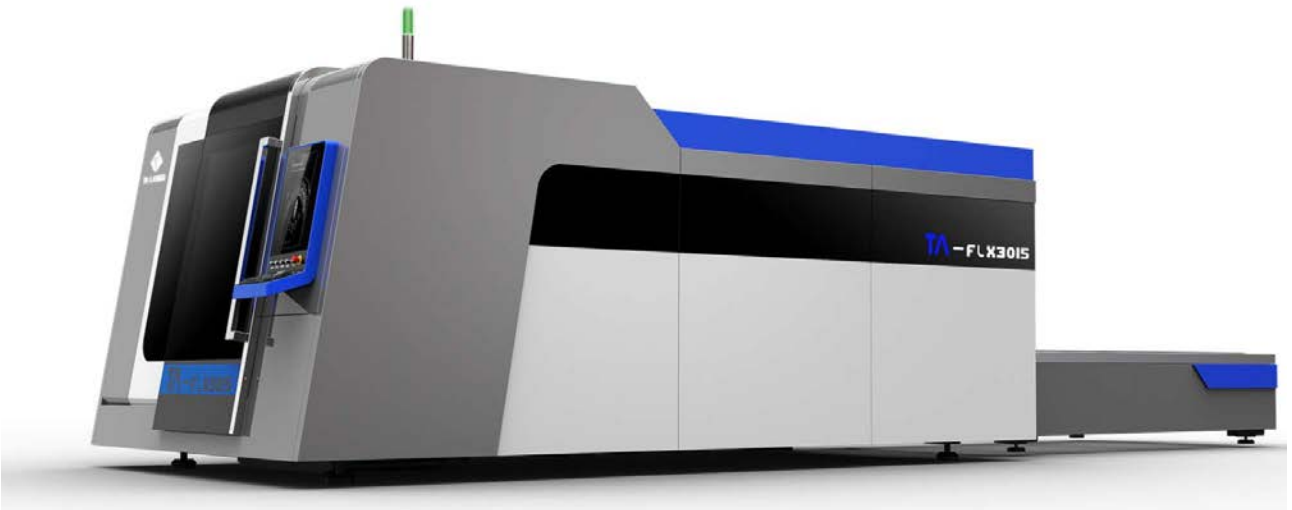
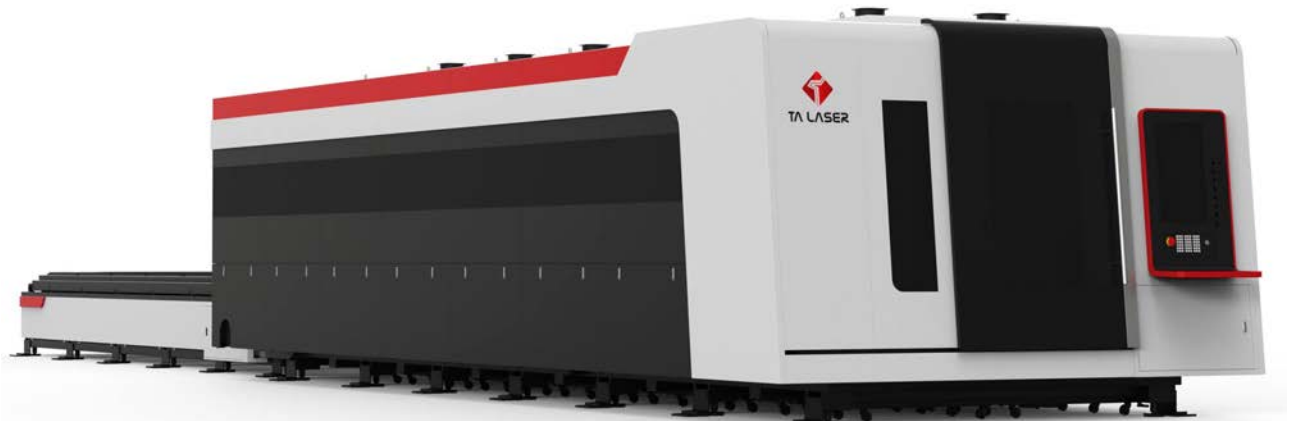




TECHNICAL SOLUTION

Fibre Laser Cutting Machine TA-FLXC Series 1.5kW to 8kW





Who is TA Laser

Based in Wuhan, China, TA Laser has established itself as a leading player in the industry, renowned for its cutting-edge technologies and extensive experience.

With a strong focus on innovation, TA Laser has been actively involved in a wide range of laser applications for over a decade. They offer an impressive lineup of fibre laser cutting machines, catering to various power requirements, including low, medium, and high power options. In addition, their product range includes CO2 lasers, cutting and engraving machines, laser marking machines, and laser welding machines, ensuring they can meet your specific needs and preferences.

One of the key advantages of TA Laser is their strategic location in the hi-tech development zone known as the Optical Valley, often referred to as the Chinese Silicon Valley. This proximity to technological advancements and industry collaboration enhances their ability to deliver cutting-edge solutions.

As a potential client, you'll be pleased to know that TA Laser is committed to providing the best laser products in the market. They are active members of the esteemed Wuhan Laser Association and actively engage with laser technology companies and renowned manufacturers worldwide. This collaborative approach enables them to stay at the forefront of industry trends, ensuring that their customers receive the latest and most advanced laser equipment.

With a production base spanning over 3000 square meters, TA Laser boasts state-of-the-art facilities equipped with a wide range of advanced machinery. Their team of professionals covers the entire production chain, from design and research to manufacturing and marketing. This comprehensive approach ensures that every aspect of their products is carefully considered and optimised.

TA Laser excels in precision processing applications, including cutting, engraving, and welding, catering to the diverse needs of various industries. Their commitment to delivering high-quality solutions and satisfying their customers' requirements sets them apart from the competition.

Introducing Smart Manufacturing & Packaging Solutions – Your Gateway to Excellence!

Meet SMPS, the dynamic sibling of Plasquip Sales, your ultimate destination for cutting-edge plastic fabrication, laser, and packaging equipment. With over 25 years of industry expertise, we've honed our craft to bring you the finest products from renowned industry giants like Golden Laser, Shannons, Manix, Giess, MACDUE Packmasta, and DMC.

In 2020, a new era began with a change in ownership, leading to the birth of two distinct entities. Smart Manufacturing & Packaging Solutions emerged, taking the reins of the Fibre Laser and Packaging domain, while Plasquip reasserted its dominance in the Plastic Fabrication realm.

Our commitment to innovation is unwavering. Previously, we were proud distributors of Golden Laser and Senfeng Fibre Laser equipment, and now, we're thrilled to shift our focus to TA Laser, offering you top-tier equipment at unbeatable prices. At Smart Manufacturing & Packaging Solutions, our nationwide team of technicians is second to none. Our Fibre Laser Technician boasts training from the industry's most seasoned experts. We may not be the biggest players, but that's



your advantage, as we don't burden you with exorbitant markups. That's why we confidently claim that no one else matches our blend of equipment features, quality, and price.

Why should you choose Smart Manufacturing & Packaging Solutions? Here's the answer:

When you invest in a TA Laser machine with us, you get more than just a product – you receive a comprehensive support package, including:

- Hassle-free setup of your TA Laser machine
- Expert commissioning of your TA Laser machine
- In-depth training to maximise your investment's performance
- Local warranty, service, and support
- Access to our head technician in NSW, with service and support partners scattered across the nation
- A dedicated technician as your single point of contact, guiding you from installation to ongoing machine support
- Swift sourcing of spare parts locally, covering lenses, nozzles, sensors, servo and servo drives, with the option for express delivery directly from TA Laser, dispatched on the same day.

Furthermore, we pledge to meet or beat any competitor's price on machines of equal quality and features sold by any other Australian distributor of Fibre Laser cutting machines.

Ready to elevate your manufacturing and packaging game with unbeatable value and service? Choose Smart Manufacturing & Packaging Solutions today – where excellence meets affordability.

Why choose the TA Laser TA-FLXC3015?

When it comes to flatbed fibre laser machines, we truly believe our new TA Laser TA-FLXC3015 machine offers the best value for money in the market for high powered machines. We have very competitively priced our machine to compete against lesser quality machines so you can be assured at our price point you can't buy better. TA Laser machines are an excellent quality and packed with features other can't match.

The latest TA Laser TA-FLXC3015 fibre laser cutter is especially designed for demands of high power cutting up to 8kw. With a full protection cover, to protect your workers from the harm of laser radiation and assist with the removal of harmful dust and fumes to keep the workplace safe from environment pollution. It's also equipped with auto-exchangeable platforms, which is used to load and unload product whilst the machine is cutting which greatly improves the processing efficiency. It only takes the exchange platform 20 seconds to complete the exchange.

Ned a larger machine?

If you need a larger machine we offer the **TA-FLXC6020** with it 2m x 6m cutting bed.



1. Standard Configurations Of TA-FLXC3015

Major Configurations	Brand
Laser Generator	MAX - Raycus or IPG
Laser Cutting Head	Raytoold BM111 1.5kW to 3kW Ospri LC808 for 4kW to 8kW
Height Controller	BOCHU, China
CNC Controller	
Professional Laser Cutting Software	
Speed Reducer	SHIMPO, Japan
Rack and Pinion	YYC/KH, Taiwan
Linear Guide	HIWIN/CSK, Taiwan
Laser Gas System	HOERBIGER, Germany
X/Y/Z Drag Chain	Mammut, China
Shield Cover	TA, China
Electric Devices	Schneider, France
Industrial Water Chiller	TongFei, China
Industrial PC and LCD Screen	BOCHU, China
Voltage Stabilizer	XiShun, China
Double Servo driver system	Yaskawa, Japan

If you have a specific requirement or prefer a change to the configurations do not heist to ask.
Specifications of the laser generators are supplied in a seperate document.

2. Technical Data

Technical spec	Standard Data
Total weight	10T
Total Power	63KW
Laser Type	Fiber laser
Maximum Cutting Thickness	30MM Carbon steel, 30MM Stainless steel
Effective Cutting size	1520MMx3050MM
X.Y Axis Drive system	Rack and Pinion mode, Yaskawa Bus Servo system X 1.3KW Y1 Y2 1.8KW
Laser cutting head Drive System	Rack and Pinion mode, Yaskawa servo system 750W
Laser cutting head lifting distance	325MM

3. Machine Technical Accuracy

Maximum rapid X, Y Axis Speed	120m/min
Maximum Acceleration X, Y Axis Speed	1.5G
Position Accuracy	0.02mm/M
Repeat Accuracy	0.03mm/M
Cooling Style	Recycling water
Max loading weight of cutting table	1500KG
Assistant Gas	Oxygen/Nitrogen/Compressor Air

4. Equipment Working Condition

	Item	Requirements	Notes
Power	Laser Source	26KW	The total installed capacity is not less than 63KW, and this machine needs a very good grounding line.
	Chiller	13.5KW	
	Machine Servo System	8.4KW	
	Dust blower Motor	6KW	
	Exchange Motor	5.5KW	
	Other accessories	3KW	
	Stability of 3-phase power	380V±5%	
	Instability of 3-phase power	<2.5%	
	Earthing	<40hm	
Water	Water for Chiller	Distilled water without minerals	Change every month
Gas	Cutting Gas	N2>99.5%	The processing parameters
		O2>99.5%	
		Air pressure should not be less than 1MPA	
Temperature requirements		5-40 Degree	
Humidity requirements		Less than 70%	
Working	Foundation requirement	There should be no vibration source nearby on site or nearby, the user is required to dig an anti-vibration trench around the foundation	
Work piece	For Mild Steel and Stainless Steel	For CS and SS: Quality surface and no rust	

5. Laser Cutting Tools

5.1 OSPRI laser head LC808

Is a auto-focus cutting head which is featured by its fast speed of focusing, high accuracy, user-friendly operation, compact structure and light weight. Additionally, the built-in auto edge-searching sensor can facilitate the users to position the sheets. Patented design of dust-proof collimating protective window can better protect the optical parts inside the head and extend the service lifespan.

It can not only monitor the temperature of all optical lenses inside the laser head in real time, but also monitor the air leakage, piercing conditions etc

- Swiss imported laser cutting head
- Auto Focus function (software control focus)
- Anti-collision function with non-contact Capacitance sensor
- Breakpoints Cutting
- Quick and Convenient part changing



5.2 Raytools Laser Head BM111

The laser head made in Swiss is suitable for fibre laser cutting machine, with a diversified interface setting so that it can be matched with all kinds of mainstream fibre lasers.

The cutting head adopts the optimisation of optical design, light weight, small volume, easy to use, with a height sensor can make cutting more efficient, but with a great low price.

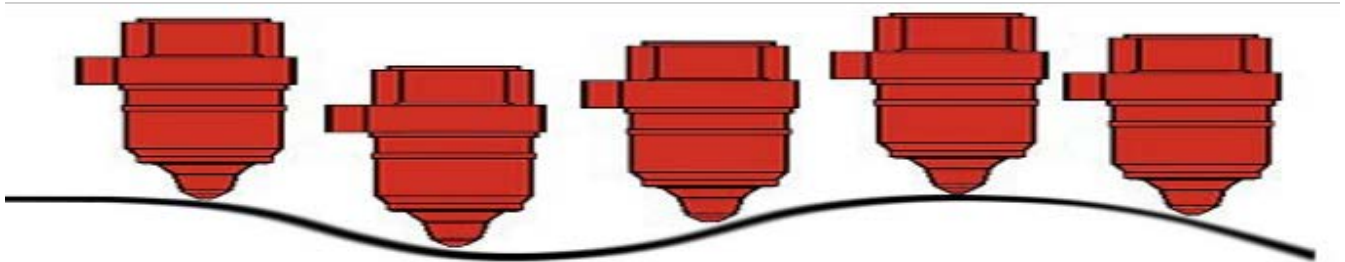
- Swiss imported laser cutting
- Auto Focus: Applicable to various focal lengths, which are controlled by machine tool control system. Focal point will be automatically adjusted in cutting process to achieve the best cutting effect of different thicknesses sheets metal. Anti-collision function with non-contact Capacitance sensor
- Accuracy: Increasing perforation focus length, separately setting perforation focal length and cutting focal length, enhance cutting accuracy. Quick and Convenient part changing



A range of other cutting heads are available on request but we are confident our cuttings head best match our machine.

Auto Focus saves a lot of time and enormously improves the efficiency of production and quality of piercing, when your material is uneven, the distance of Nozzle to the surface of material remains the same, that mean which highly improves the production efficiency and maintain the highest quality and uniformity during continuous production in the long-term.

Also the laser cutting head is equipped with Non-Contact Capacitive Sensor, reflection device and collision protection function, the machine will automatically stop cutting and flexibly diverges and reset when accident occurs.



More over, it is able to resume the breakpoints cutting, the cutting head and focus lens can withstand the pressure of 3MPa gas

Quick and Convenient Parts Changing: The laser head belongs to module design product, it is easy to install and disassemble, if you need to change lens or any part, it is very convenient to operate.

Auto Focus and Fast Piercing: With Auto focus and fast piercing functions of the cutting, save time.



5.3 Laser Cooling System

The laser resonator, laser cutting head and other key components all require sufficient cooling to ensure machine's smooth and safe running. Therefore we only use the industry leading TongFei water chillers.

- Using a dual temperature control system, which is precise, stable and reliable, ensures we are able to set and maintain constant safe temperatures
- The chillers have comprehensive protection functions of over temperature, phase-loss, over-pressure, water-shortage, low-voltage, overload and so on.
- All the key-components and parts are imported, the chiller has the advantages of high stability, easy maintenance and being in line with the cooling indicator requirement of the laser source and optical path.



5.4 Voltage stabiliser



The voltage stabiliser guarantees a stable and persistent power output. Converting the typical Australian power supply of 415AC to a stable and reliable 380VAC as required by the laser and the other components of the machine. The stabiliser also stabilises the power and reduces input power variations that are essential to maintaining the very best control of the laser output and therefore cutting quality and efficiency.

5.5 Laser Cutting Gas System



■ Concept

Cutting gas control systems from HOERBIGER (Germany) are electrically controlled proportional pressure regulators with 3 integrated distribution valves for gas selection. The control and pilot valves as well as the control and communications electronics form a compact unit. A piezo element weighing just a few grams acts as an actuator and ensures maximum responsiveness. The low weight and compact design allow the valve to be installed in the vicinity of the cutting head, resulting in rapid pressure changes and low loss of gas due to short the short lines.

The high accuracy and the gas pressure stability of the HOERBIGER cutting gas control system create a stable and precise cutting process for flat-bed laser cutting machines - especially important for processing thin metal sheets. Pressures as high as 28 bar at the output also allow thick sheets to be cut safely. Given the generously dimensioned valve cross-section, cutting with

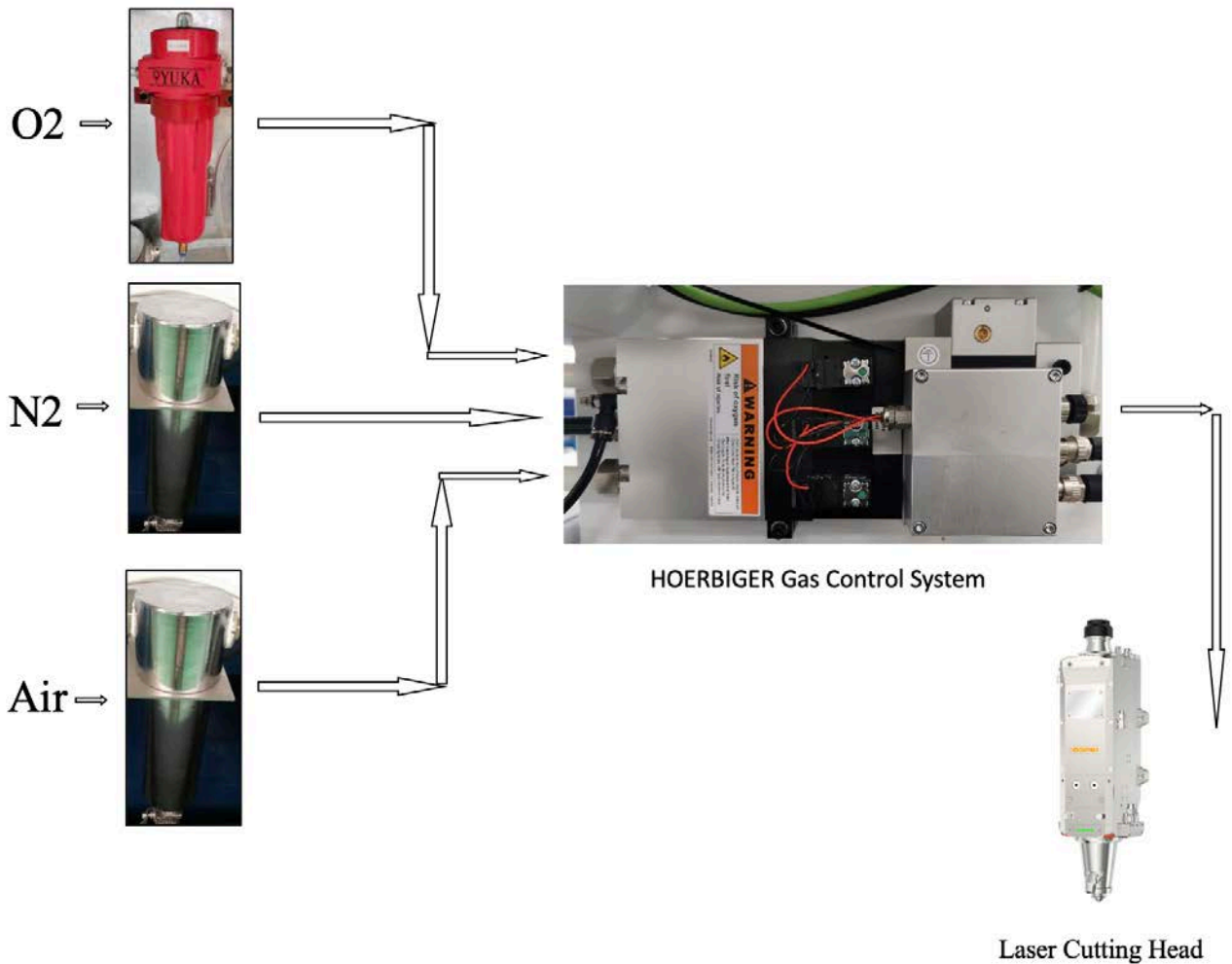
large cutting nozzle diameters is not subject to any drop in pressure at the cutting head even when the input pressure is low to conserve resources.

▪ **Design and function**

The Laser Gas Regulator is a proportional pressure control valve, which controls the flow of cutting gas during laser cutting process.

The supplies of three different cutting gases can be attached to the three 2/2-control valves (nitrogen, oxygen, compressed air). The laser application can choose between those three cutting gases. There are two alternatives regarding interfaces: one analogue version and one EtherCAT version. We use the version that best suits your machine.

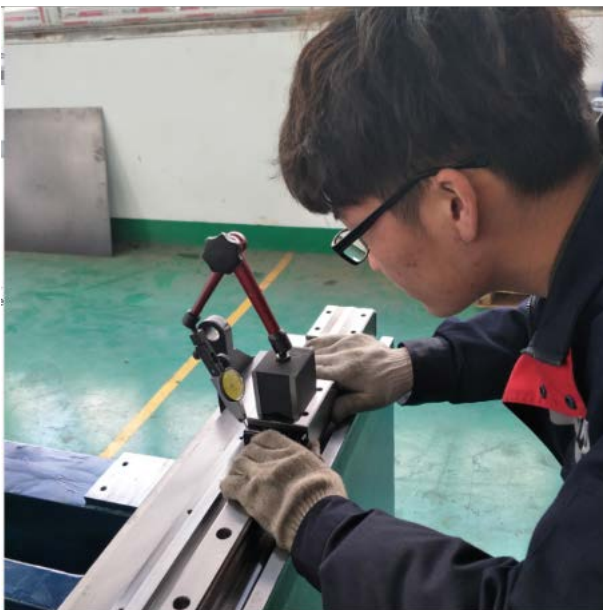
You will not find other machines at our price point offering the high end HOERBIGER as standard equipment.



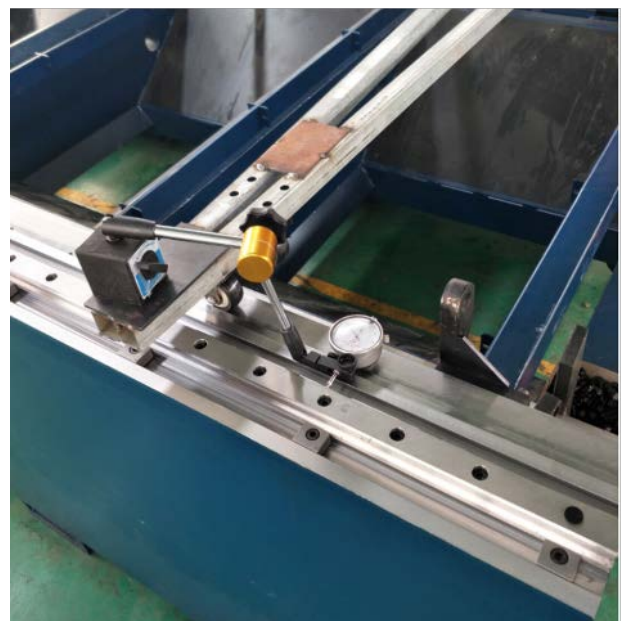
6.0 Machine Bed

6.1 Main Body

Of course the machine is an essential part of any laser cutting machine. The cutting is only as accurate as the bed. That is why we put a huge amount of effort not just into building a quality bed that will last for years to come with double heat treatment ageing and annealing. All this effort is to ensure a stress free body that will be free from twisting bending and distortion for years to come. After the heat treatment and ageing the bed is precision machined to ensure we have perfect surfaces to hand fit the guide rails and racks to exacting standards to ensure the very best and accurate movement of the Gantry and thus the cutting head.



Linear guide parallelism examination, our requirement $\leq \pm 0.02\text{mm}$



Guide gap detection, our requirements, our requirement $\leq \pm 0.03\text{mm}$

6.3 Machine Body Beam Thermal Insulation Treatment

6.3.1 Machine Working Table Copper Protection

To protect all the work we put into your bed cutting tables on models 4kW and above we fit as standard copper table protection plates. Normally only fitted by other manufactures on machines 12kW and above or not even offered at all. We believe this system is essential for protecting your cutting table when using laser power of 4kW and up.



6.3.2 Machine Base Table Graphite Plate Protection

The next step of our system to protect your investment is the granite protection of the bed. Again on all machines 6kW and above we fit the granite plates shown in our picture to protect the cross beams in the cutting area of the bed from the laser beam and heat. If the machine body is design without any thermal insulation treatment for these higher power laser then over time the cutting will cause the machine body deform, this is irreversible damage, so it is essential to avoid this damage



7. Full-process self-manufacturing quality assurance

At TA laser we ensure quality by controlling the complete manufacturing and assembly process. Other use subcontractors to manufacture their beds not not at TA Laser. You can be assured we do as much manufacturing in house as possible.

7.1 Workshop

We use equipment such as Plasma, flat bed laser and tube sheet laser cutting machines and various other equipment to ensure the dimensional accuracy.

7.2 Quality Welding

The laser cutting machine adopts a flexible tooling bed and welding production line to ensure welding quality and greatly improve welding efficiency and quality.

7.3 Annealing

The bed body is annealed and aging treated by the electric furnace to ensure the stability of the welded bed body structure.



7.4 High-precision milling

The bed body and beam are processed by high-end CNC gantry milling. The CNC gantry milling machines are 12-meter, 8-meter, and 5-meter machines. They are fully equipped, with excellent equipment precision, batch processing, and high processing efficiency.

7.5 Sheet Metal Manufacturing

High-standard sheet metal blanking, bending and welding production processes.

7.6 Sheet Metal Automatic Spraying Line

Sheet metal pickling, alkali washing and automatic spraying production lines that meet environmental protection requirements.



7.7 Machine Assembly

Machine assembly and debugging is an essential part of our process. We know it is essential that all machine are checked and double checked to avoid you getting stuck with bugs and quality issues. We set out to ensure that when your machine is setup and running you will have trouble free running. Our machine assembly and debugging is the best way to avoid issues.

7.8 Guaranteed Accuracy

Assembling details, we use a laser collimator to ensure the installation accuracy. During the commissioning of the whole machine, we use a laser interferometer to detect the positioning accuracy and repeatability positioning accuracy of the machine tool to ensure the mechanical performance of the machine is accurate.



8. Motion Control

Without quality motion components you cannot be assured of ongoing precision and repeatability. We want to ensure you that by using the best quality components you can expect years of trouble free running.

8.1 Reducer

We use the Shimpo Reducer from Japan to take our servo drive motion and deliver high end motion which is both stable and precise. Offering high rigidity and excellent wear resistance. This allows our machines to maintain precision and excellent repeatability of motion performance for many years.



8.2 Rack and Pinion

When it comes to quality YYC rack and pinion from Taiwan, ensure high motion precision and stability plus high rigidity and good wear resistance, Our YYC rack and pinion system is able to maintain precision for a long time. YYC with excellent motion performance, is the perfect match for our Shimpo Reducer



RACK&PINION FROMYYC



8.3 Liner Guides

To keep the motion smooth and swift you need only the best liner guides and that why we use Hiwin.



- Linear guide imported from Hiwin, Taiwan
- High precision linear guide
- High rigidity
- Maintenance and easy maintenance
- Less heat generated during moving
- No gap high mechanical efficiency
- Able to withstand both the upper and lower left and right direction of the load
- Easy to assemble and interchangeable
- Simple lubrication structure



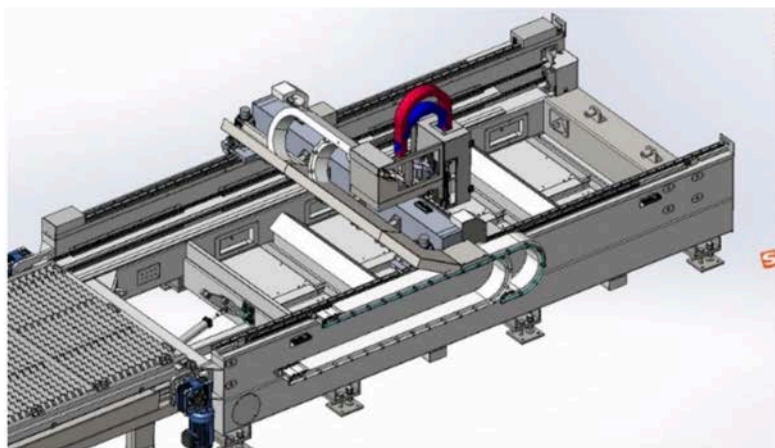
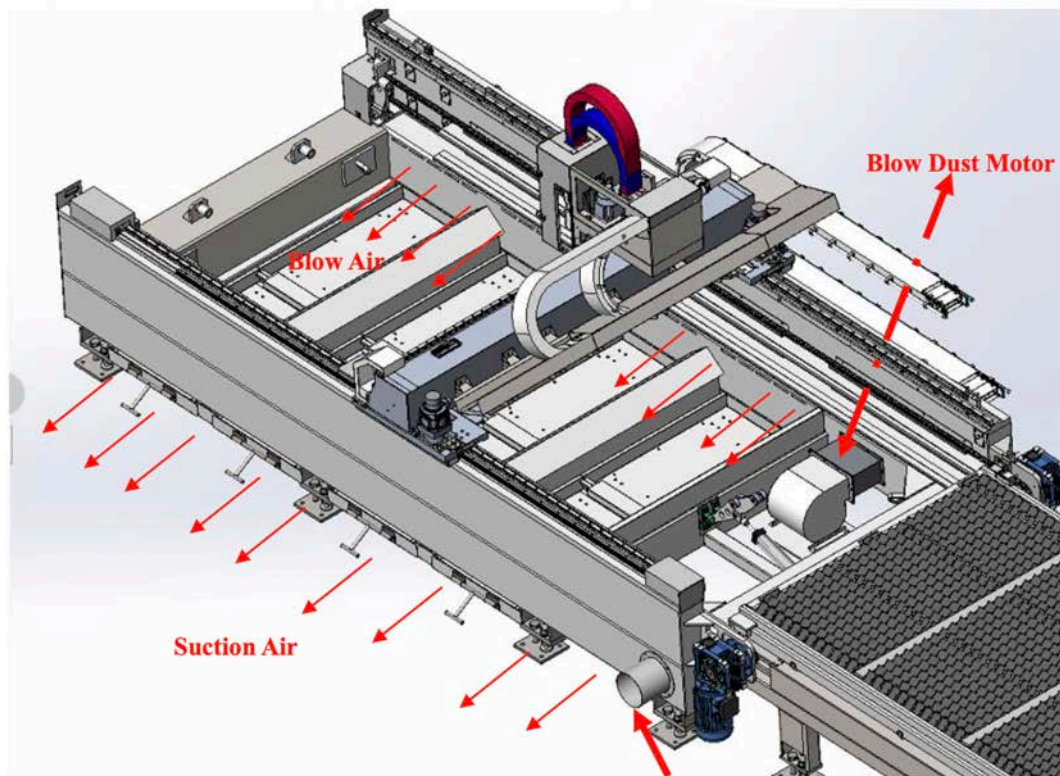
8.4 Servo System

Our choice of Yaskawa double motor drive system, synchronous double drive, effectively ensures high speed, high precision and high stability of the whole machine during the cutting process. Yaskawa drives and drive systems are made in Japan to exacting standards. Just what required to ensure long life of your drive system.

9 Dust and Fume Extraction

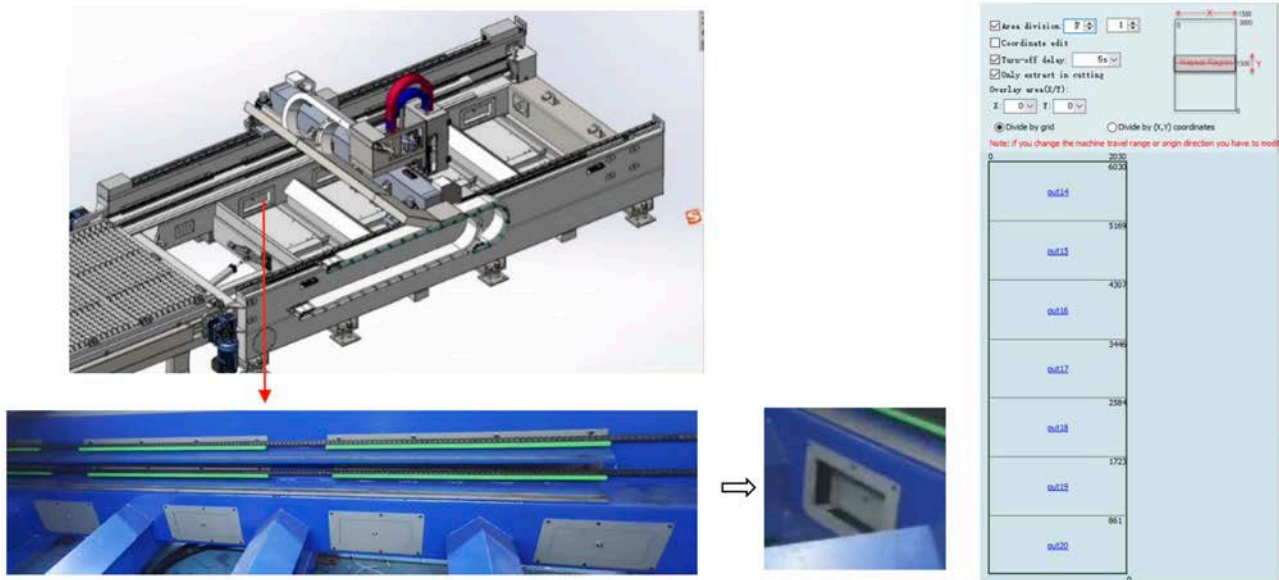
Professional laser dust remove system (For the bottom dust remove)

We have adopted a combination of blowing and air extraction for dust and fume removal. This system ensures the removal efficiency is market leading.



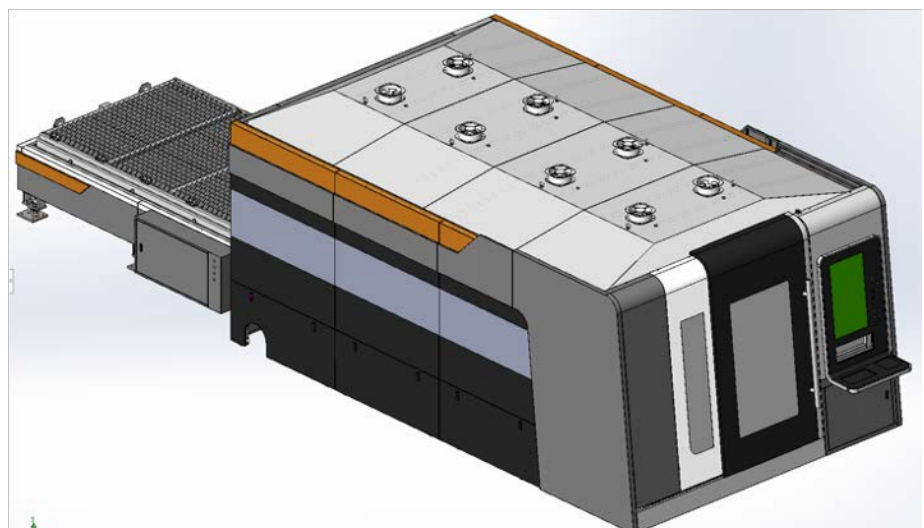
Suction Dust Blower

We also make use of section extraction which means we only open up a small area immediately below the cutting heat to ensure no extraction air is wasted in areas that it is not needed. This reduces the total number of extraction fans needed which equates to lower running cost.



Most clients do not worry about adding a dust filtration unit but if you would like a dust filtration unit we offer a dust filtration unit as an optional extra which is competitively priced. The dust extraction units produced by **PureAir** are long lasting and energy efficient.

The final part of the puzzle we have fans fitted to the top of the cutting chamber. These fans blow air in from above and help to force the smoke and the fumes out through our extraction system at the bottom of the machine.



10. Electricity Cabinet

We use industrial control system, more stable and designed to reduce interference.

Quick Adapter cable connection make it easy to assembly and dis-assembly. And reduces the chances of faulty wiring at installation



Quick adapter cable connection

11. Cypcut CNC System

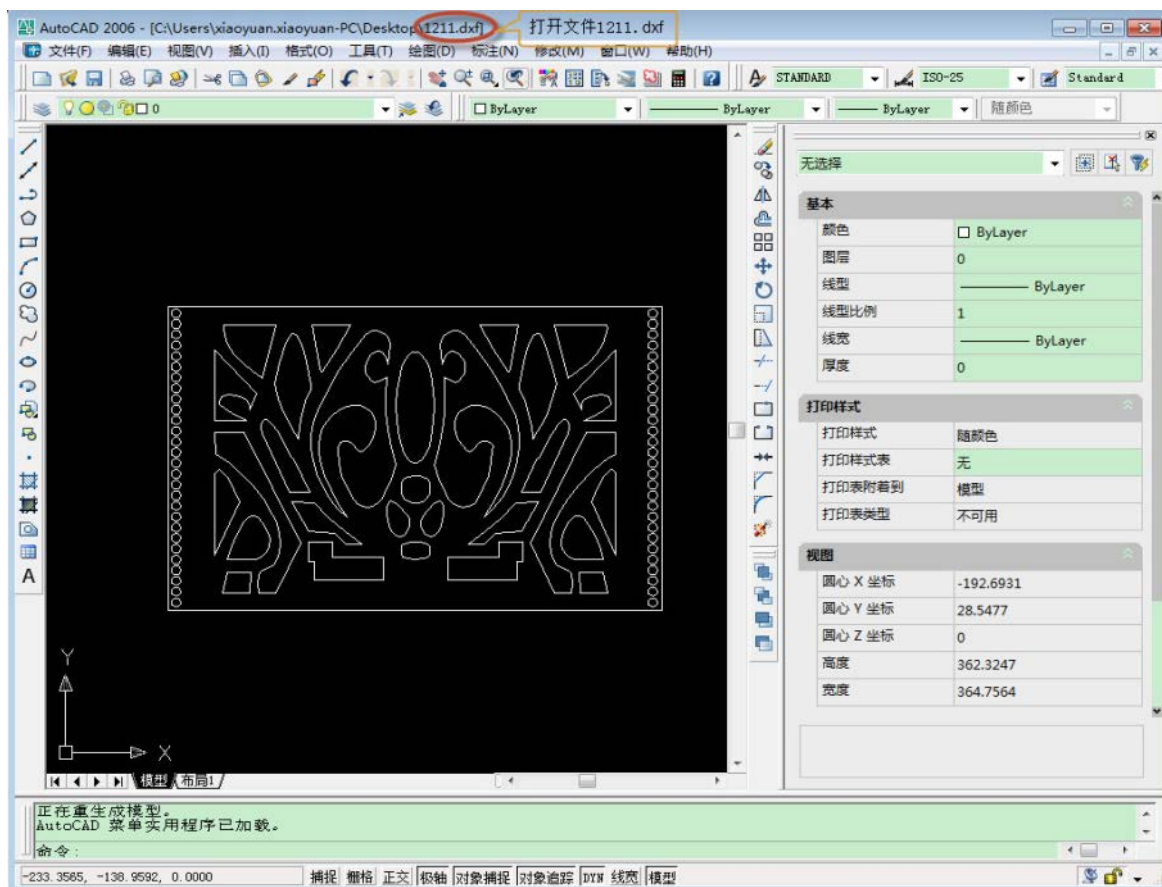
11.1 About Cypcut

Cypcut CNC system is made by Bochuan company, which located in Shanghai, China, it is the most popular laser control and hardware manufacturing company in China, you can view it website by the link: www.fscut.com

11.2 Features About Cypcut

11.2.1. Intuitive Interface, Perfect Match With AutoCAD Software.

Cypcut software also has simple drawing tools, which could draw simple graphics processing, also could output DXF format graphics file.



11.2.2. Flying Cutting

Decrease the non-cutting distance from the lower to the extreme, cutting small circle small square more smoother and more faster.

11.2.3 Real-time Power Adjustment

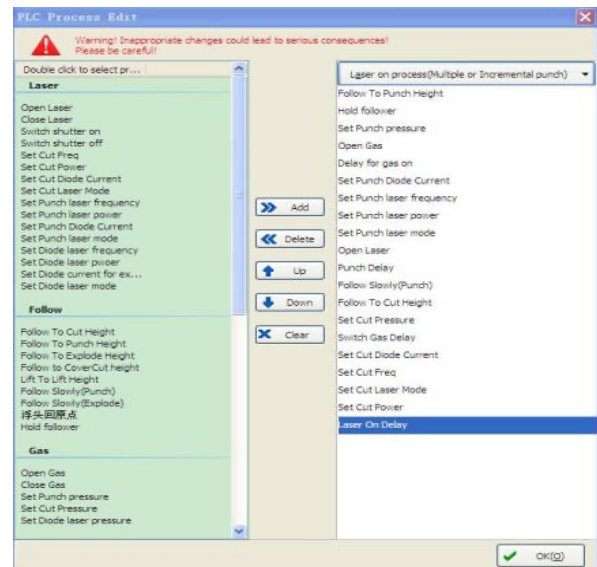
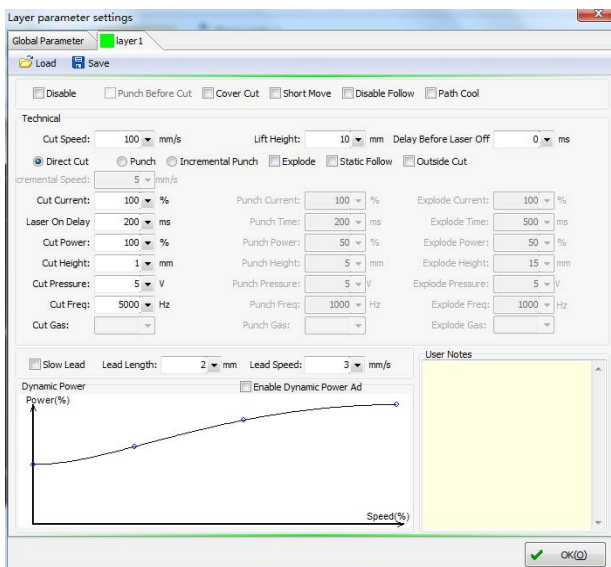
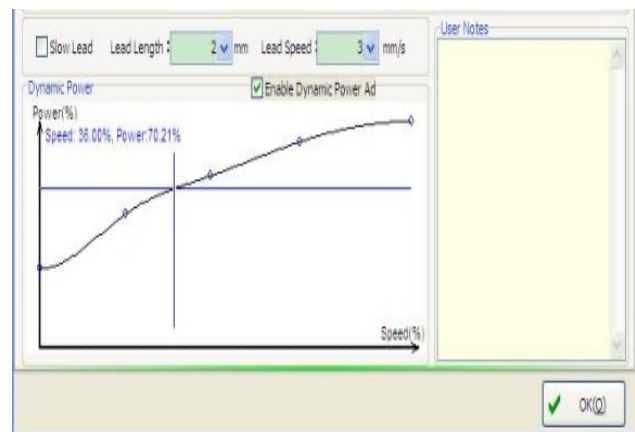
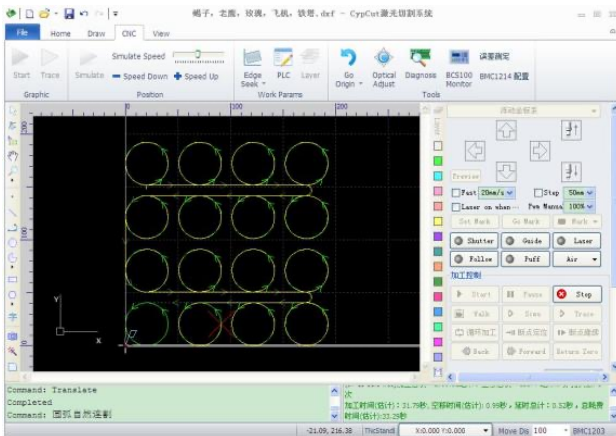
Cutting power adjusted in real time according to the actual design and speed make the corners, sharp corners, holes and other fine pattern cutting much more better.

11.2.4 Cutting Parameters Material Library

Providing a laser cutting parameters stored material library that can be called directly, make your operation more simple and convenient.

11.2.5 PLC Programming Process

Opening PLC programming process make the operation more humane, dynamic design and processing freedom when cutting allow your process design more flexible and convenient.



11.2.6 Online Trouble Shooting Recording

Cypcut software contains an feedback information receiving function, it could real-time monitoring servo system, cutting head, laser generator and other components, make online diagnosis possible, save much more time.

11.2.7 Operational Status Recording

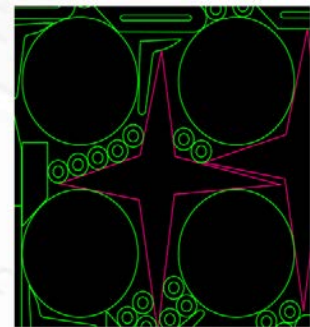
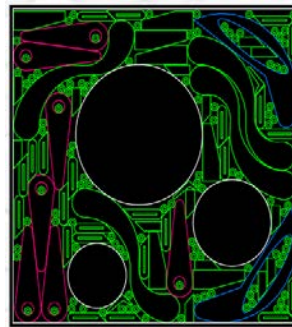
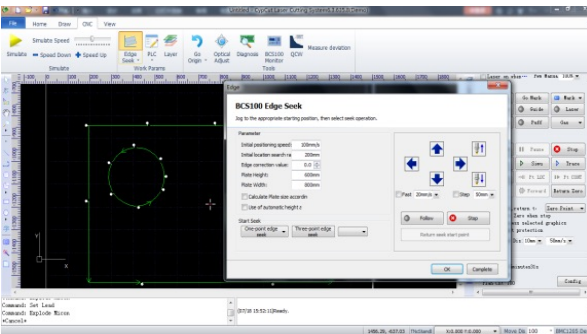
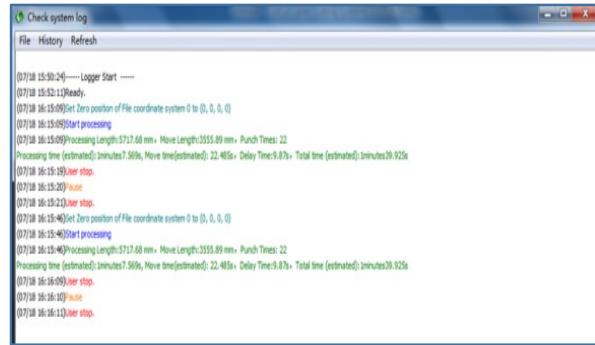
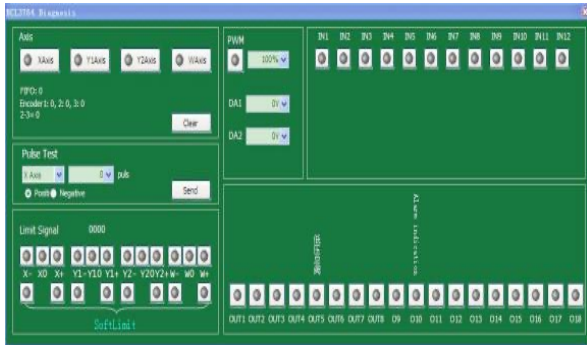
Real-time recording process information, fast simulation calculate the total length and the required processing time of design, easy to calculate the total fees.

11.2.8 Automatic Boundary Function

With BCS100 discrete capacitors height controller automatically find the edges of sheet.

11.2.9 Nesting

Cypcut contains nesting function, joint nesting and cutting in one program.



12 Other important items

12.1 Auto Lubrication

To ensure your machine is kept in tip top condition each machine is fitted with an automatic lubrication system

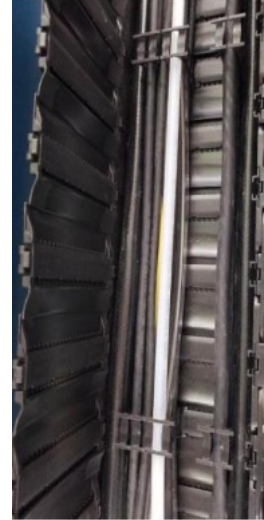
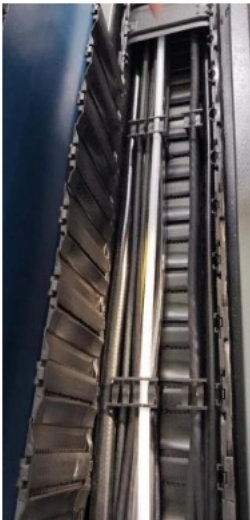
- It is programmed in CNC controller or control it manually (Usually 240min~480min)
- It stops lubricating when the machine does not move (no excessive oil on the machine)
- Oil level alarm when the oil level is lower than the set point, and oil pump stops working to avoid running the pump dry.
- Running status display function
- Cumulative time indication



The system is fully plumbed to each area of the machine that requires lubrication to ensure your machine never runs dry.

12.2 X/Y/Z Drag Chain

For drag chains on the X/Y/Z axis we use Mammut drag chains to ensure the electricity wires, fibre cable, water pipes, gas pipes are all stable when the machine moves at high-speed.

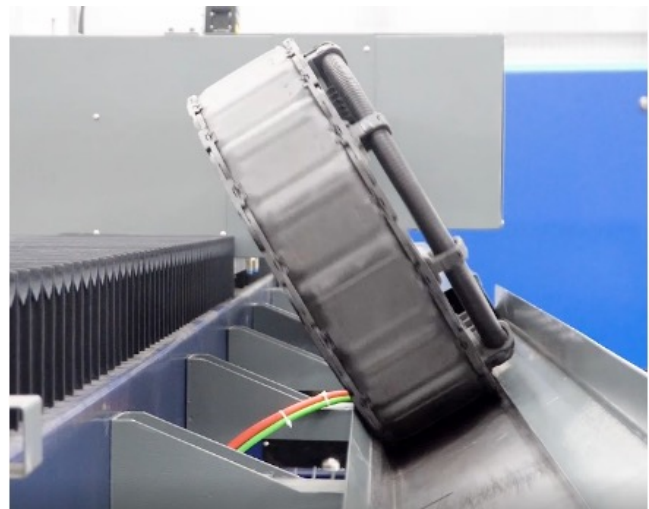
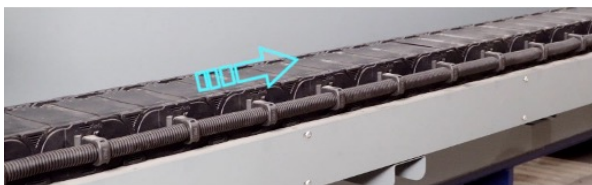


12.3 Optical fibre external hanging design

Our Mammut drag chains have one very important feature it allows us to externally hang the fibre optic cable. Just about the most important and definitely the most fragile part of the machine. It is essential that the fibre laser cable is treated like gold and the external hanging system does just this.

This system has the following advantages

- Eliminates the need to remove the cutting head during disassembly and delivery, and avoiding secondary installation at the customer site. (One of the main causes of damage).
- As the cutting head does not need to be removed this eliminates the possibility of cutting dust getting into the cutting head which often damages the cutting head in the secondary installation.

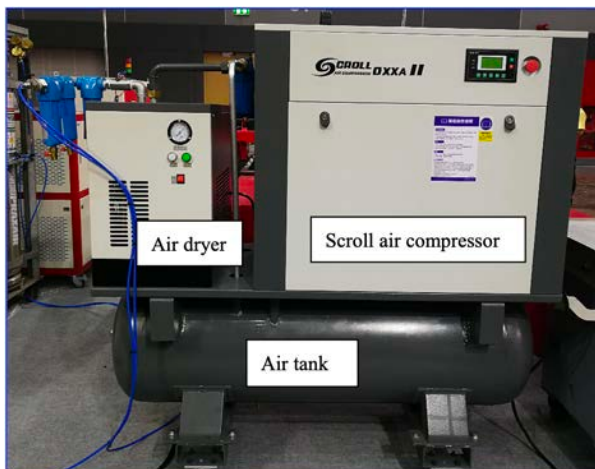


12.4 Clean room and associated components.

In the rare case that you may need to remove the cutting head to service it we provide a clean room/bench to use to do this work. This is an essential tool for all machine of 6kW and above and we provide one per client. If you would like a clean room for machines 4kW and under then these are available as an optional extra at a competitive cost.



12.5 Air compressor



To take advantage of the saving in running cost when using compressed air, we offer a incredible scroll compressor suitable for models up to 8kW and a 16 bar pressure rating. Scroll compressors have three main advantages over screw compressors they make much less noise, are about 25% more energy efficient and they also provide cleaner air than a screw compressor perfect for keep the laser cutting head clean. For these reason, scroll compressors are often preferred in medical environments such as hospitals.

12.5.1 Why use a 16 Bar Air Compressor

- Generally use Oxygen or Nitrogen will give you the ability to cut thicker material then using compressed air. But compressed air has a number of advantages when it can be used.
- The cost of compressed air is lower than the cost of bottled Oxygen and Nitrogen
- On thin sheets oxygen very easily give a burning effect and the quality of the cutting is inferior to compressed air
- When cutting with compressed air the cut edge does not oxide like it does with Oxygen and therefore the edge is much easier to machine in a post process.





13 Setup, Commissioning and Training

Setup, commissioning, and training is included in our quotation.

We will provide a technician from TA Laser and also our own technician for the duration of the setup, commissioning, and training (as long as no travel restrictions are in operation).

The following is not included and are your responsibility:

- Footing/foundations
- Placement of the machine in your factory as we are not aware of what equipment you have or don't have regarding material handling
- The connection of the machine to mains power
- The connection to the factories compressed air supply

13.1 Training at TA Laser or on Buyers premises

The buyer is invited to attend the TA Laser factory during the manufacturing process in order to have training and for acceptance sign off for the machine. During this visit we will train the buyer in the following

Routine maintenance, lubrication, assembling and disassembling lens assembly

- Machine tool programming, transfer operations
- Equipment operation and basic trouble shooting
- Programming procedures, the use of programming software and so on

Of course all this can also be completed at the customers site.

13.1.1 Training at the Buyers premises

We highly recommend that the proposed operator be involved with the complete installation , setup and commissioning of the machine. There is no better way for the operator(s) to get to know the machine. Regardless it is essential that up to two operates be available full time during the commissioning and training stage. It is also essential that the buyer provide multiple sheets of all the thickness and material they wish to cut. During this commissioning and training stage we can train the operator(s) how to set and adjust the machine to suit your cutting needs. The machine will be loaded with standard cutting parameters but a lot of this training will be about how to monitor and adjust the cutting parameters to achieve the best possible cutting conditions.

As part of the training out technician will remain on site for a full 8 hour working day whilst your operator(s) operate the machine, just to be on hand to ensure the knowledge has sunk in.

13.2 Placement within the Buyers premises

It is the responsibility of the Buyer to unload the machine from the transport and the contains and place as accurately as possible within their premises in the location they wish to have the machine setup in. We can assist with this but we are not responsible for providing the equipment or the labour to site the equipment within the buyers premises. All materials handling equipment required to install the machine are at the Buyers cost.



13.3 After-sales Service

13.3.1 Warranty period

From the acceptance qualified date, the warranty period for machine will be 1 year.

Note: MAX, Rays and IPG all guarantee there laser systems for 2 years (From the date of shipment from their premises. Not from commissioning time).

For full details of our Terms and Conditions of Sales and our Warranty please refer to our documents that are offered with this document. If you did not get these documents please ask for a copy.

13.3.2 Service and Support

The machine is backed with true online technical support from both TA Laser and SMPS. When we commission your machine, we setup both TeamViewer for remote assistance and a WeChat group with TA Laser and SMPS technicians plus your operator(s) which makes it perfect for asking questions and sending pictures or video's which is absolutely the best way to ensure your using the best possible setting for any given material and thickness. It is the next best thing to having a technician on site. Most question can be responded to within 30 minutes and most issues can be resolved without the need of sending a technician to site with all the delays and cost this brings.

Please note the specifications are correct at the time of printing. However from time to time specifications do change. We reserve the right to change these specification at any time to improve our machines. We also receive the right to switch to an alternate brand of no less a quality based on supply issues from time to time.



TA LASER



TA LASER

WUHAN TA LASER MACHINERY CO.,LTD

Address: NO. S00340, 2/F, E-Commerce Building, Bldg. 1, NO. 58 Optical Valley Avenue.

East Lake High-Tech Development Zone Wuhan, China

Email: bob.ran@talasertech.com

Website: <http://www.talaser.net>

Mobile Phone: 0086-15871488866



TA LASER

WUHAN TALASER MACHINERY CO.,LTD

TA's Primary Customers:

Machinery dealers with technical service team

TA's Insist:

Reliable quality, fast service, is the only way leads to long term business success.

TA's Mission:

Endless technology, Forever service

Content

- 01** OPEN TYPE FIBER LASER CUTTING MACHINE
TA-FLS SERIES
- 02** OPEN TYPE FIBER LASER CUTTING MACHINE
TA-FLSE SERIES
- 03** CLOSED TYPE FIBER LASER CUTTING MACHINE
TA-FLSC SERIES
- 04** OPEN TYPE SHEET & TUBE FIBER LASER CUTTING MACHINE
TA-FLS-T SERIES
- 05** OPEN TYPE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
TA-FLX SERIES
- 06** OPEN TYPE SHEET & TUBE FIBER LASER CUTTING
MACHINE WITH SHUTTLE TABLE
TA-FLX-T SERIES
- 07** CLOSED TYPE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
TA-FLXC SERIES
- 08** CLOSED TYPE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
TA-FLXC-H SERIES
- 09** CLOSED TYPE FIBER LASER CUTTING MACHINE
TA-FLXC1530 SERIES
- 10** CLOSED TYPE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
WITH BEVEL CUTTING FUNCTION
TA-FLXC-B SERIES
- 11** CLOSED TYPE SHEET & TUBE FIBER LASER CUTTING
MACHINE WITH SHUTTLE TABLE
TA-FLXC-T SERIES
- 12** GROUND RAIL FIBER LASER CUTTING MACHINE
TA-FLG SERIES
- 13** FIVE AXIS TUBE LASER CUTTING MACHINE
TA-FLT6000 SERIES
- 14** SIX AXIS TUBE LASER CUTTING MACHINE
TA-FLT6025-6A SERIES
- 15** EIGHT AXIS TUBE LASER CUTTING MACHINE
TA-FLT6060-8A SERIES
- 16** HAND-HELD FIBER LASER WELDING MACHINE
TA-FLW SERIES
- 17** HAND-HELD FIBER LASER CLEANING MACHINE
TA-FLC SERIES

Who We Are ?

TA LASER is an excellent laser equipment manufacturer in Wuhan, China, which have been engaged for more than ten years in a wide range of laser applications and production.

Our production base is located at hi-tech development zone in Optical Valley, where is called Chinese 'Silicon Valley'. Ever since the start of our foundation, we have been dedicated ourselves to research and manufacture of best laser products and applications.

As a member of 'Wuhan Laser Association', we are making efforts to work and communicate with laser technology companies and giant manufacturers all over the world, for the purpose of bringing customers with best products.



What We Make ?

With our technologies and experiences growing for years, we have already put in market low/medium/high power fiber laser cutting machine, CO₂ laser cutting&engraving machine, laser marking machine, laser welding machine

Plant size over 3000 square meters with a wide range of equipment, as a professional industrial laser equipment manufacturer, our operations cover a complete chain of production including design, research, manufacturing, marketing, etc.

Precision processing application including cutting, engraving and welding, to satisfy various industrial needs.



OPEN TYPE FIBER LASER CUTTING MACHINE
TA-FLS SERIES

- 1. Autofocus laser head active collision prevention.
- 2. Intelligent CNC system, easy to operate.
- 3. Open type table design, save purchase cost, save working space, easy for loading and unloading.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm 4000*2500mm, 6000*2500mm, 8000*2500mm Machine table size can be customized.
Laser Power	1500W-12000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.2G
Max Travelling Speed	120m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<75KVA
Power Supply	380V 50HZ / 380V 60HZ

OPEN TYPE FIBER LASER CUTTING MACHINE
TA-FLSE SERIES

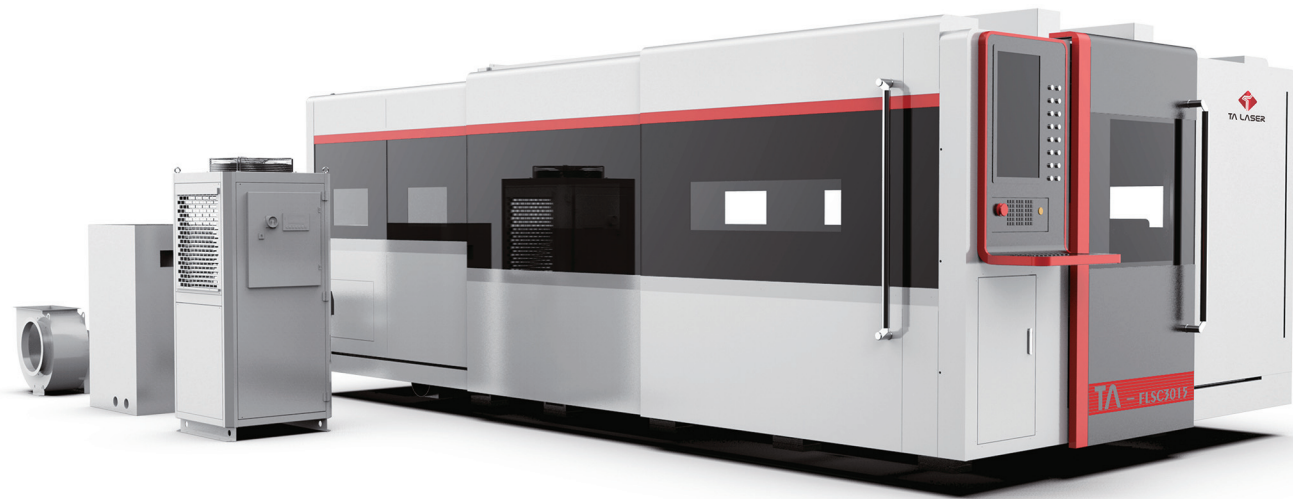
- 1. Compact appearance design, integrated electric cabinet and operation cabinet, less cost, easy for shipping, save working place.
- 2. Extruded aviation aluminum beam, high dynamic response.
- 3. Intelligent CNC system, auxiliary gas low pressure monitor function.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm Machine table size can be customized
Laser Power	1500W-3000W
Laser Source	IPG / Raycus / Max
Max Acceleration	0.8G
Max Travelling Speed	60m/min
Positioning Accuracy	±0.03mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<25KVA
Power Supply	380V 50HZ / 380V 60HZ

CLOSED TYPE FIBER LASER CUTTING MACHINE
TA-FLSC SERIES

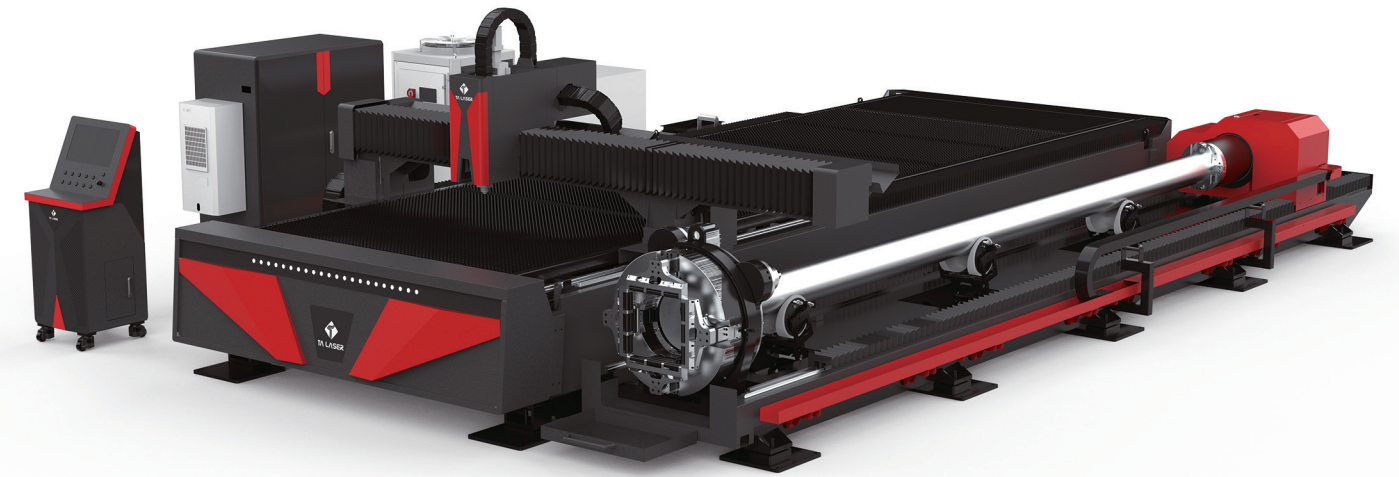
1. Fully protective construction reached CE safety standard, camera monitor instant cutting status.
2. Double open sliding door and intelligent feeding design, more efficient and convenient
3. Electric cabinet is integrated with machine body to occupy smaller area, this kind of fully-sealed structure and standard electric wires can prevent dust entry and risky flames.



Specification	Model
Processing Area	3000*1500mm,4000*1500mm Machine table size can be customized
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.2G
Max Travelling Speed	120m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<40KVA
Power Supply	380V 50HZ / 380V 60HZ

OPEN TYPE SHEET & TUBE FIBER LASER CUTTING MACHINE
TA-FLS-T SERIES

1. Combining sheet laser cutting machine and tube laser cutting machine. Expand user's scope of cutting type and enhance their market competitiveness. Save purchasing costs, save working space.
2. Open structure design, convenient loading & unloading.
3. One-key switch between sheet cutting & tube cutting, easy to operate.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm, 8000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm Machine table size can be customized.
Tube Cutting Length	3000mm/6000mm
Chuck Type	220mm / 320mm / 360mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-12000W
Laser Source	IPG / Raycus / Max
Max Acceleration	0.8G
Max Travelling Speed	80m/min
Positioning Accuracy	±0.03mm/min
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<80KVA
Power Supply	380V 50HZ / 380V 60HZ

**OPEN TYPE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
TA-FLX SERIES**

- 1. Open type table design, save purchase cost, save working space.
- 2. Heavy duty structure design with strict processing methods, ensuring long life time.
- 3. User-friendly operation system with embedded nesting software.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm 4000*2500mm, 6000*2500mm, 8000*2500mm Machine table size can be customized.
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.5G
Max Travelling Speed	120m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<45KVA
Power Supply	380V 50HZ / 380V 60HZ

**OPEN TYPE SHEET & TUBE FIBER LASER CUTTING
MACHINE WITH SHUTTLE TABLE
TA-FLX-T SERIES**

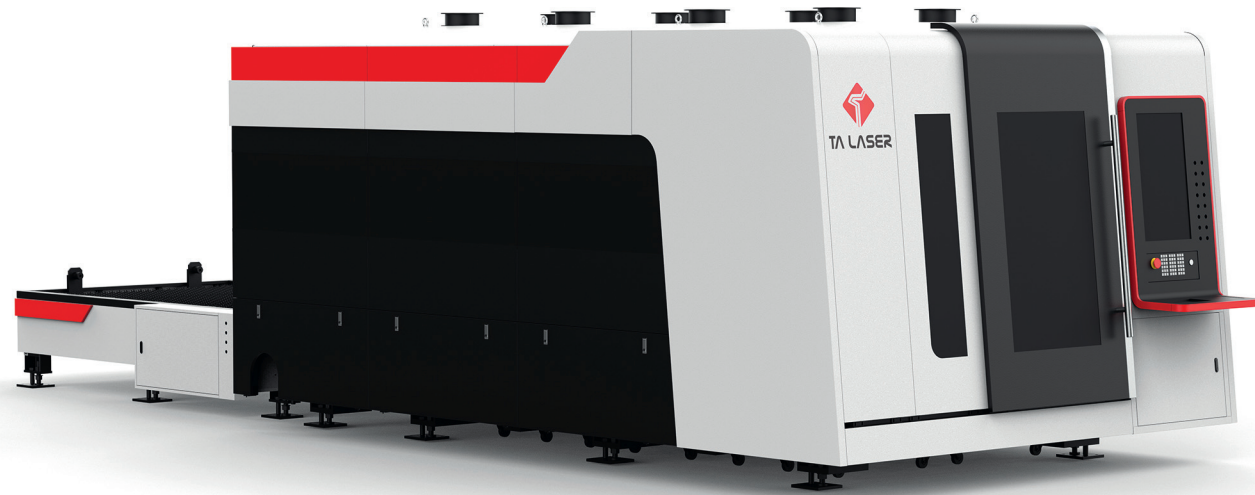
- 1. Combining sheet laser cutting machine and tube laser cutting machine. Expand user's scope of cutting type and enhance their market competitiveness. Save purchasing costs, save working space.
- 2. Open structure design, convenient loading & unloading.
- 3. One-key switch between sheet cutting & tube cutting, auxiliary gas low pressure monitor function.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm Machine table size can be customized.
Tube Cutting Length	3000mm/6000mm
Chuck Type	220mm/320mm/360mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.0G
Max Travelling Speed	100m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<50KVA
Power Supply	380V 50HZ / 380V 60HZ

**CLOSED TYPE FIBER LASER CUTTING MACHINE
WITH SHUTTLE TABLE
TA-FLXC SERIES**

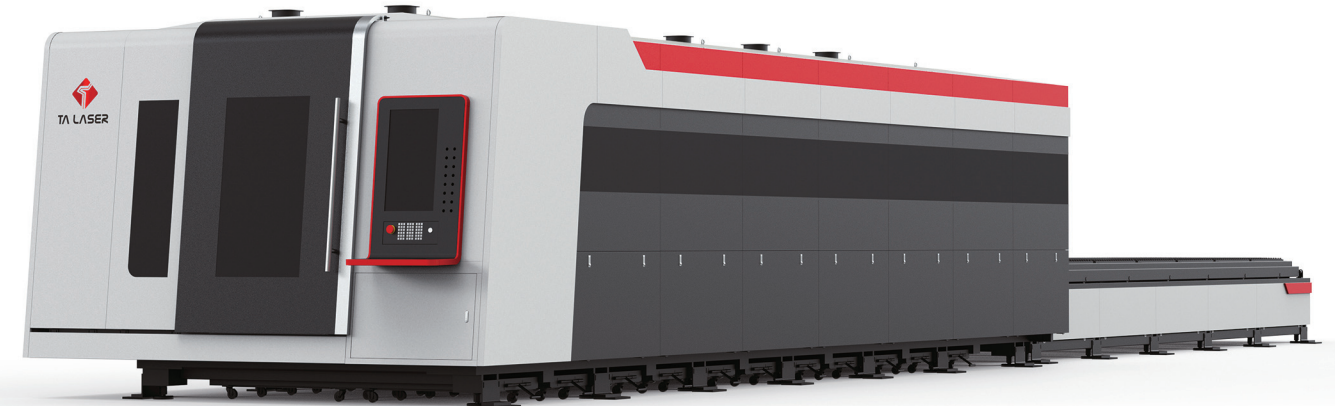
- 1. Full cover protection reached CE safety standard, camera monitor instant cutting status.
- 2. Heavy duty structure design with strict processing methods, ensuring long life time.
- 3. User-friendly operation system with embedded nesting software.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm 4000*2500mm, 6000*2500mm, 8000*2500mm Machine table size can be customized
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.2G
Max Travelling Speed	120m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<48KVA
Power Supply	380V 50HZ / 380V 60HZ

**CLOSED TYPE FIBER LASER CUTTING MACHINE
WITH SHUTTLE TABLE
TA-FLXC-H SERIES**

- 1. Aviation cast aluminum beam, professional fire prevention, high efficiency exhaust dust removal system.
- 2. Burr-free piercing, super-fast cutting, fast response technology, high cutting efficiency.
- 3. CNC bus system, professional nesting software, auto nozzle cleaning and calibration.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm 4000*2500mm, 6000*2500mm, 8000*2500mm Machine table size can be customized
Laser Power	6000W-30000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.5G
Max Travelling Speed	140m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<140KVA
Power Supply	380V 50HZ / 380V 60HZ

CLOSED TYPE FIBER LASER CUTTING MACHINE
TA-FLXC1530 SERIES

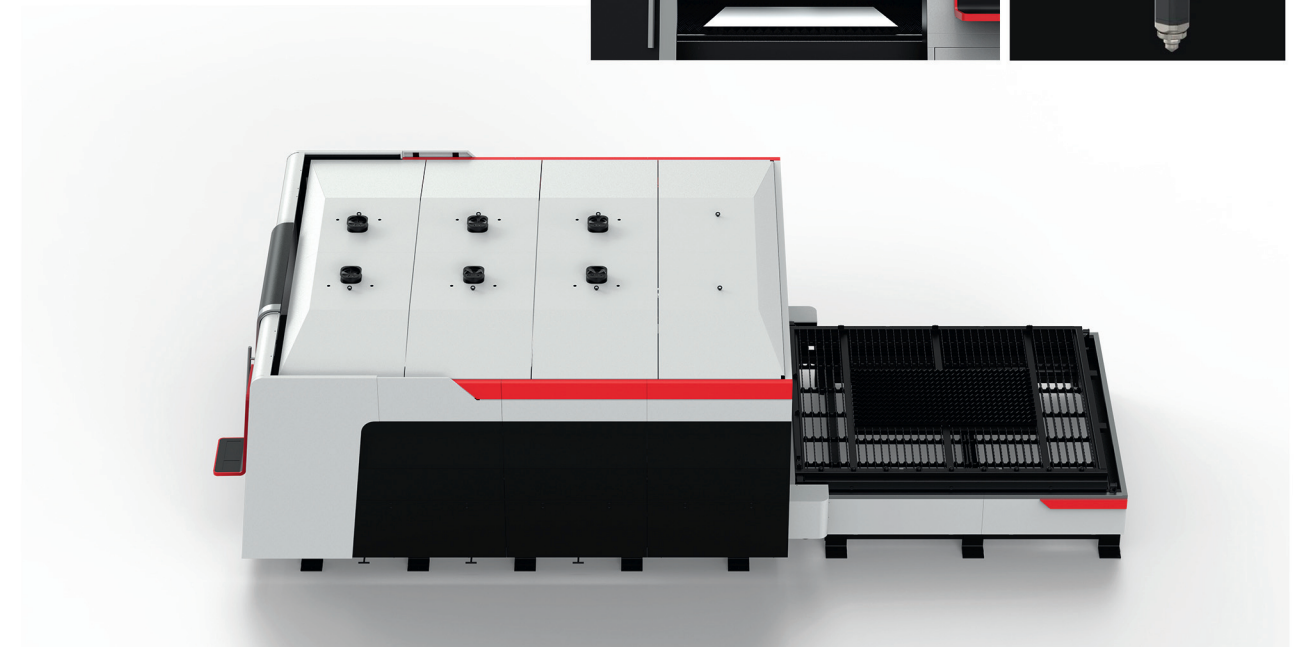
- 1. Full cover protection reached CE safety standard, camera monitor instant cutting status.
- 2. Different from traditional design, adopt horizontal exchange way, save exchange time.
- 3. Can meet the different space location requirements of the customer's factory.



Specification	Model
Processing Area	1500*3000mm
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
Max Acceleration	0.8G
Max Travelling Speed	60m/min
Positioning Accuracy	±0.03mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<40KVA
Power Supply	380V 50HZ / 380V 60HZ

CLOSED TYPE FIBER LASER CUTTING MACHINE
WITH SHUTTLE TABLE
WITH BEVEL CUTTING FUNCTION
TA-FLXC-B SERIES

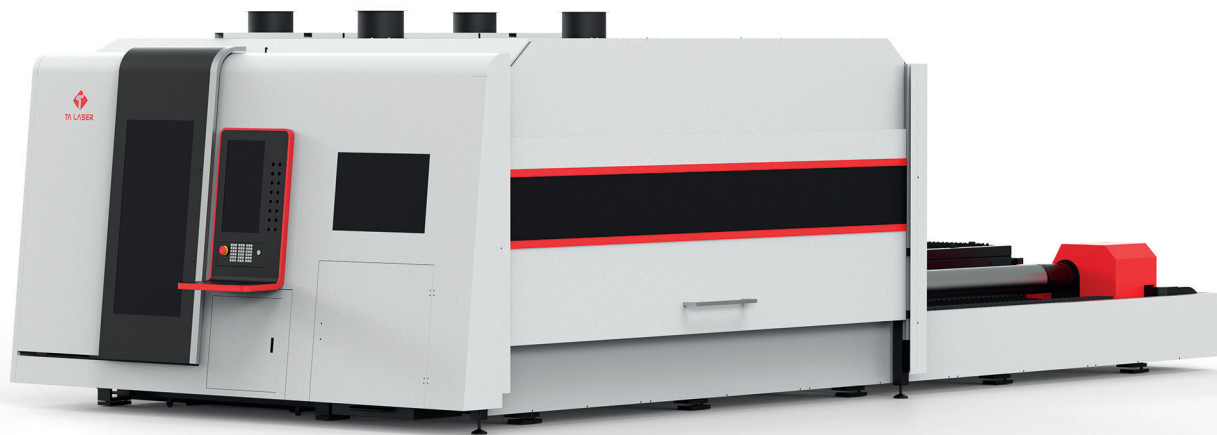
- 1. Equipped with bevel cutting head, rotation A B axis, bus drive system.
- 2. Heavy duty quality machined railway track, gives accuracy and stability to the machine for the whole working life.
- 3. Auto-Focus 3D cutting head with bus system realize 0-45 bevel cutting with V type, X type, Y type and K type.



Specification	Model
Processing Area	3000*2500mm, 4000*2500mm, 6000*2500mm, 8000*2500mm Machine table size can be customized
Laser Power	6000W-30000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.2G
Max Travelling Speed	120m/min
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<140KVA
Power Supply	380V 50HZ / 380V 60HZ

CLOSED TYPE SHEET & TUBE FIBER LASER CUTTING MACHINE WITH SHUTTLE TABLE
TA-FLXC-T SERIES

1. Combining a sheet laser cutting machine and tube laser cutting machine. Expand user's scope of cutting type and enhance their market competitiveness. Save purchasing costs, save working space.
2. Double pneumatic chucks 2~3 times faster than traditional electric chucks, 2 variable diameter rollers are adopted for a wide range of clamping and high cutting precision.
3. Full closed cover design, reached CE safety standard, make cutting more safe.



Specification	Model
Processing Area	3000*1500mm, 4000*1500mm, 6000*1500mm 4000*2000mm, 6000*2000mm, 8000*2000mm Machine table size can be customized
Tube Cutting Length	3000mm/6000mm
Chuck Type	220mm/320mm/360mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-12000W
Laser Source	IPG / Raycus / Max
Max Acceleration	1.0G
Max Travelling Speed	100m/min
Positioning Accuracy	±0.03mm/m
Repeatability Accuracy	±0.01mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<80KVA
Power Supply	380V 50HZ / 380V 60HZ

GROUND RAIL FIBER LASER CUTTING MACHINE
TA-FLG SERIES

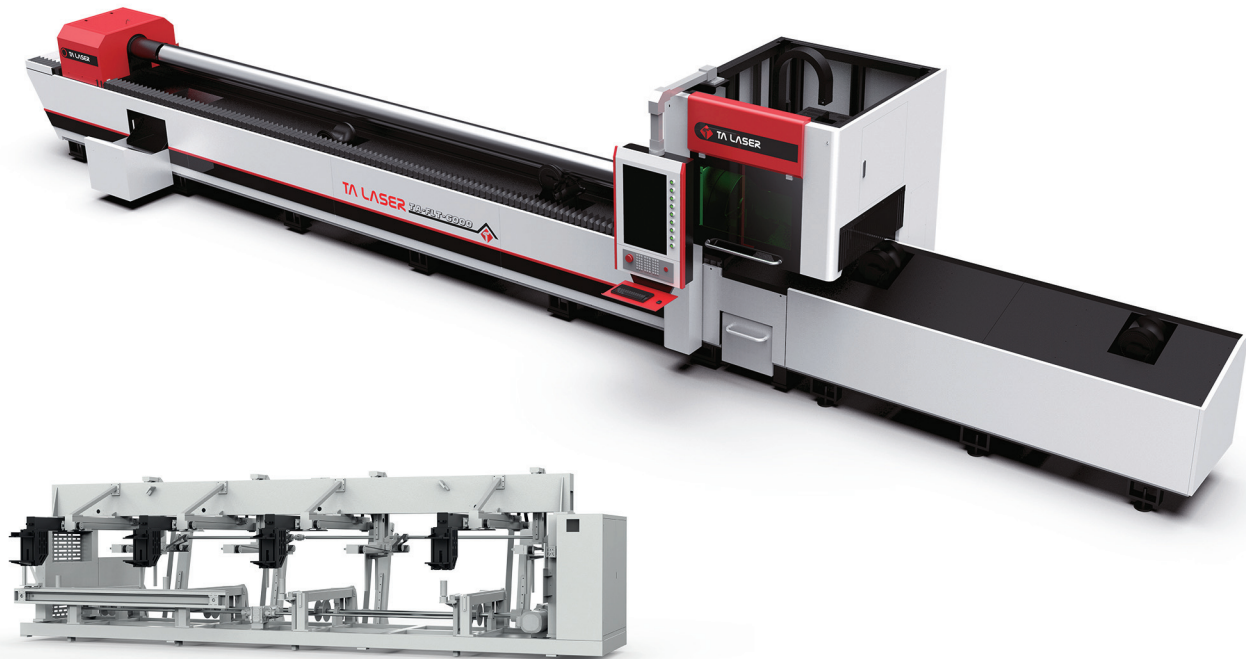
1. Gantry machine externable structure, modular working table design.
2. Precision machined, hardened, heavy duty drive rack on both the long and the cross travel direction, ensure high accuracy and long service life.
3. Low cutting taper, little kerf, high material utilization.
4. Bevel cutting function is optional.



Specification	Model
Processing Area	12000*2000mm, 12000*2500mm, 12000*3000mm. Machine table size can be customized.
Laser Power	6000W-30000W
Laser Source	IPG / Raycus / Max
Max Acceleration	0.8G
Max Travelling Speed	80m/min
Positioning Accuracy	±0.03mm/m
Repeatability Accuracy	±0.08mm
Transmission	Dual-drive Rack & Pinion
Total Power Consumption	<140KVA
Power Supply	380V 50HZ / 380V 60HZ

FIVE AXIS TUBE LASER CUTTING MACHINE TA-FLT6000 SERIES

1. Thick steel tube and plate welding, high stability, high temperature annealing treatment, less heat absorption, deformation prevention.
2. It employs intelligent tube support design which can solve the deformation problems in the process of long tube cutting.
3. Simple unloading system with two roller supports, high efficiency, super convenient.
4. Auto loading system is optional, bevel cutting function is optional.



Specification	Model
Tube Cutting Length	3000mm/6000mm/9000mm Machine table size can be customized
Z Axis Stroke	240mm
Chuck Type	220mm / 320mm / 360mm/520mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
W Rotation Accuracy	≤ 0.05mm
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Single-drive Rack & Pinion
Total Power Consumption	<40KVA
Power Supply	380V 50HZ / 380V 60HZ

SIX AXIS TUBE LASER CUTTING MACHINE TA-FLT6025-6A SERIES

1. Bus control system, front chuck can move 2500mm, ensure the long finishing part cutting accuracy.
2. Laser head can move to both side of the front chuck, to ensure the waste tube length less than 80mm.
3. It is equipped with follow-up support and roller support, which can effectively support the tube in the process of cutting and unloading, ensure the stability and accuracy of cutting.
4. Auto loading system is optional, bevel cutting function is optional.



Specification	Model
Tube Cutting Length	3000mm/6000mm/9000mm Machine table size can be customized
Z Axis Stroke	240mm
Chuck Type	220mm / 320mm / 360mm/520mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
W Rotation Accuracy	≤ 0.05mm
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Single-drive Rack & Pinion
Total Power Consumption	<45KVA
Power Supply	380V 50HZ / 380V 60HZ

EIGHT AXIS TUBE LASER CUTTING MACHINE TA-FLT6060-8A SERIES

1. Three chucks design, bus control system, laser head can move to both side of the middle chuck, can realize whole tube cutting.
2. It is equipped with follow-up support and roller support, which can effectively support the tube in the process of cutting and unloading, ensure the stability and accuracy of cutting.
3. Three chucks design, in the cutting process, any time the tube will be in stable situation, for any length finishing part will get perfect cutting accuracy.
4. Auto loading/unloading system is optional, bevel cutting function is optional.



Specification	Model
Tube Cutting Length	6000mm/9000mm Machine table size can be customized
Z Axis Stroke	240mm
Chuck Type	220mm / 320mm / 360mm/520mm
Tube Section Shape	Round/Square/Rectangle/Oval/H type/L type/I type
Laser Power	1500W-6000W
Laser Source	IPG / Raycus / Max
W Rotation Accuracy	≤ 0.05mm
Positioning Accuracy	±0.02mm/m
Repeatability Accuracy	±0.01mm
Transmission	Single-drive Rack & Pinion
Total Power Consumption	<45KVA
Power Supply	380V 50HZ / 380V 60HZ

HAND-HELD FIBER LASER WELDING MACHINE TA-FLW SERIES

1. More efficiency and lower maintenance costs.
2. Welding routes are solid and smooth under mode of continuous laser. Little deformation and tiny bulgeless or no need polishing, saving labor and time costs.
3. Compact size design, easy to move, easy to install and control.
4. Welding gas pressure monitor system, air conditioner system ensure long life using time.



Specification	Model
Laser Mode	Six Different Modes
Laser Power	1000W-3000W
Laser Source	Raycus/MAX
Power Adjusting Range	10-100%
Laser Spot Range	0.2mm-6mm
Emission Wavelength (nm)	1080±5
Laser Frequency Range	50-20000Hz/50-5000Hz
Laser wobble Frequency Range	20-200HZ
Fiber Length	5m
Cooling Method	Water cooling
Machine Dimensions	1000MM*650MM*1250MM
Welding Material	Carbon steel, Stainless steel, Aluminum
Welding Penetration	≤ 5MM
Power Supply	AC 220V±10% / AC 380V±10% ,50/60Hz

1. Easy to remove resin stains, paint-coat, rust, cladding material and paint.
2. Compact size design, easy to Move, easy to install and control easy to move.
3. No secondary pollution, no noise dust hazard, conducive to environmental protection.



Specification	Model
Laser Mode	Six Different Modes
Laser Power	1000W-2000W
Laser Source	Raycus/MAX
Power Adjusting Range	10-100%
Emission Wavelength (nm)	1080±5
Laser Frequency Range	50-20000Hz/50-5000Hz
Fiber Length	5m
Cooling Method	Water cooling
Machine Dimensions	1000MM*650MM*1250MM
Power Supply	AC 220V±10%/ AC 380V±10% ,50/60Hz

Laser Marking Machine (Fiber/CO₂/UV/Green Laser)

TA-FLM Series



Laser Source	Fiber/ CO ₂ /UV/ Green Laser Source
Application Material	Fiber Laser for metal material marking; and CO ₂ laser for nonmetal material marking.
Optional Device & Function	1) Rotary device; 2) Dynamic (auto-focus) marking system; 3) CCD auto-positioning visual marking system



Precision Fiber Laser Cutting Machine

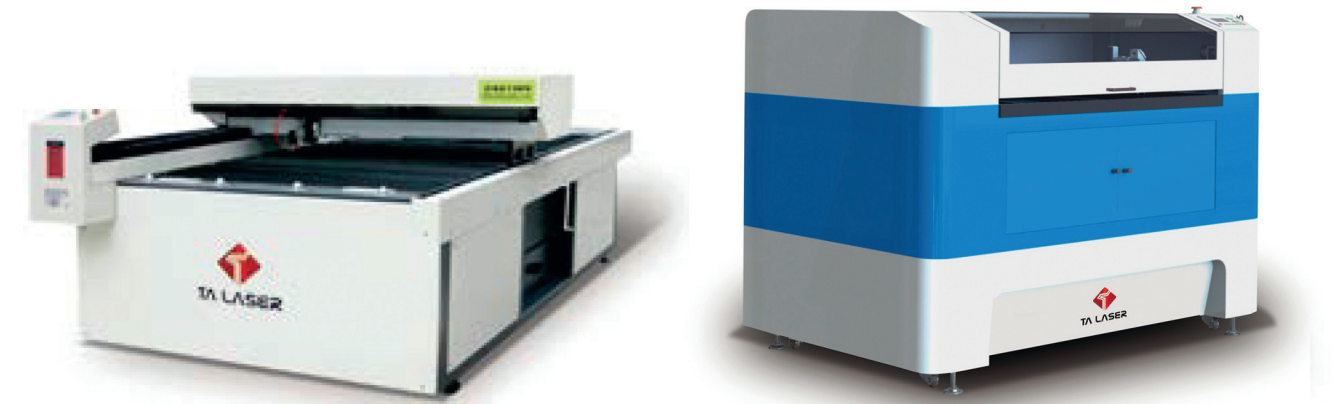
TA-FLP Series



Laser Source	Fiber Laser
Application	Precise & fast processing in a smaller scale. Different laser source is selected for different processing material for the best performance.
Application Industries	Glass industry. PCB circuit industry. touch screen industry. ceramic industry etc.

CO₂ Laser Cutting Machine for Nonmetal Material

TA-CLC Series



Laser Power	60w/80w/100w/130w/150w/320W
Working Size	1000x600mm, 1300x900mm, 1600x1000mm, 2500x1300m
Applicable Materials	Acrylic, wood, carton box, leather, cloth, paper, etc

Laser Cutting Assisting Equipment & Spare Parts



Deburring Machine



Dust Collector



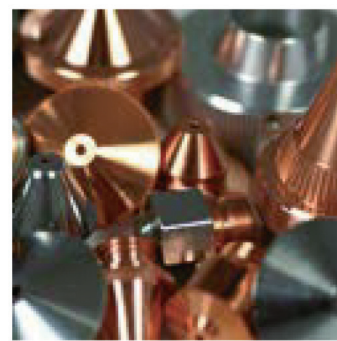
Compressed Air Station



Pneumatic Sheet Loading Device



Voltage Transformer & Regulators



Laser Machinery Spare Parts

Cut Sample

Metal sheet fabrication, mechanic parts
1mm-20mm metal sheet cutting



Sport equipment industry



Encasement, cabinet manufacturing
below 2mm metal sheet cutting



Kitchenware industry
stainless steel sheet cutting



Light industry
round, square and conical tube cutting



Automotive industry
automotive parts processing

