



About Us

Shandong Oree Laser Technology Co., Ltd. is a high-tech enterprise integrating R&D, production and sales of laser application equipment.

66000m²

Manufactory

The company has a manufactory of 66000 square meters, including modern standard factory buildings of 4000 square meters and smart office building of 6000 square meters.

1,000

Over 1000 Employees

The company has more than 1,000 outstanding employees, including more than 120 professional core R&D team members, and some experts with more than 15 years experience of laser filed.

150+

Products are exported to 150+ countries and regions

The products are exported to more than 150 countries and regions including Russia, the United States, South Korea, India, Thailand, Poland, Vietnam, and Malaysia.

30

International certification, patent

It has obtained ISO9001, RoHS, CE and FDA international certifications, and has more than 30 utility model patents and appearance design patents.

6

Major product series

Products mainly include Flatbed fiber laser cutting machine, Tube fiber laser cutting machine, Sheet&Tube dual-use fiber laser cutting machine, 3D fiber laser cutting machine and Hand-held welding machine.

INDUSTRIES

Wide application field

Products have been widely used in electronic appliances, precision machinery, integrated circuits, auto parts, kitchen and bathroom hardware, smart home, handicraft processing, fashion and lighting industries.

MYRIAWATT FIBER LASER

Protective Cover Is Safer



Full Protection Fiber Laser Cutting Machine OR-PH

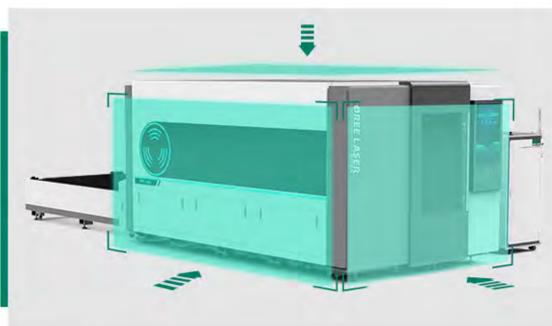
Exchange Platform • Super High Precision



|| Fully Enclosed Protective Cover



- The large 32-inch screen and the integrated design of monitoring and operation provide users with the ultimate experience;
- The protective cover has a built-in camera to monitor the machine without stopping the machine during operation, which is convenient for the operator to observe the cutting process in real time;
- The rear camera of the outer cover is convenient for the operator to monitor the side and rear dynamics in real time



Protective Cover >>>

Fully enclosed design, internal dust is filtered to discharge.



CE Standard Protective Glass >>>

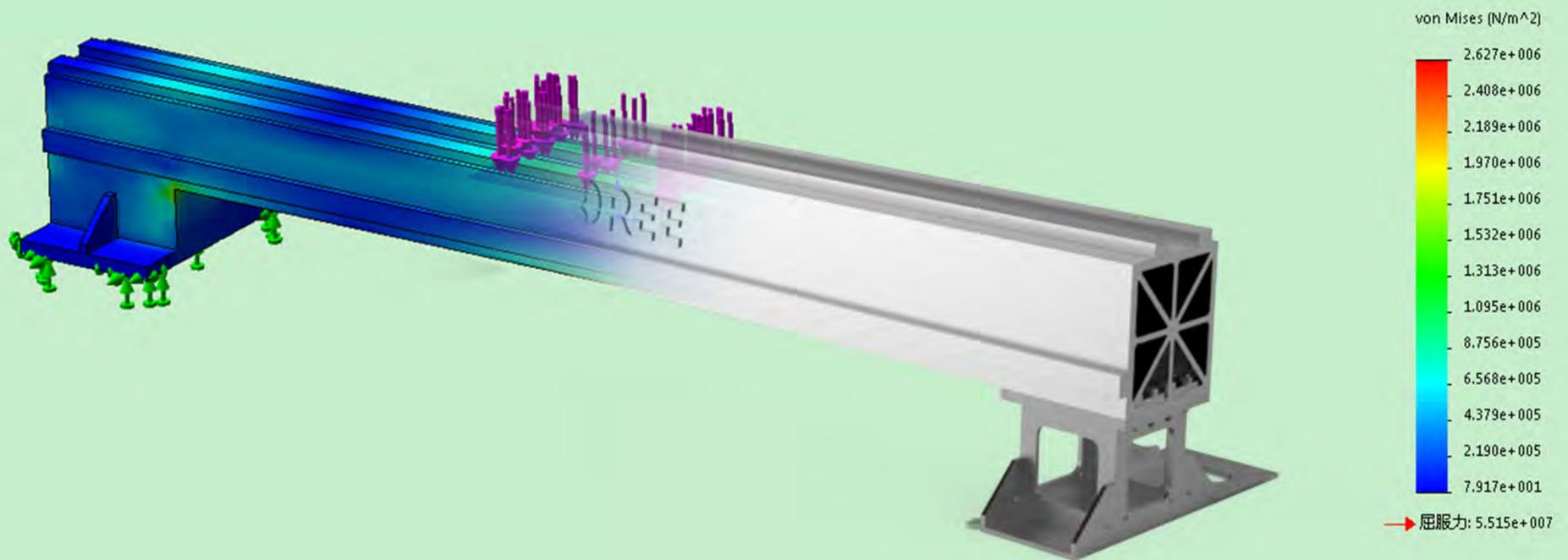
The observation window adopts European CE standard protective glass, which makes eye protection safer.



Thicken Sheet Metal >>>

The thickness of the sheet metal is 1.5-3mm, the shell is not easy to deform, and the body is more tough.

|| The Fifth-generation a'Aviation Aluminum Beam

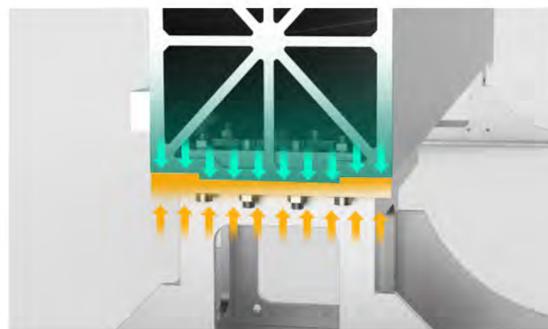


- In order to improve the structure of the beam and optimize its dynamic performance, the R&D staff of Oree took advantage of the previous 4 generations of beams and used finite element analysis to ensure the stability of the beam structure;
- Under the condition of normal operation of the laser cutting machine, physical monitoring was observed for 30 days;
- The structural stability and dynamic performance meet the expected standards, and finally the fifth-generation aviation aluminum alloy beam was successfully developed.



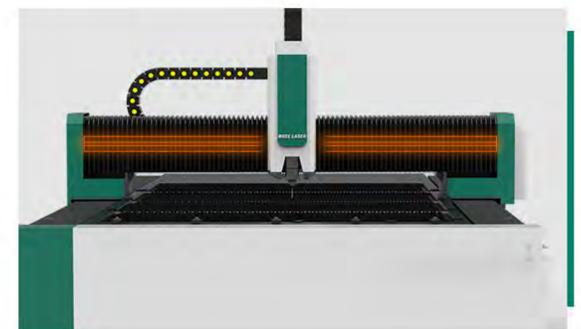
T6 Heat Treatment Process >>>

The whole is processed by **T6 heat** treatment process to make the beam obtain the highest strength. Solution treatment increases the strength and plasticity of the beam, and improves the corrosion resistance of the alloy; complete artificial aging makes the beam obtain the maximum strength (tensile strength), and obtains the hardness and ductility by controlling the effective **temperature and holding time**.



Stop Structure >>>

The beam is specially equipped with a "**stop structure**", the convex stop and the concave stop are tightly locked, and the strong stop of the side wall is on the inner side to resist external forces. The overall structure can ensure that the beam does not move, and the structure is stronger.



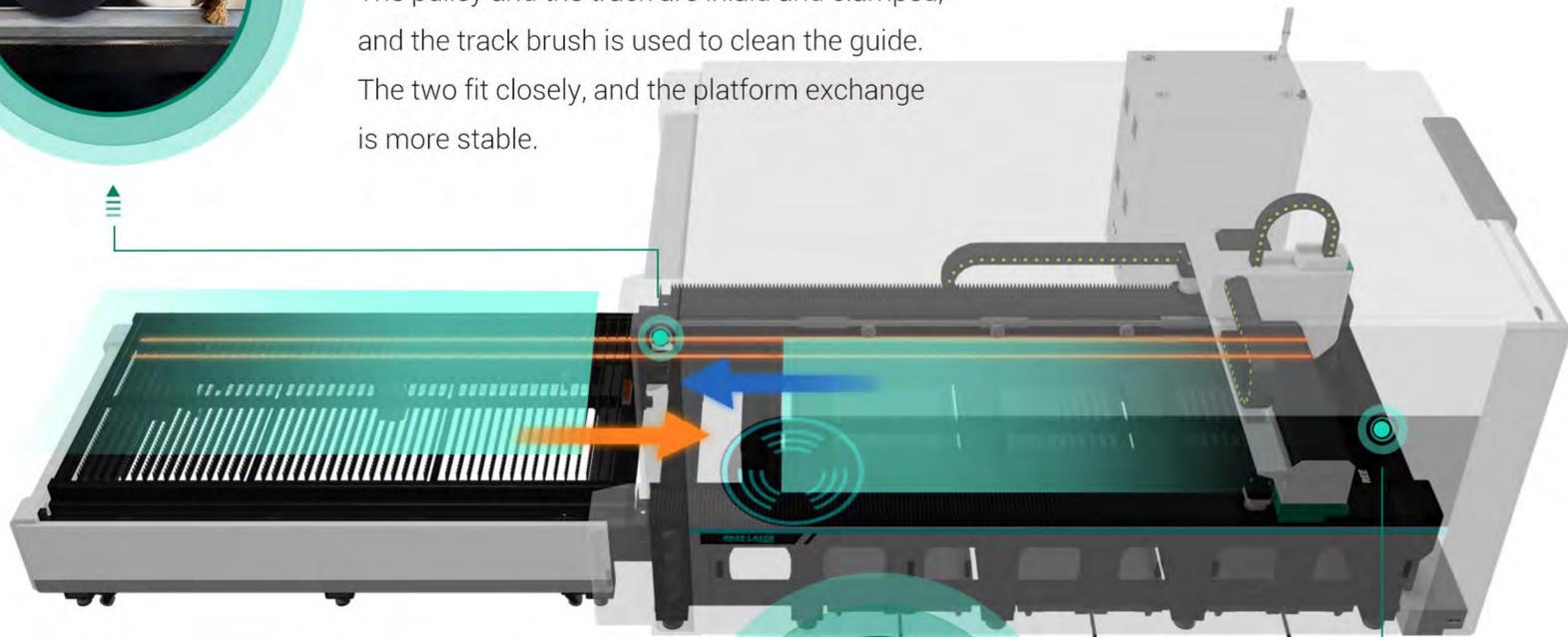
Lightweight And High Speed >>>

OREE's newly developed and upgraded mass-produced beams optimize and reduce their weight while ensuring structural stability, ensuring their ultra-high response speed.

Six-sided Steel Rapid Exchange Platform



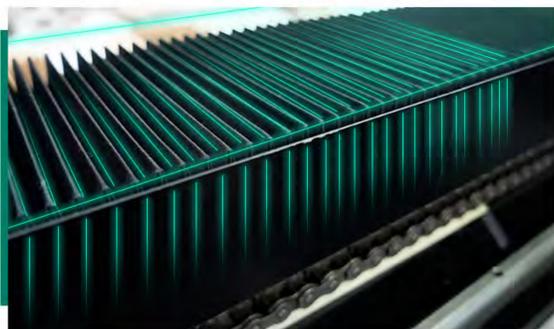
- **Six-sided steel rapid exchange platform**
The pulley and the track are inlaid and clamped, and the track brush is used to clean the guide. The two fit closely, and the platform exchange is more stable.



- **Pneumatic locking**
Pneumatic locking between platforms. The locking force is stronger than electromagnetic locking, and the cutting is firmer.

• Single Platform Exchange Only Takes 10 Seconds

Taking the 3015 platform as the standard, a single platform exchange only takes 10 seconds, which can effectively improve the processing efficiency of the manufacturer.



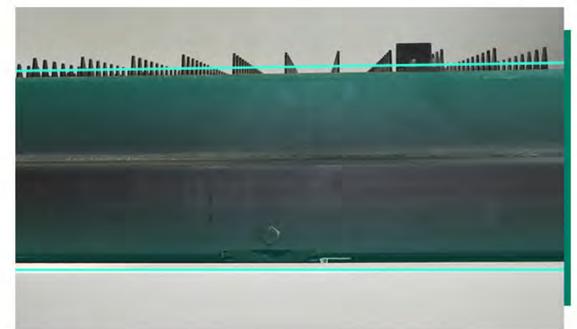
Burn-proof Partition >>>

Prevent sparks from burning the dust cover and reduce loss.



Reinforcement Of Knife Strip >>>

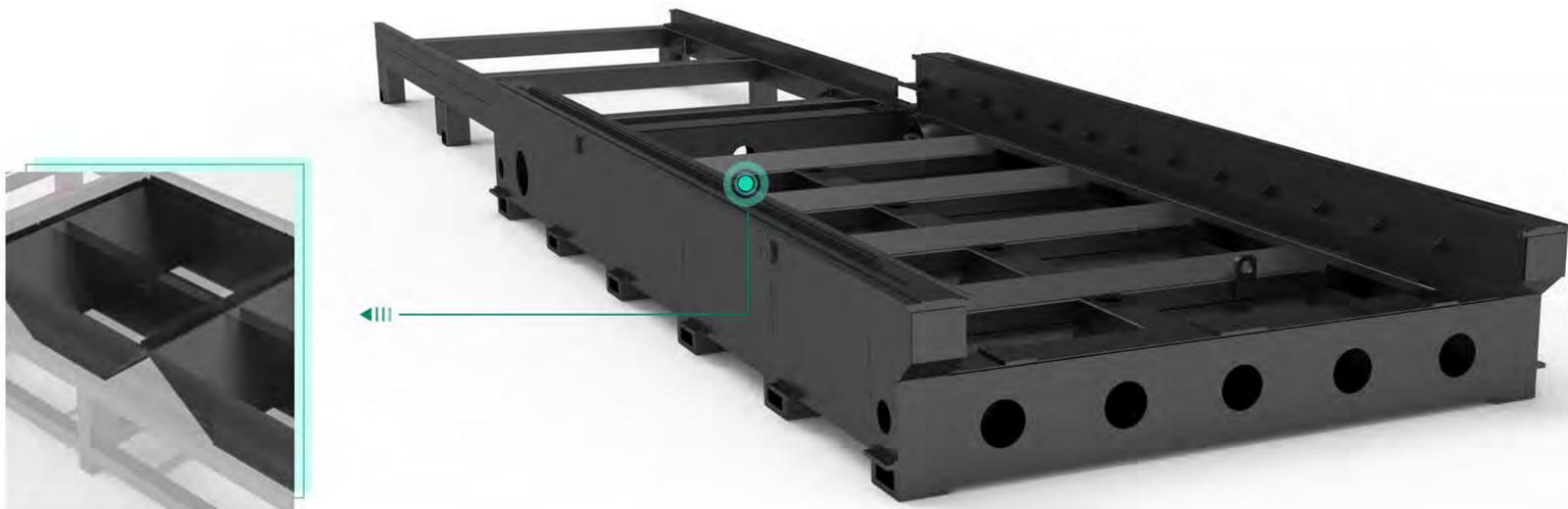
Prevent plate vibration during processing and improve cutting accuracy.



Heightening The Sheet Metal >>>

The sheet metal on both sides of the exchange platform is heightened, and the platform pulley is built in for safer.

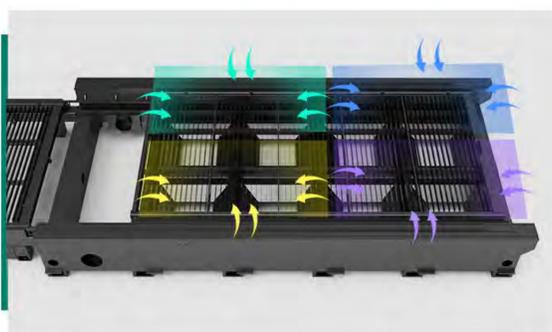
High Rigidity Super Heavy Steel Plate Welded Bed



- **Graphite protective plate**

The graphite plate with obvious protective effect is used to form the anti-burning partition, which can effectively prevent the beam from damaging the lathe and left and right mechanisms of the bed.

The raw material of the welded bed is 12mm thick steel plate. The finite element analysis assists in optimizing the structure of the bed, and the groove welding method is used to achieve equal strength butt joints to ensure the good mechanical properties of the bed. After stress annealing and natural aging treatment to eliminate internal stress, maintain the extremely high stability and cutting accuracy of the bed.



Partition dust removal >>>

Optimize the dust removal function of the equipment, remove dust in stages according to the use of the area, save energy and reduce emissions



Guide rail V-groove + pressure block design

Provide guide rail fine-tuning function to ensure that the guide rail is always level with the bed.



Blade reinforcement >>>

Prevent plate vibration during processing and improve cutting accuracy.



Automatic Focusing Laser Head

The laser head is made of high-quality materials in accordance with advanced technology. It is strong and durable; it can achieve "online" measurement during the production process, and the measurement is accurate and rapid.



Laser Head Follow-up Function >>>

Follow the change of the height of the board, don't worry about the unevenness of the board affecting the cutting effect.



Automatic Cleaning >>>

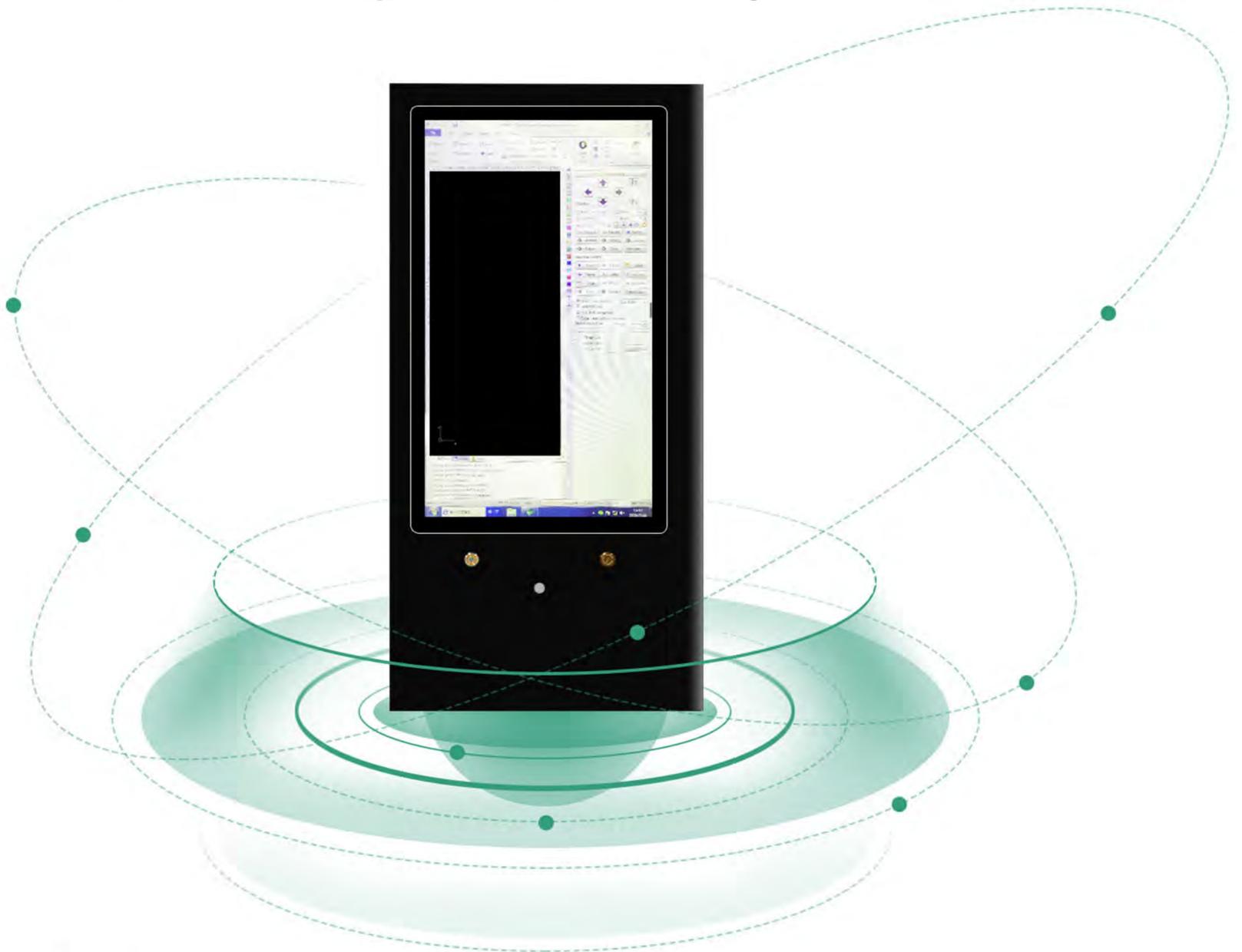
Equipped with laser head brush, which can automatically clean the nozzle, which is efficient and worry-free.



Long Service Life >>>

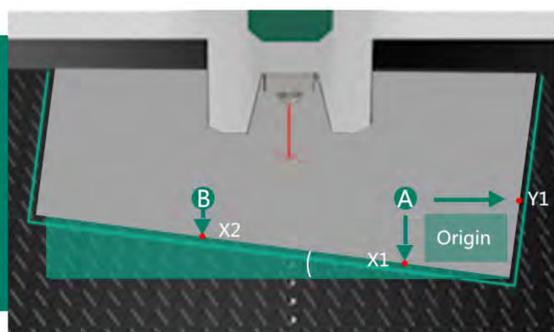
The protective lens is continuously monitored; the internal structure of the laser head is completely sealed to prevent the optical lens from burning due to dust.

Intelligent Control System



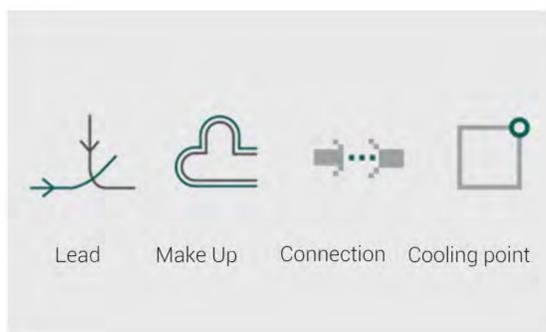
• Cypcut Plane Control System

CypCut plane cutting software is a set of software specially developed for the deep customization of the laser cutting industry, combined with a 32-inch touch screen, easy to use, rich in functions, suitable for various processing occasions.



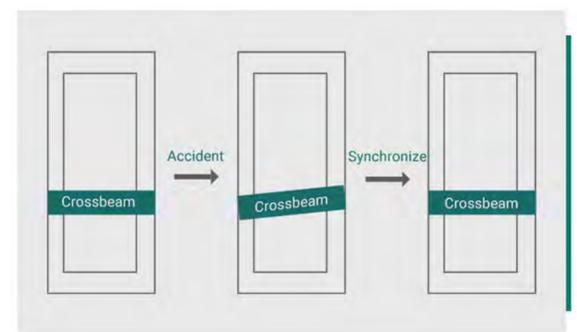
Edge Finding Aid >>>

Dual-drive deviation self-correcting two-stage capacitive edge seeking, accurately locates the edge of the plate, optimizes the layout according to the position of the plate, saves time and materials, and improves the utilization rate



Concise And Clear Process Settings >>>

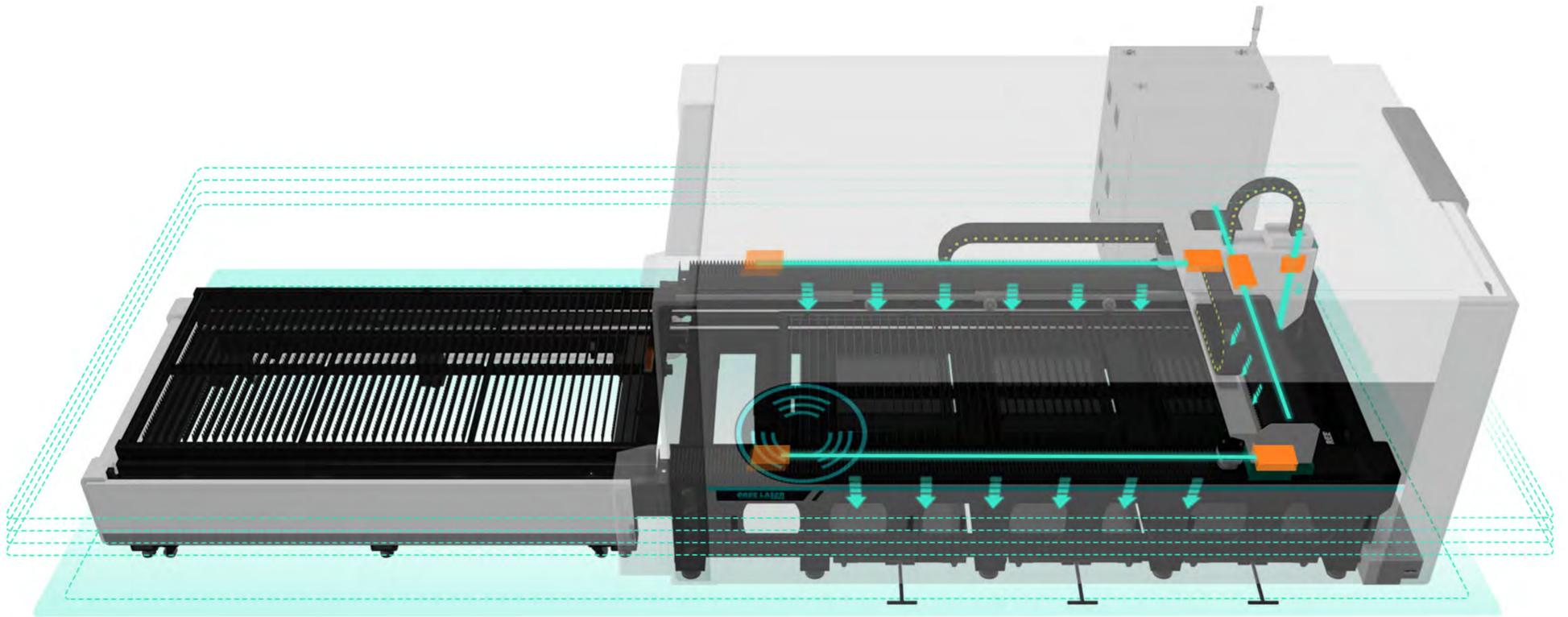
After importing graphics, you can quickly complete the setting of the entire board process; support three-level perforation and automatic layout. Film cutting, power-off memory and other functions are simple and easy to operate.



Double Drive Deviation Self-correction >>>

Using the gantry synchronization function, the deviation of the dual-drive shaft will be corrected every time the origin is returned to ensure the cutting accuracy.

Automatic Lubrication System

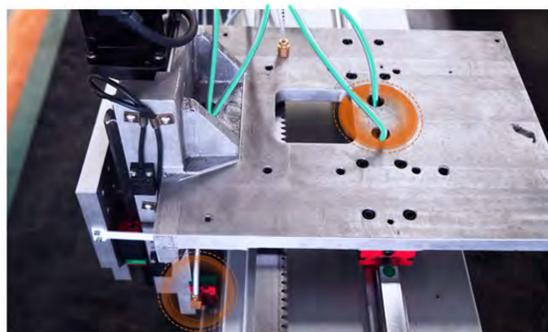


Whole body layout, automatic lubrication of guide rails and racks.



Automatic Lubrication >>>

The software controls the oil pump to automatically perform multi-point lubrication, and the lubrication times and time intervals are manually controllable, saving labor time.



Multi-point Lubrication >>>

Automatic lubrication system for automatic lubrication of guide rails, sliders, screws, racks and other points, reducing equipment strain rate.



Waste Oil Recycling >>>

Specially set oil return tank, which can recycle and centrally dispose of lubricating waste oil. Humanized design ensures the cleanliness of the equipment body.

QC Lifeline, Full Control

The QC quality control system under the "whole industry chain" mode is in the quality loop of equipment production. Each link requires quality management personnel to conduct real-time supervision in accordance with the requirements of operating standards and operating procedures, so as to ensure that the equipment is processed and assembled. The debugging end, the supervision end and other links realize the quality controllable, so that it meets the quality technical requirements.



- **LASER CUTTING**

Accurate cutting, small error, will not cause plate size error due to slitting



- **GROOVE WELDING**

Groove welding and seamless welding are used to make the plates (pipes) reach equal strength butt, and ensure that the bed reaches equal strength



- **STRESS ANNEALING**

Stepwise increase temperature to 580 degrees for annealing treatment, and then aging treatment for 1-2 days, release the internal stress of the bed, the internal stress is basically eliminated.



- **SANDBLASTING**

The impact of high-speed sand flow is used to clean and roughen the surface of the bed. After spraying, the bed can form a smooth and bright permanent coating film to achieve the purpose of decoration and anti-corrosion.



- **SANDBLASTING**

The impact of high-speed sand flow is used to clean and roughen the surface of the bed. After spraying, the bed can form a smooth and bright permanent coating film to achieve the purpose of decoration and anti-corrosion.

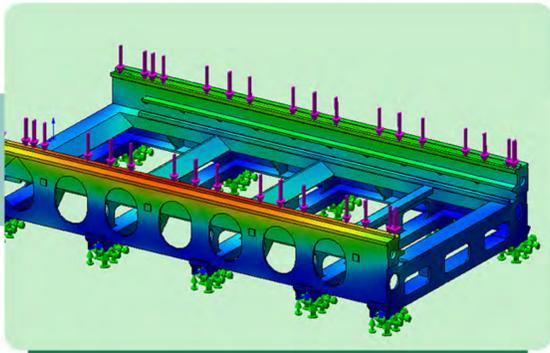


- **FINISHING**

A few machining allowances are cut from the surface of the finely machined workpiece to obtain high machining accuracy and a small surface roughness value.

QC Lifeline, Full Control

The QC quality control system under the "whole industry chain" mode is in the quality loop of equipment production. Each link requires quality management personnel to conduct real-time supervision in accordance with the requirements of operating standards and operating procedures, so as to ensure that the equipment is processed and assembled. The debugging end, the supervision end and other links realize the quality controllable, so that it meets the quality technical requirements.



Design drawing—Make a model >>>

Through computer finite element analysis, the structure of the bed is accurately designed, and the mold is 1:1.



Brush Paint >>>

Ensure that the casting model has a beautiful appearance and no trachoma.



Pouring >>>

Fill the molding with resin sand in the sand box, and pour it after the molding is fixed, which effectively eliminates shrinkage and porosity defects, and the mold has high rigidity.



Clean Up The Sand >>>

After cooling, the casting is hoisted out, and the casting is naturally separated from the dry sand. At the same time, the integrity of the casting is checked for other defects, and then the sand is cleaned with a shot blasting machine.



Stress annealing >>>

Stepwise increase temperature to 580 degrees for annealing treatment, and then aging treatment for 1-2 days, release the internal stress of the bed, the internal stress is basically eliminated, the cast iron bed will not be deformed after 50 years of use.



Sandblasting >>>

The impact of high-speed sand flow is used to clean and roughen the surface of the bed. After spraying, the bed can form a smooth and bright permanent coating film to achieve the purpose of decoration and anti-corrosion.



Roughing >>>

Cut most of the machining allowance from the workpiece to make the shape and size close to the requirements of the finished product. Leave it for another month to achieve natural aging and ensure that the deformation of the rail mounting surface is extremely small, not exceeding 0.02mm/M.



Fine processing >>>

Cut less machining allowance from the rough machined surface, so that the workpiece can achieve higher machining accuracy and surface quality.



Finishing >>>

A few machining allowances are cut from the surface of the finely machined workpiece to obtain high machining accuracy and a small surface roughness value.

Production lines



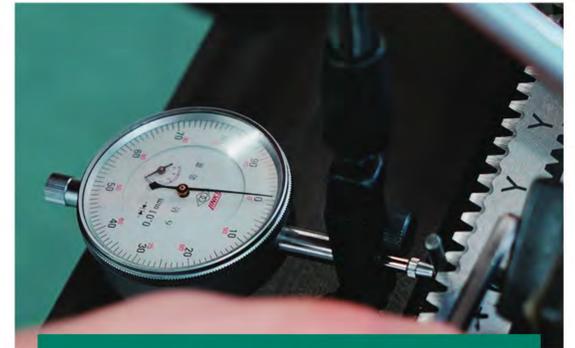
Bed Foot Installation

Adjust the height of the feet according to the test results of the strip level to ensure the accuracy of subsequent installation.



Rail Installation

Use photoelectric autocollimator to detect the straightness and flatness of the guide rail to ensure that the detection value is within the standard range.



Rack Installation

The relative position of the guide rail and the rack is locked by the measuring rod and the multi-point position is clamped. After the distance is detected by the dial indicator, data statistics and analysis are performed to ensure that the two are parallel.



Beam Installation

After the beam is installed, use a three-coordinate measuring instrument to check the coaxiality to ensure the relative perpendicularity of the X/Y/Z three-axis



Positioning Accuracy Inspection

The laser interferometer tests the X-axis positioning accuracy to ensure the accuracy of the whole machine.



Positioning Accuracy Inspection

The laser interferometer tests the Y-axis positioning accuracy to ensure the accuracy of the whole machine.



Laser Power Meter Test

Ensure that the laser output power of the laser is within the specified range



72h Machine Aging Test

Simulate the high-intensity test of various harsh conditions in the actual use of the equipment, and at the same time, according to the requirements of use, rationalize the improvement to ensure the factory pass rate and improve the reliability of the equipment



Pack And Ship

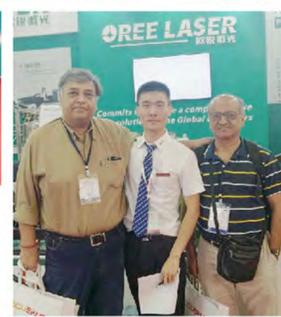
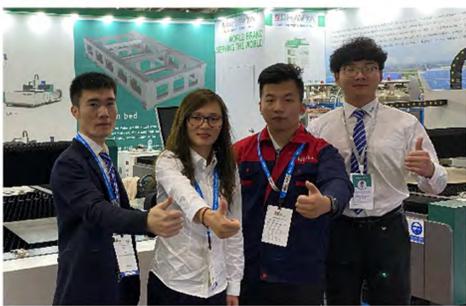
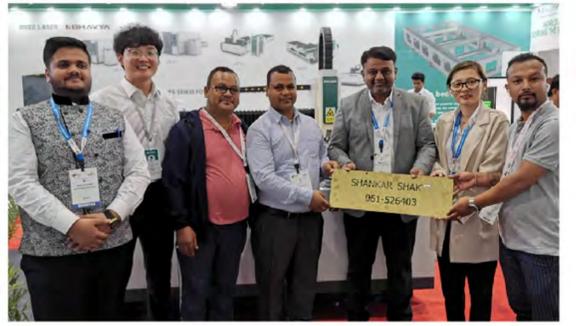
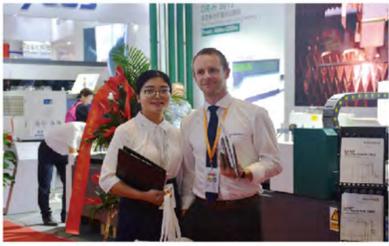
Adopt sealed composite aluminum foil moisture-proof low-pressure packaging and thick wooden boards to protect the fuselage to prevent bumps and collisions during shipping, and minimize unnecessary mechanical losses that may occur during transportation.



AFTER-SALES SERVICE

OREE LASER





EXHIBITION SILHOUETTE

OREE LASER

