

ENTRY-LEVEL EASY TO USE

----- • Advertising Dedicated • -----



Advertising Dedicated Fiber Laser Cutting Machine OR-FMA

One-click Operation • Entry-Level • Intelligent control system



Triangular Overweight 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.

This bed adopts computer finite element analysis to assist the optimization design, the triangular steel plate layout, the design is more reasonable, and the rigidity and strength of the bed are greatly improved. The plate welding bed is subjected to stress relief annealing treatment on the basis of heavier, so that the bed is not easy to deform and is more stable.



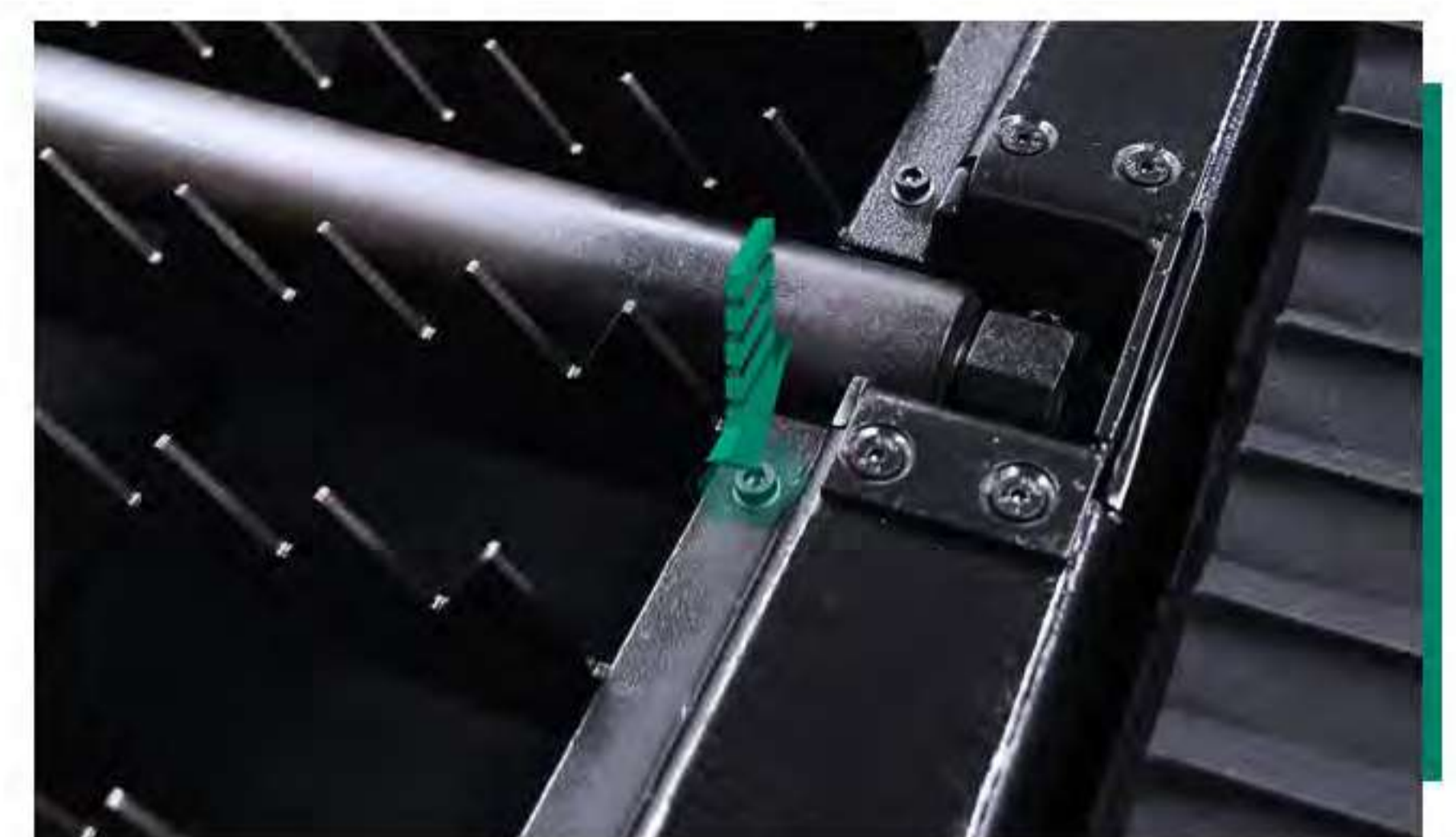
Partition dust removal >>>

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

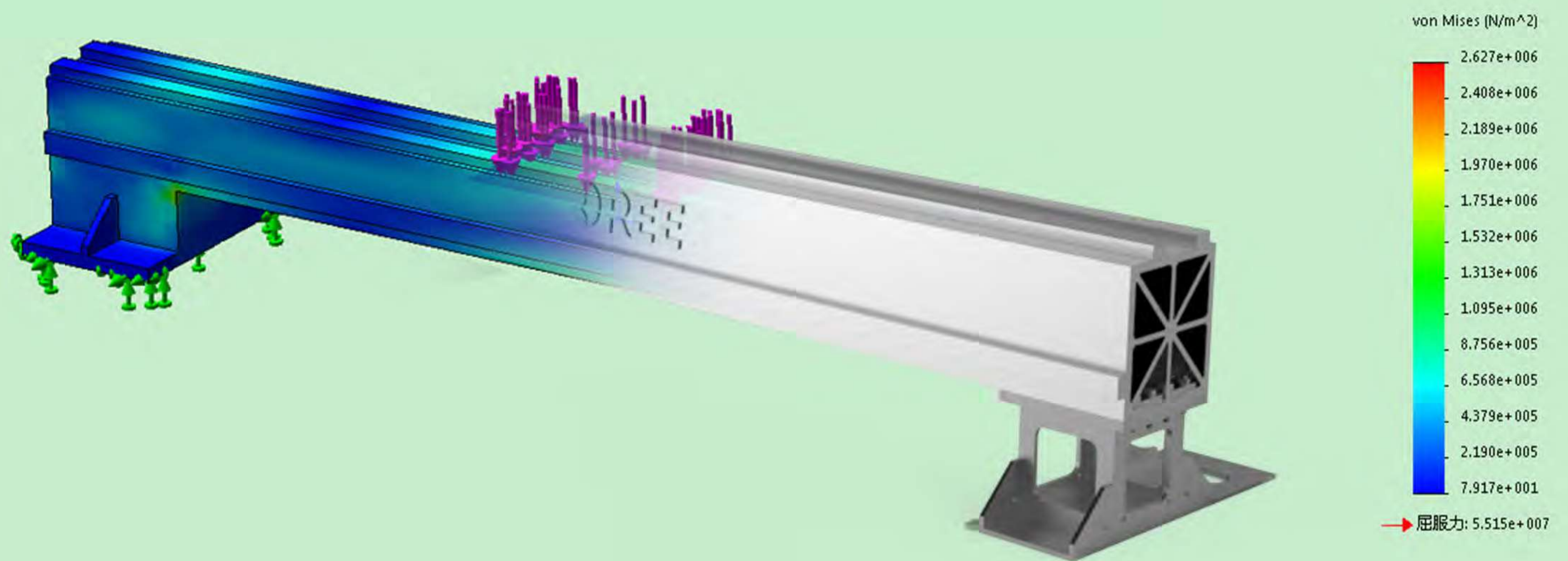
Provide guide rail fine-tuning function to ensure that the guide rail is always level with the bed.



Blade reinforcement >>>

Prevent plate vibration during processing and improve cutting accuracy.

|| The Fifth-generation a'Aviation Aluminum Beam

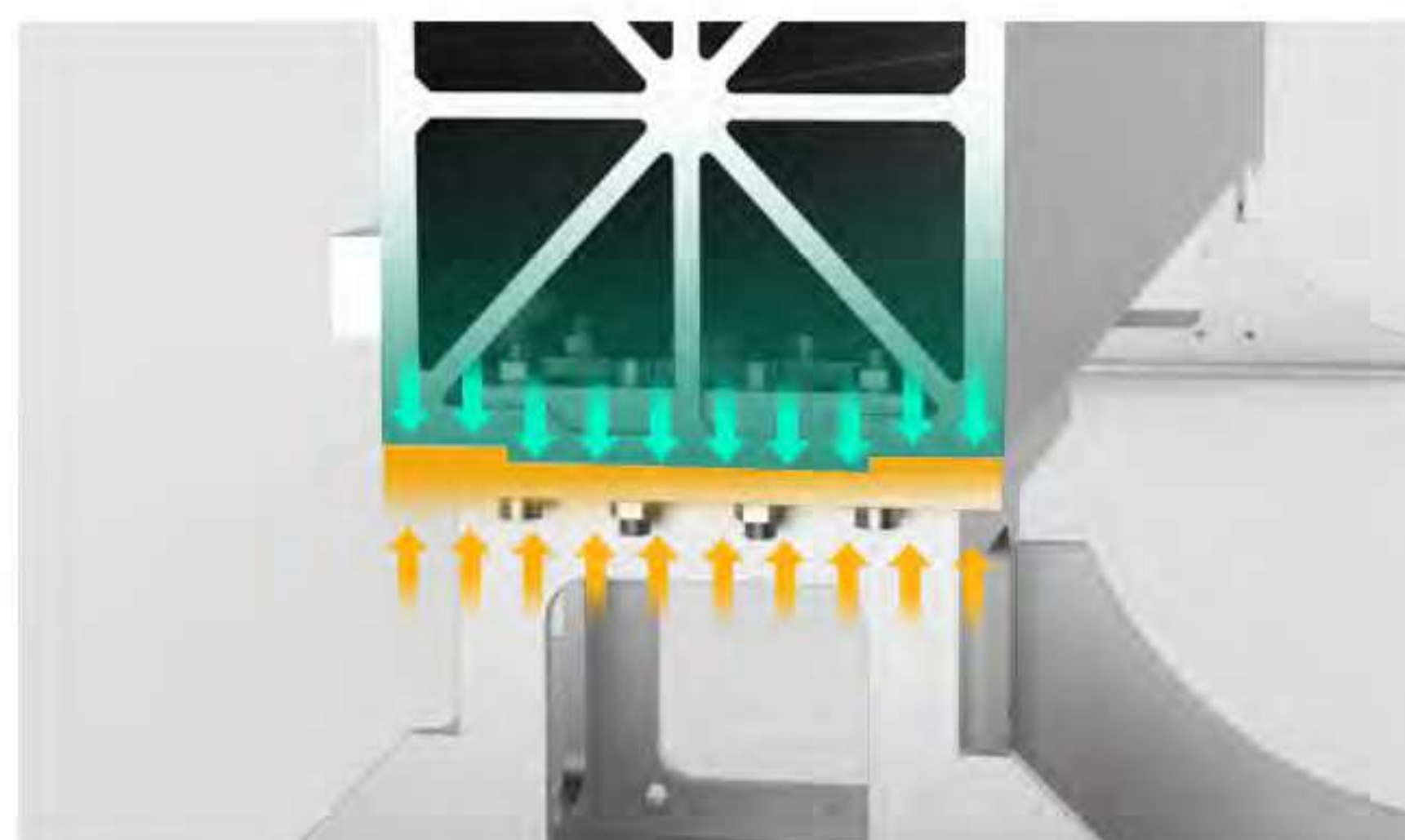


- In order to improve the structure of the beam and optimize its dynamic performance, the R&D staff of Oree took advantage of the previous 4 generations of beams and used finite element analysis to ensure the stability of the beam structure;
- Under the condition of normal operation of the laser cutting 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.



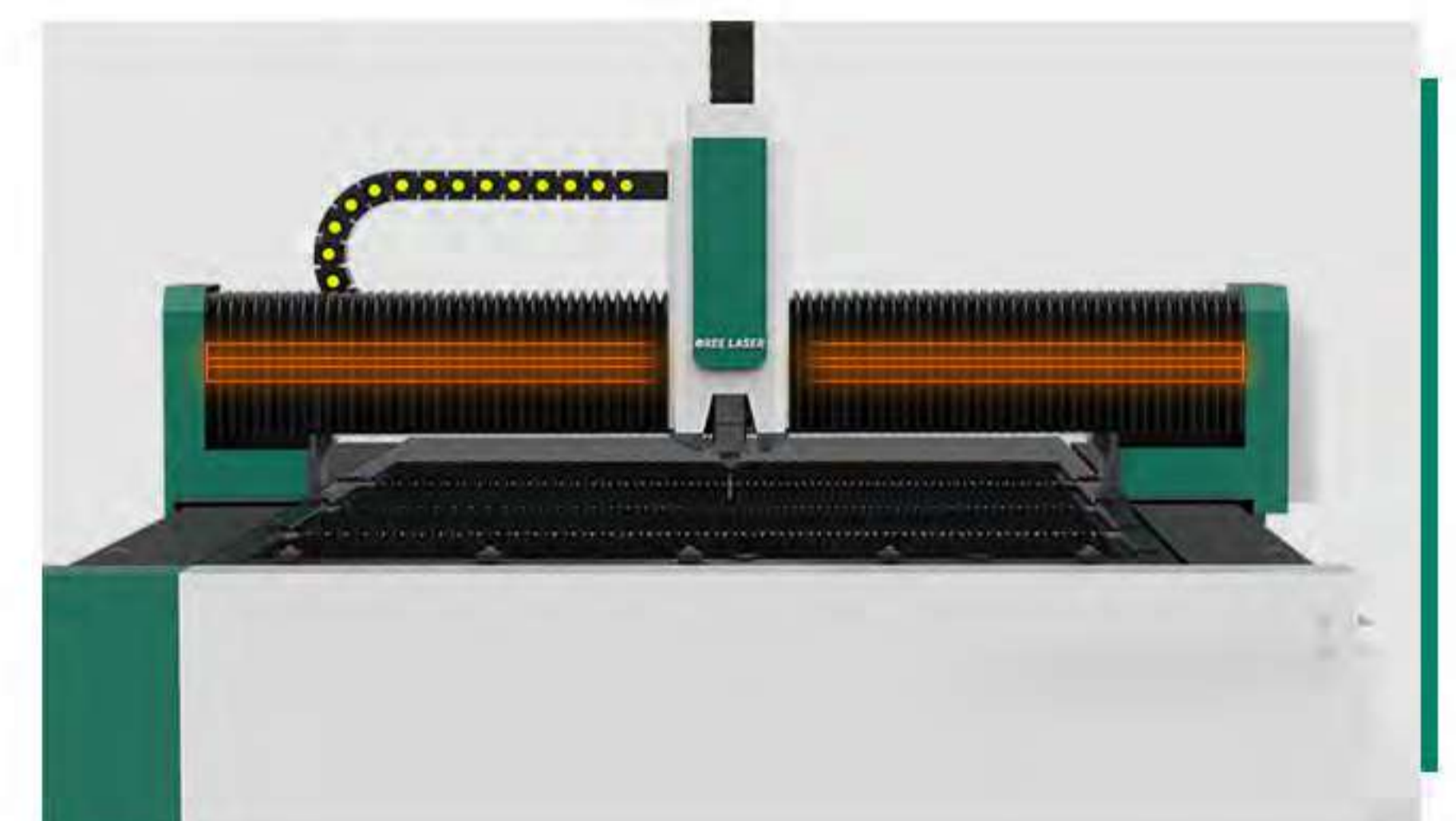
T6 Heat Treatment Process >>>

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.



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.



Auto Focus >>>

The cutting focal length is directly controlled by the system, without manual adjustment, which avoids errors or obstacles caused by manual operation



Long Service Life >>>

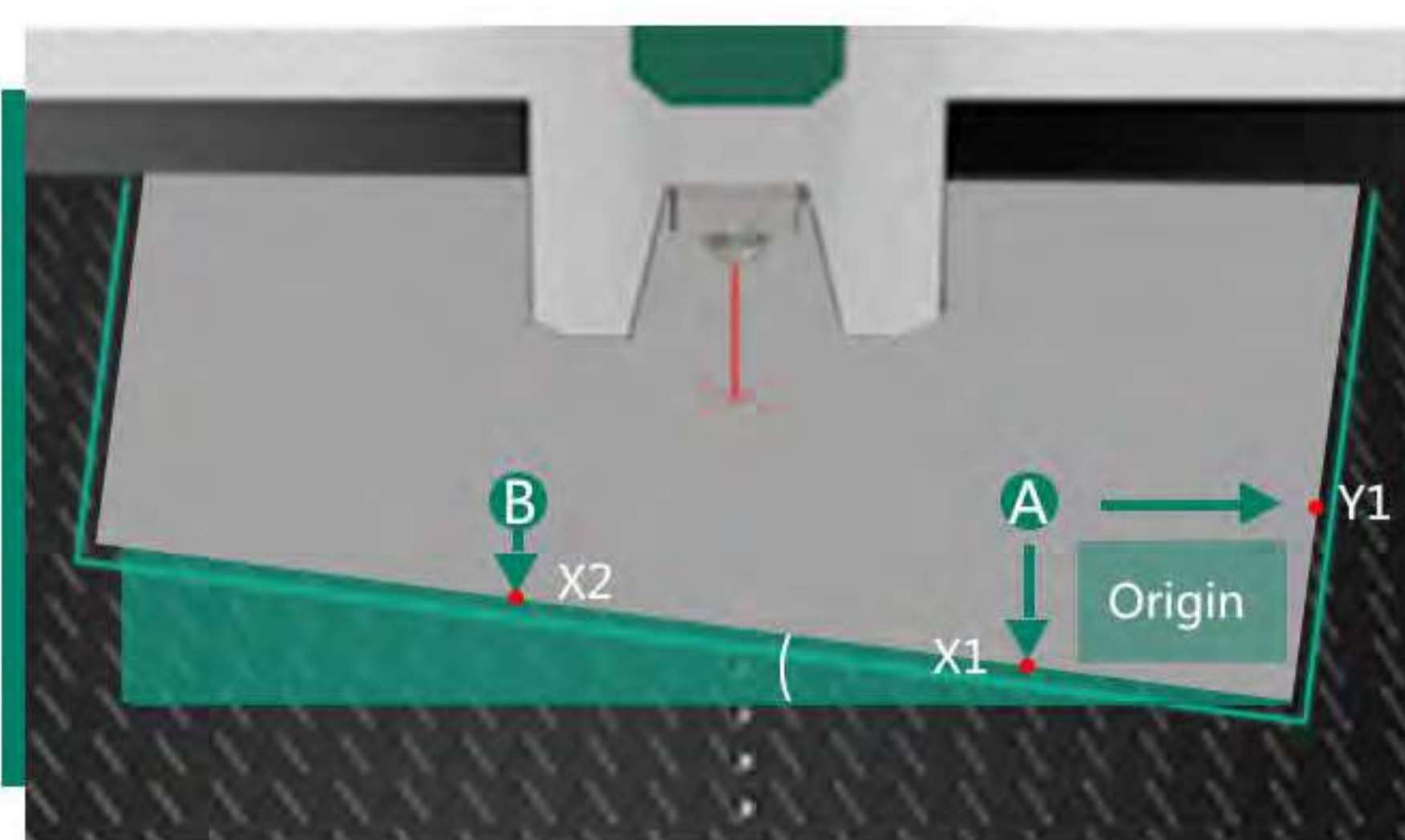
The protective lens is continuously monitored; the internal structure of the laser head is completely sealed to prevent the optical lens from burning due to dust.

Intelligent Control System



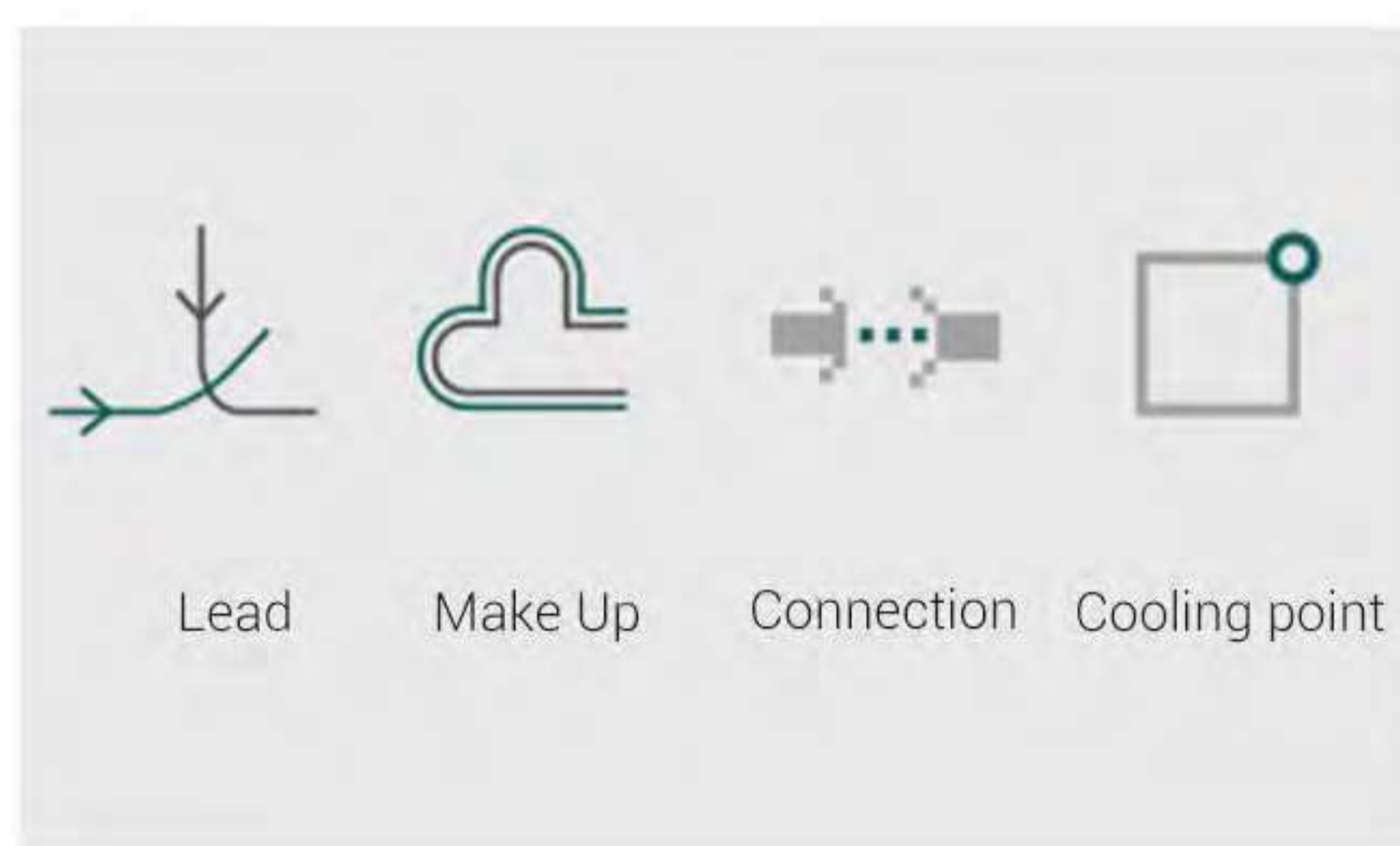
• Cypcut Plane Control System

CypCut plane cutting software is a set of software specially developed for the deep customization of the laser cutting industry.



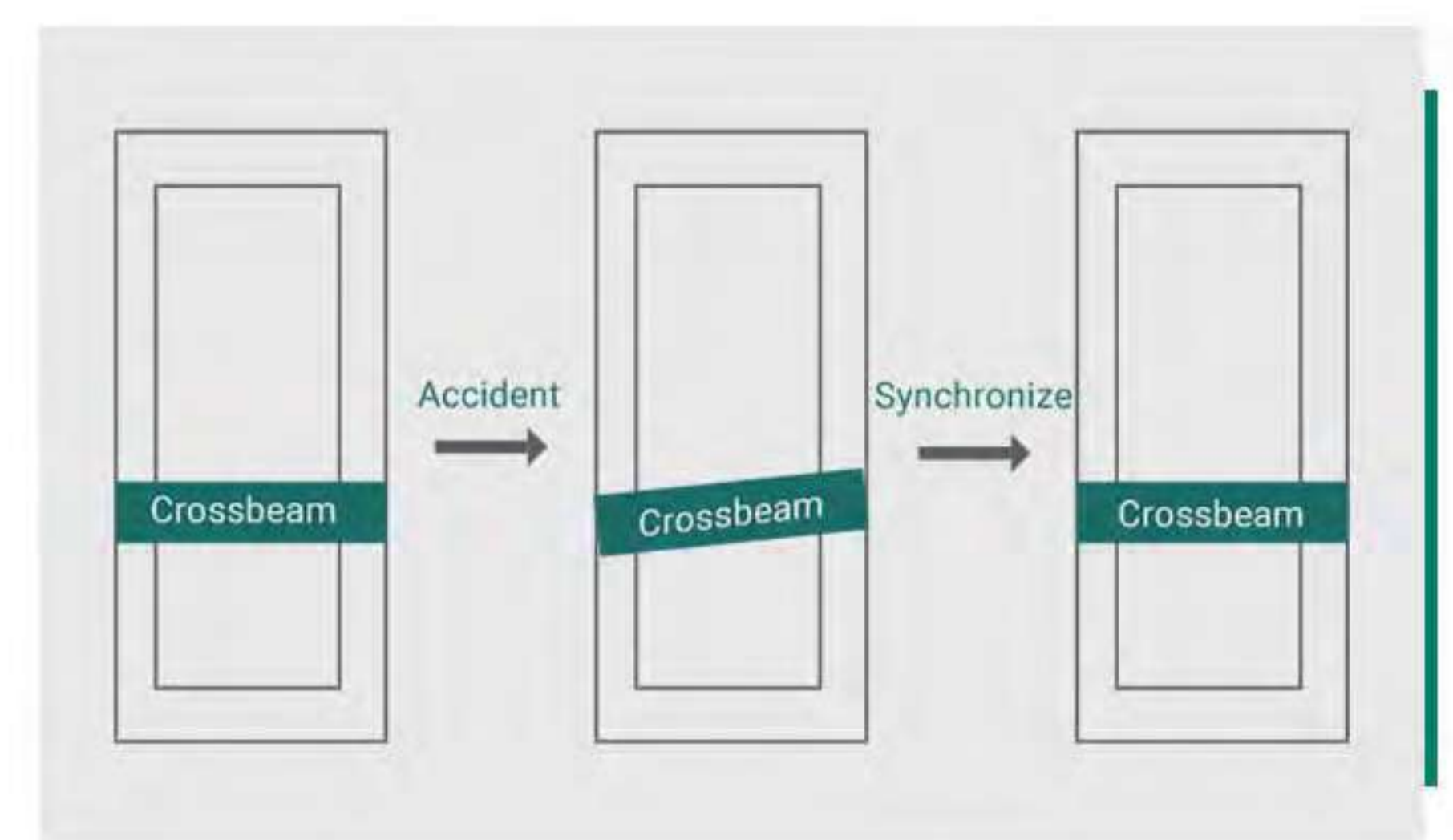
Edge Finding Aid >>>>

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 >>>>

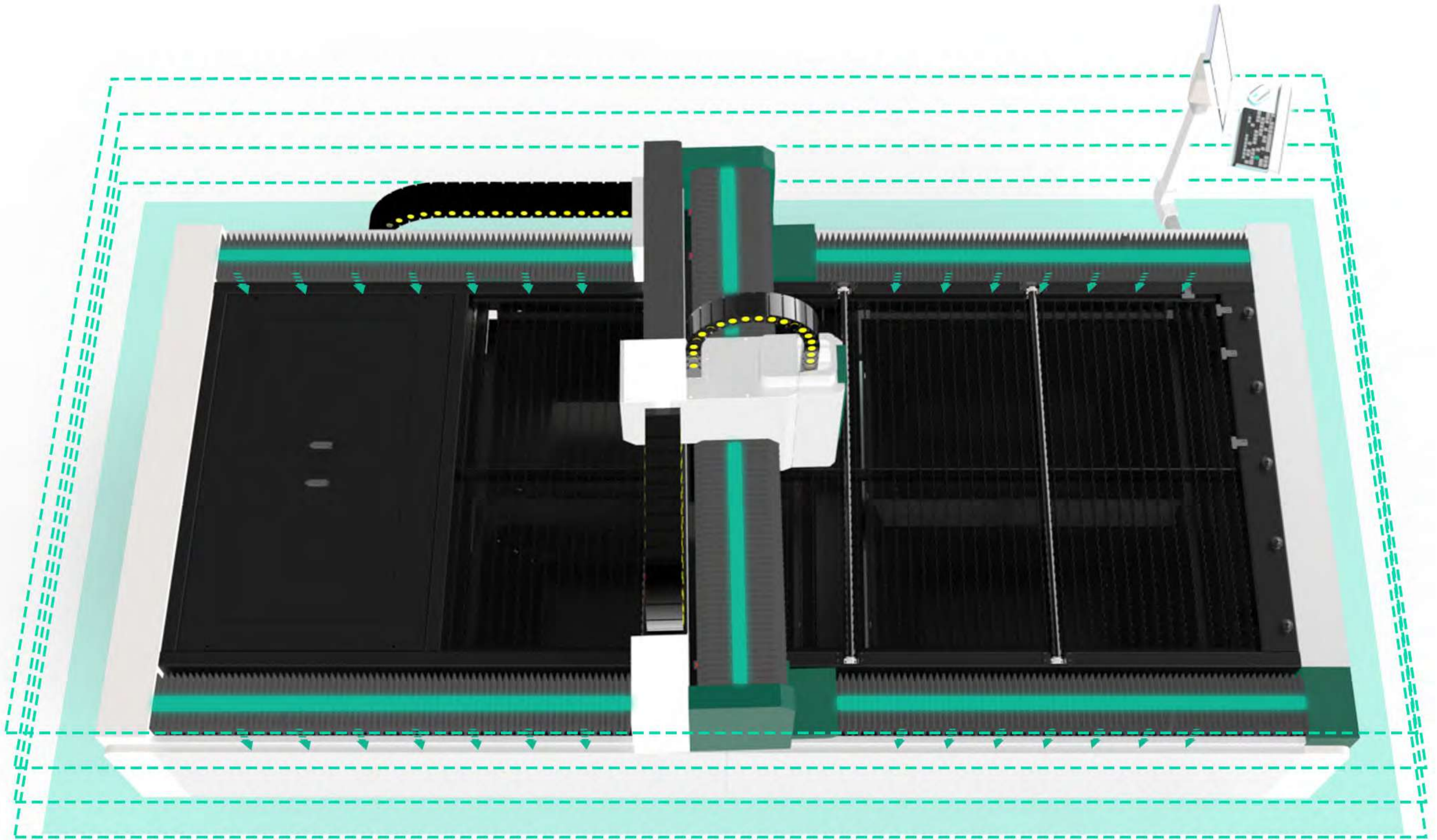
After importing graphics, you can quickly complete the setting of the entire board process; support three-level perforation and automatic layout. Film cutting, power-off memory and other functions are simple and easy to operate.



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

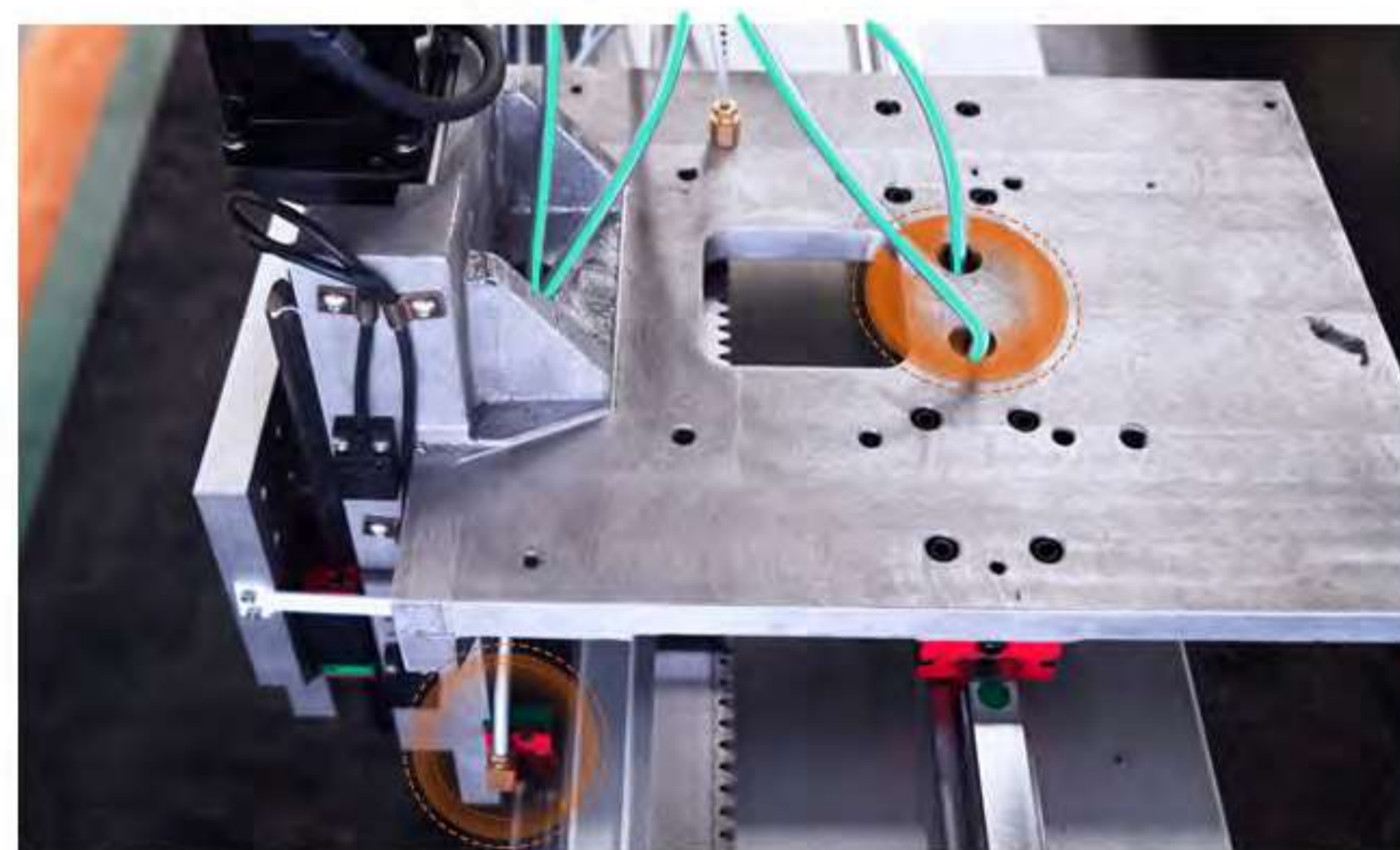


Whole body layout, automatic lubrication of guide rails and racks.



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.

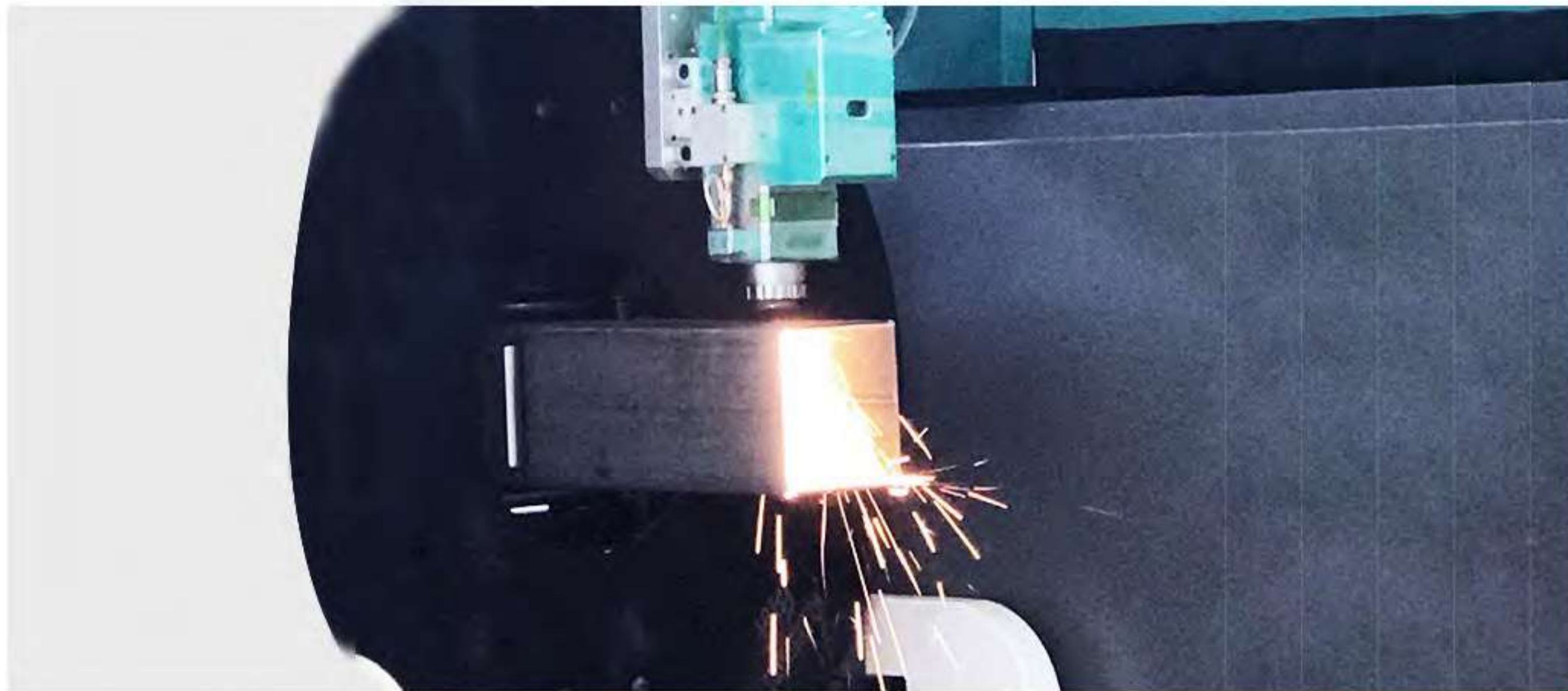


Waste Oil Recycling >>>

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.

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.

Sales partner in Mexico:



ACAT MEXICANA

Ave. Regio Parque #200 Regio Parque Industrial
Apodaca, Nuevo León, México CP. 66633



acat@acatmexicana.com



TEL. 81 8354 8910



www.acatmexicana.com