4000W	1000-4000W	1000-4000W
Max. Tube clamping weight	≤ 120KG	≤ 170KG	≤ 400KG
X-axis and Y-axis positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
X-axis and Y-axis repetition positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
Chuck rotating speed	0-80r/min	0-70r/min	0-60r/min
Clamping tube range	φ10-φ160, □ 10- □ 110	φ10-φ220, □ 10- □ 155	φ10-φ320, □ 10- □ 225

GFPB Zero-tailing Tube Laser Cutting Machine Three-chuck

Realize zero-tailing

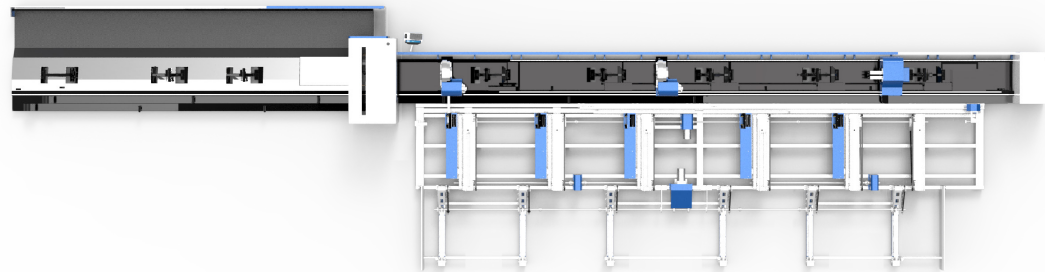
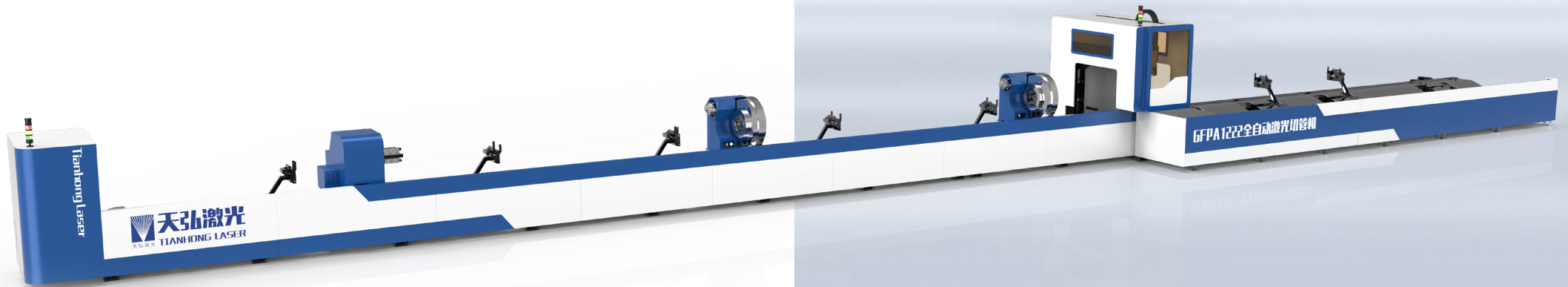
Pneumatic reverse grip three-chuck with high accuracy, repeated grip cutting for the last product, customized tube length to achieve true zero-tailing.



Model	GFPB6016R	GFPB6022R	GFPB6032R
Laser power	1000-4000W	1000-4000W	1000-4000W
Max. Tube clamping weight	≤ 120KG	≤ 170KG	≤ 400KG
X-axis and Y-axis positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
X-axis and Y-axis repetition positioning accuracy	±0.03mm/1000mm	±0.03mm/1000mm	±0.03mm/1000mm
Chuck rotating speed	φ10-φ160, □ 10- □ 110	φ10-φ220, □ 10- □ 155	φ10-φ320, □ 10- □ 225
Clamping tube range	0-80r/min	0-70r/min	0-60r/min

TH-GFPB

GFPB1222 Automatic Tube Laser Cutting Machine Three-chuck

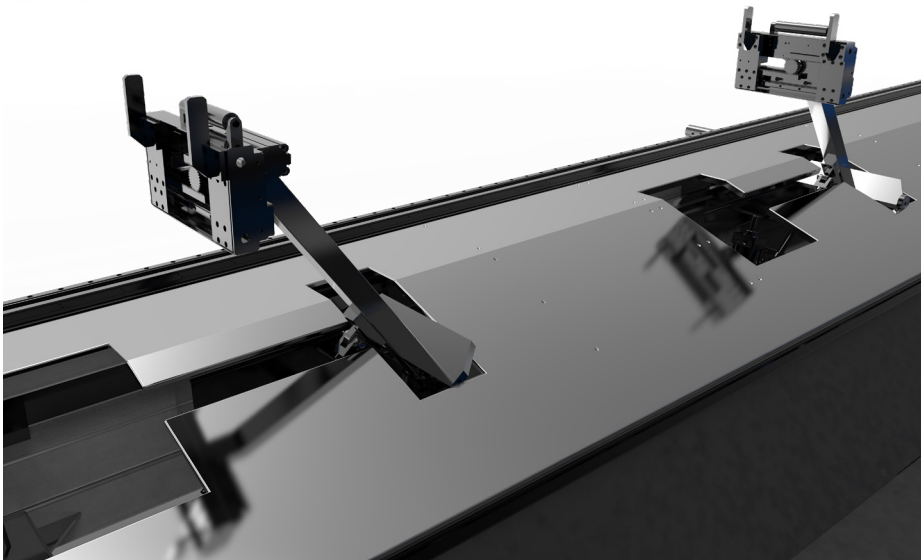


Model	GFPB1222
Laser power	2KW
Fixed chuck through-hole diameter	220mm
Max. Air movement speed	80m/min
Max. acceleration	1.0G
Cutting accuracy	±0.3mm+2 times tube toleration
W-axis max. Rotating speed	100r/min

Model Characteristics

Follow-up support assembly

It can rise and support to different heights according to the type of tube to be cut, so as to carry out different specifications of tube with the support, greatly improving the efficiency of tube processing.



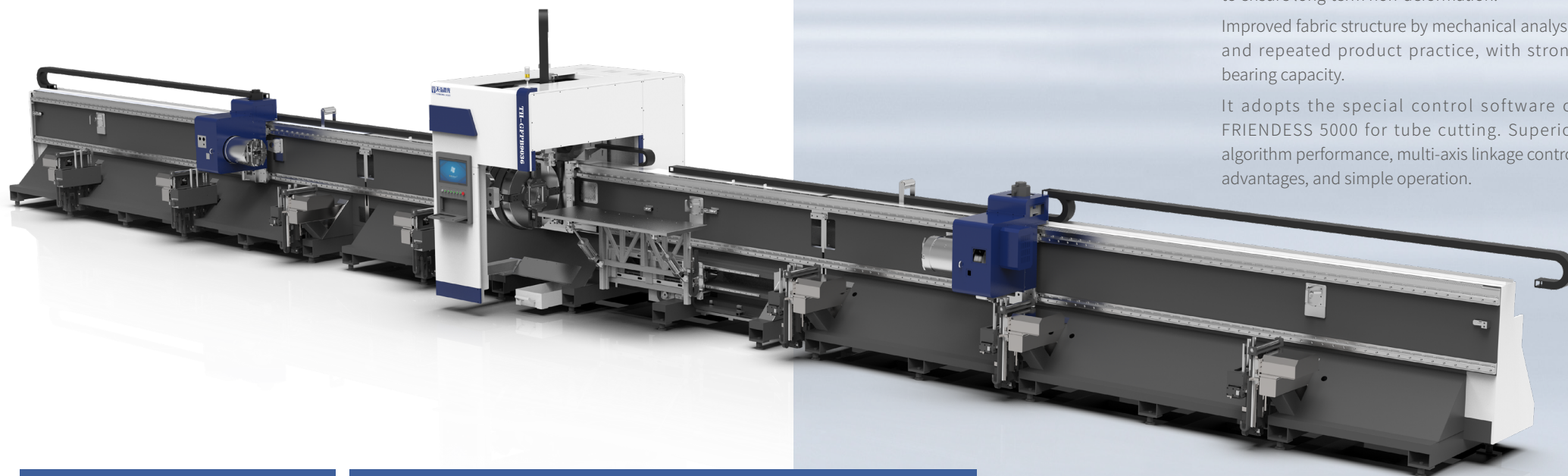
Intelligent chuck can do the job

The right one is the first chuck: the dynamic chuck is double-action chuck, clamping range: 0-220mm, two chuck linkage, automatic centering.

The second right is the second and third chucks: front type full-pass pneumatic chuck, through-hole diameter: 220mm, clamping range: 0-220mm, roller-like chuck jaws two-two linkage.



GFPB12052-12000 Automatic Tube Laser Cutting Machine Three-chuck



Professional tube cutting and structural strengthening upgrade

Welded bed, high rigidity, annealing treatment, to ensure long-term non-deformation.

Improved fabric structure by mechanical analysis and repeated product practice, with strong bearing capacity.

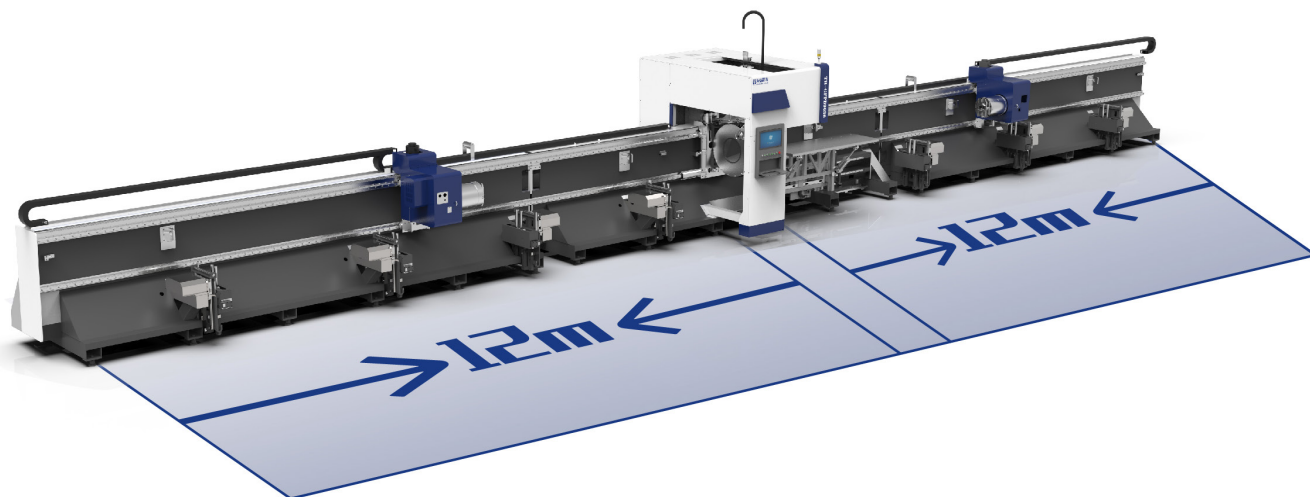
It adopts the special control software of FRIENDESS 5000 for tube cutting. Superior algorithm performance, multi-axis linkage control advantages, and simple operation.

Model	GFPB12052-12000
Laser power	1.2KW
Fixed chuck through-hole diameter	520mm
X-axis and Y-axis air movement speed	≤ 40m/min
Max. acceleration in the rear chuck axis (Y)	0.4G
Chuck rotating speed	≤ 40r/min
Cutting accuracy	±0.3mm (excluding the tube's own precision, thermal processing deformation)

Model Characteristics

All-in-one design for worry-free processing

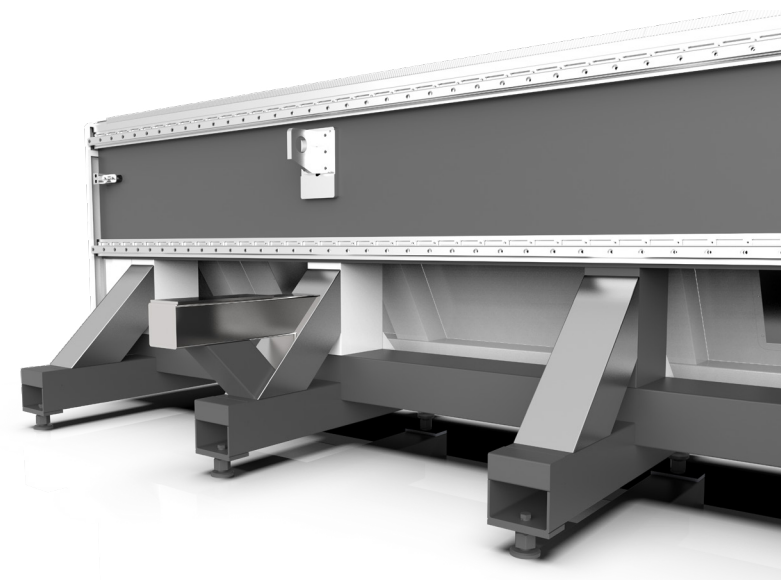
It adopts the integrated bed design of 12m incoming processing body + cutting room + 12m unloading platform, with large load capacity, good stability and high accuracy of equipment.



Scientific analysis and superb structure

Welded bed, high rigidity, annealing treatment, to ensure long-term non-deformation; splicing scheme can ensure the accuracy and reliability.

Improved fabric structure by mechanical analysis and repeated product practice and with strong bearing capacity.



GFPD Laser Tube Breaker Preferred for entry

Model Characteristics

Easy to learn and use, easy to break the tube

Low operating cost, time and energy saving and with high efficiency.

It comes with large-capacity material magazine, fully automatic loading, and one person can control multiple machines.



Model	GFPD6005-A	Model	GFPD6005-B
Round tube cutting range	φ6mm-φ60mm	Round tube cutting range	φ6mm-φ60mm
Max. Acceleration	1.0G	Max. Acceleration	1.0G
W-axis max. rotation speed	120r/min	W-axis max. rotation speed	120r/min
X-axis and Z-axis positioning accuracy	±0.03mm	X-axis and Z-axis positioning accuracy	±0.03mm
X-axis and Z-axis repetition positioning accuracy	±0.02mm	X-axis and Z-axis repetition positioning accuracy	±0.02mm
Cutting accuracy	±0.2mm+2 times tube tolerance	Cutting accuracy	±0.2mm+2 times tube tolerance

TUBE SHEET INTEGRATED LASER CUTTING MACHINE/Three-dimensional Cutting

天弘激光
TIANHONG LASER



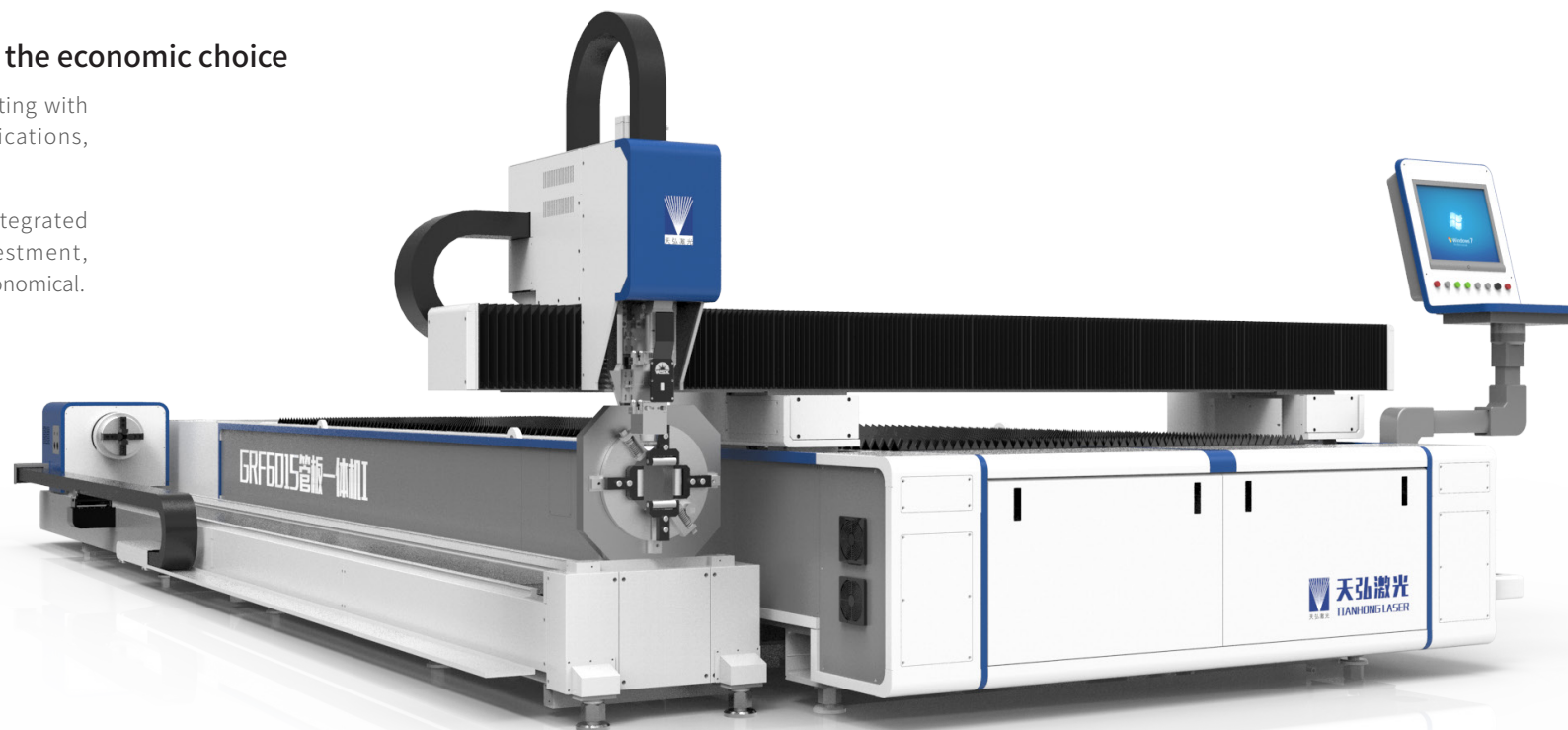
Single Platform Tube and Metal Integrating Laser Cutting Machine

Economic choice

One machine for two uses, the economic choice

Integrate sheet cutting and tube cutting with one, cutting a wider range of applications, stronger processing capacity.

The single plane tube and plate integrated machine has less preliminary investment, occupies a smaller area and is more economical.



Model	GRF3015	GRF6020
Laser power	1000-3000W	
Max. acceleration	0.8G	
Clamping tube range	φ8-φ120, □8-□85 / φ10-φ160, □10-□110	
Max. Clamping tube weight	≤ 120KG	
Chuck rotating speed	0-80r/min	
Y2-axis positioning accuracy	±0.03 mm/1000mm[1]	
Y2-axis repetition positioning accuracy	±0.03 mm/1000mm[1]	
U-axis repetition positioning accuracy	≤ 7 arcs	

TH-GPRF

Double Exchange Tube and Plate Integrated Laser Cutting Machine

Focus on action



Model Characteristics

Welded bed for durability

The bed is made of heavy steel plate welded, stable structure, no shaking when running at high speed; the bed is heavy, good anti-vibration performance, thus ensuring accuracy when cutting.

High speed dual switching platform

The double working tables are exchanged in parallel, with high power transmission and overload capacity, so that cutting work and loading and unloading can be carried out simultaneously, thus improving processing productivity.

Model	GPRF3015	GPRF6020
Laser power	1000-3000W	
Max. acceleration	1.0G	
Clamping tube range	φ8-φ120, □8-□85 / φ10-φ160, □10-□110	
Max. Clamping tube weight	≤ 120KG	
Chuck rotating speed	0-80r/min	
Y2-axis positioning accuracy	±0.03 mm/1000mm[1]	
Y2-axis repetition positioning accuracy	±0.03 mm/1000mm[1]	
U-axis repetition positioning accuracy	≤ 7 arcs	

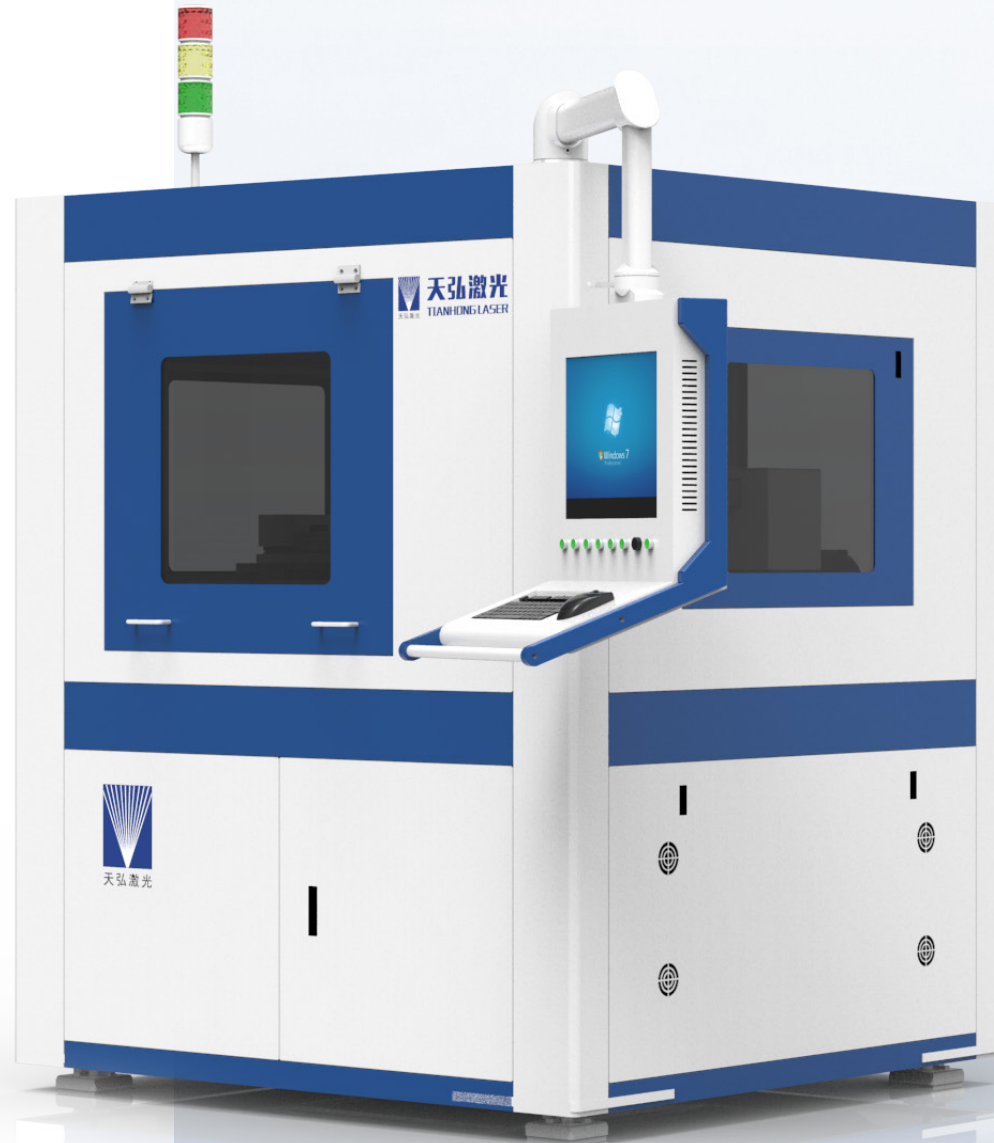
Precision Fiber Laser Cutting Machine

Coaxial anti-splash slag blocking mechanism

Adopt the patented coaxial anti-splash slag blocking mechanism, it can make the cut products have a uniform internal finish and no residue of slag marks.

Precision processing system

From the thin-walled metal tube production line directly into the cutting processing system, custom ring cutting support module with cutting head to complete the cutting cutting process.



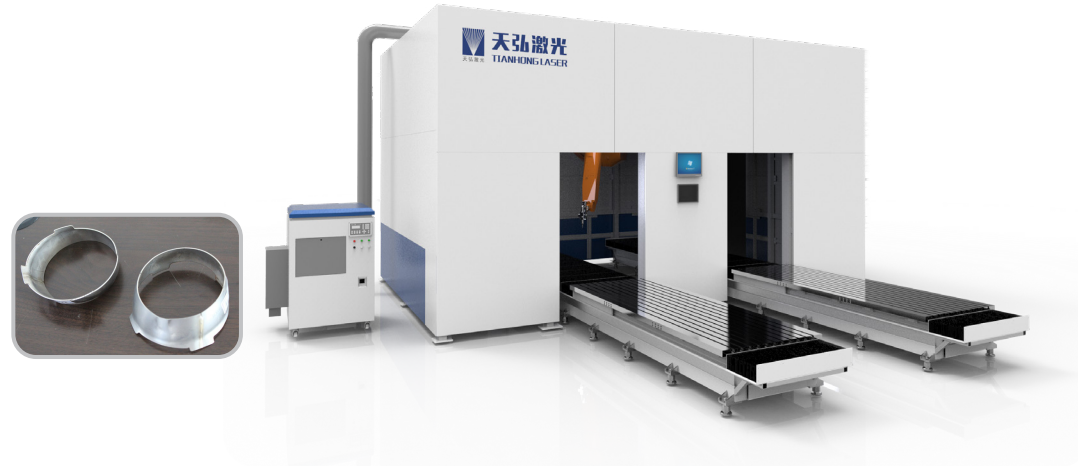
Model	GFPC6012
Round tube cutting range	φ80-120, can be customized
Chuck through-hole diameter	130
Max. acceleration	0.6
Z-axis path	120
W-axis max. rotation speed	60
Unloading length	Standard 600mm, can be customized
Cutting accuracy	±0.2mm

Three-dimensional Laser Cutting Machine

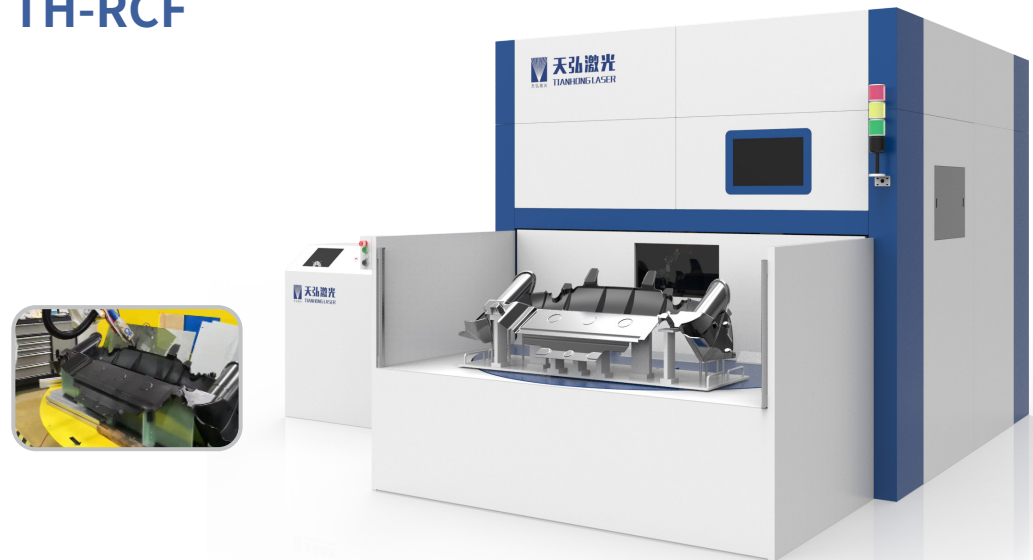
Gantry



Three-dimensional Laser Cutting Machine
TH-RCF



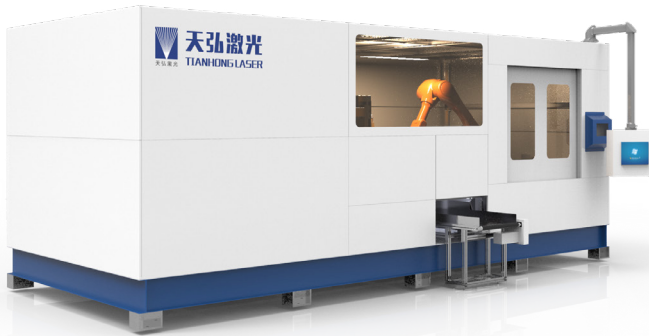
Wrap-around 3D Duplex Laser Cutting Machine
TH-RCF



Shaped Tube Laser Cutting Workstation

Applied to three-dimensional high-speed cutting of various shaped pipes in industries such as automobiles and hardware.

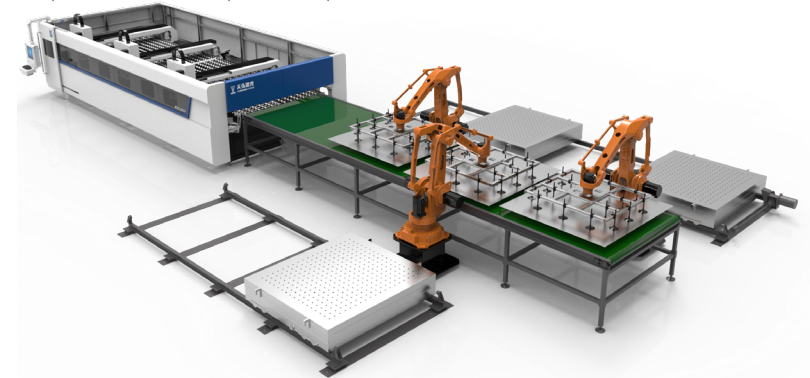
Six axis laser cutting robot and clamp type rotating fixture rotate in multiple axes.



Three-beam Unload Line Laser Cutting Machine

This model has an ultra wide cutting range, suitable for cutting ultra wide plates.

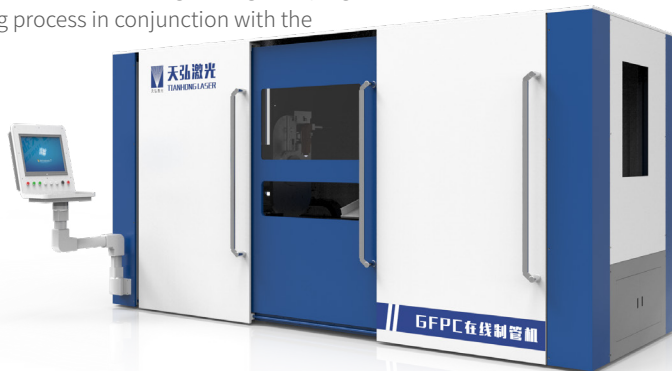
Three crossbeam collaborative cutting, capable of real-time avoidance, parallel operation, and independent operation.



Automatic Pipeline Fiber Laser Cutting Machine

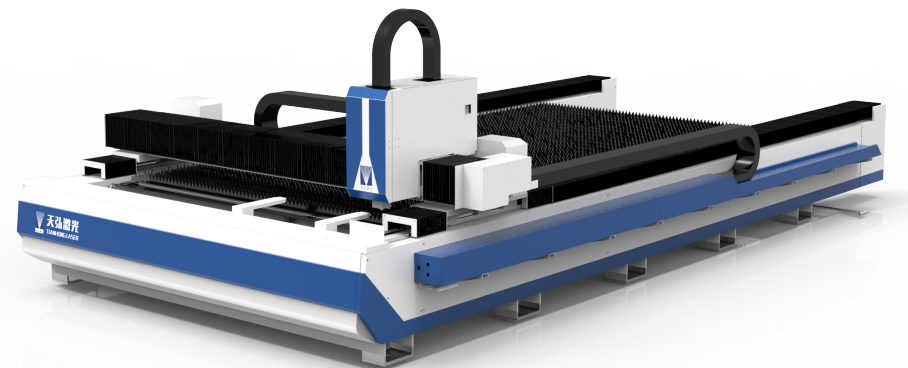
Adopting a patented coaxial anti splash slag blocking mechanism, the interior of the cut product can be smooth and consistent, without residue of slag marks.

Directly enter the cutting processing system from the thin-walled metal pipe production line, and customize the ring cutting clamping module to complete the cutting process in conjunction with the cutting head.



Rolling Loading and Unloading Platform Cutting

The machine is equipped with a tracked rolling table and is suitable for loading and unloading large sheets.



support

Survey follow-up

Regularly conduct customer satisfaction surveys every year, and accept and handle customers' opinions and suggestions.

Sample testing

Free samples are made and mailed for our customers.

Free service

Provide free training work throughout the year, one year free homeService, provide long year comprehensive protection plan.

Long-term guarantee of equipment spare parts and consumables supply.

Contact us

Customer response time within 24 hours.

Take customer more satisfaction as the center.



**National service hotline:
400-885-0505**

BETTER TIANHONG BETTER LASER



Wechat



Website