

PRECISION LASER CUTTING MACHINE

ULJM5035





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Company Introduction

Since our establishment 20 years ago, we have become the largest local machine tool manufacturer through two generations of hard work.

Our leadership prioritizes technology, research, and development to maintain our competitiveness in the current market environment, setting us apart from many industry competitors.

We always prioritize providing customers with high-quality machines because we understand that receiving such devices can excite them and help them achieve professional success. This is also where our success lies.

Our company adheres to "people-oriented, scientific management; honesty, customer first; safety production, quality first; pioneering innovation, harmonious development." Join us on this journey toward a better future.



Mission

We are committed to research and development, improving product and service quality, in order to establish a globally renowned sheet metal manufacturing machinery center.



Vision

Our goal is to become a highly respected sheet metal support service provider, earning the trust of customers and the pride of employees.



Values

Innovation, Lean Manufacturing, Integrity, Win-Win.

- 40 years of manufacturing and service experience
- Exported to over 80 countries
- More than 40 technical personnel
- Ranked in the top 5 in China.

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Fabrication Equipment









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Precision Fiber Laser Cutting Machine

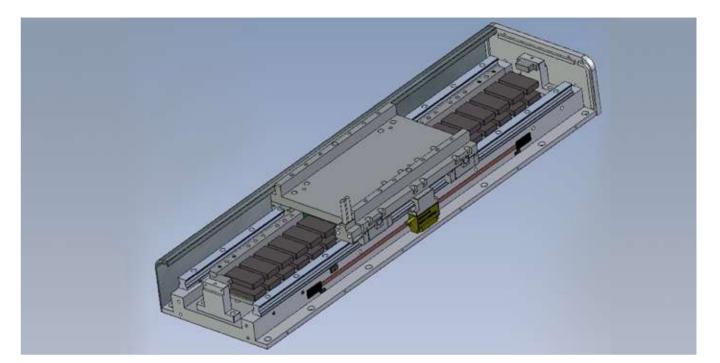
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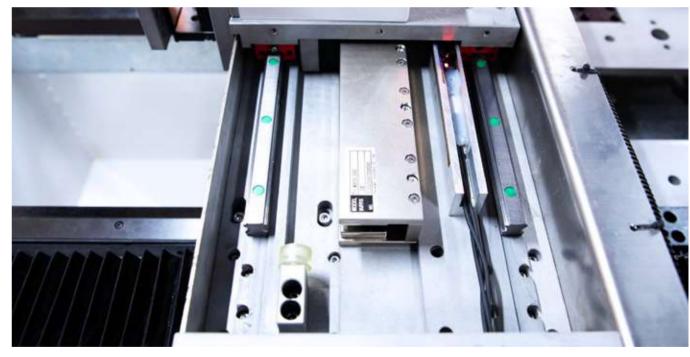
The ULJM precision fiber cutting machine is a high-tech product that integrates laser technology, precision machinery, electronic technology, and computer science. The equipment adopts a modular design architecture with a marble cutting platform, linear motor drive system, adjustable precision tooling fixtures, and loading/unloading devices. With the high-precision motion control system and cutting system, it can achieve high-speed, high-precision and high-quality cutting applications for non-ferrous metals (such as copper, nickel, cobalt) and precious metals (such as gold, silver platinum). In addition to this, the modular design architecture can also provide customized services for customers' specific needs while shortening the development cycle.

- Continuous cutting: Achieve 24/7 continuous cutting.
- High-efficiency cutting: Fast and efficient cutting speed.
- High-quality cutting: Smooth cutting Surface and high precision.
- High material utilization rate: Reduce material waste and improve utilization rate.
- Strong scalability: Can be flexibly expanded according to needs.
- Flexible and convenient: Easy to operate, user-friendly, and widely applicable.



Technological Advantage





- Linear motor drive eliminates the intermediate transmission link and directly drives the load movement. It has high dynamic characteristics, high rigidity, fast operation, high precision and low noise. Compared with traditional linear transmission structures such as ball screws and electric cylinders, it does not require maintenance. High-efficiency cutting: Fast and efficient cutting speed.
- The linear motor structure can be visualized as a radial cut of a rotating motor that is unfolded into a straight line.
- The stator functions as the primary component of the linear motor while the rotor serves as its secondary. When current flows through the secondary, it generates a magnetic field in the air gap between both components. This magnetic field interacts with permanent magnets on the secondary to produce a driving force for the linear motion of moving parts.
- In recent years, some developed countries have successfully replaced traditional servo motors + ball screw pairs drive systems with linear motor technology in CNC machine tool linear motion drive systems.

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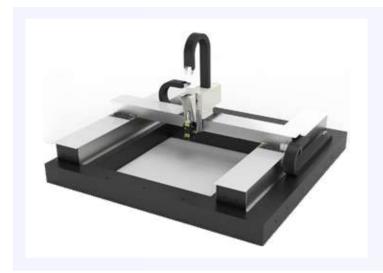


- This machine integrates laser technology, precision machinery, electronic technology, and computer science to provide high-tech performance.
- It uses the latest electronic technology for faster perforation speed, finer processing quality, superior processing quality, and minimal heat-affected zone.
- The innovative back-reflection isolation technology enables uninterrupted processing of various high-reflective materials such as copper and aluminum without damaging the laser or causing an alarm.
- Non-contact processing minimizes heat-affected zones and prevents local deformation or mechanical deformation on the workpiece.



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Detailed Display



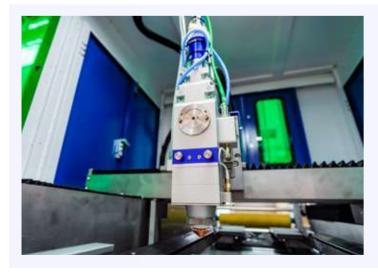
Marble Precision Platform

 Adopting a marble precision platform, equipped with a gantryintegrated closed structure, it has excellent rigidity, earthquake resistance and high-speed stability.



Lightweight Design

 The crossbeam adopts a lightweight design and has good acceleration performance. Precision machining is carried out using CNC gantry milling machines to ensure the accuracy of movement.



Precision Laser Cutting Head

 Adopting precision dedicated cutting head to ensure small cutting seam, high accuracy and smooth cut surface without burrs.



FSCUT2000 CNC System

This equipment adopts the FSCUT2000 CNC system, combined with a high-precision motion control system and CCD visual positioning system, which can achieve highprecision cutting applications. The device is equipped with professional laser cutting automatic programming software and has manual or automatic typesetting and nesting functions.



Fiber Continuous Laser

■ This equipment uses a fiber continuous laser, which has the characteristics of high stability and long service life. It is designed for ultra-long operating time and convenient maintenance and can remain durable in any harsh environment. The modulation frequency of the fiber laser is up to 50kHz, with rise/fall times of less than 20 microseconds.



Closed-loop Feedback System

This equipment adopts an imported linear motor, highprecision guide rail and 0.5µm high-precision grating ruler closed-loop feedback system, which has the characteristics of fast speed, high precision and low maintenance rate.

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Machine Configuration

Serial Number (A)	Name (B)	Type/Brand (C)
1	Control system	Friendess
2	Fiber laser	BWT
3	Special precision cutting head	WSX
4	Precision linear motor	Yokogawa
5	0.5um precision grating ru	Renishaw
6	Chiller	HanLi
7	Industrial computer (IPC)	I
8	Z-axis motion controller	Panasonic
9	Marble workbench	I
10	Programmable Logic Controller (PLC)	Inovance
11	Motor	Leadshine



Technical Parameters

Machine Model	ULJM5035
Input power	5000-8000W
Mainframe size	1200*1200*2200mm
X-axis travel	100-315mm
Y-axis travel	535mm
X/Y axis repeat positioning accuracy	±0.01mm
Worktable precision	<0.01mm
Cooling method	External water cooling
Transmission mode	Linear motor+0.5 um grating ruler
Cutting thickness	0.1mm-4mm
Processing speed	20m/min
Maximum acceleration	1.5G



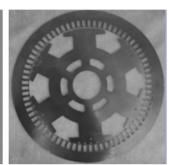
11 | Machine Configuration

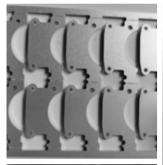
Industry Applications

This equipment is suitable for a variety of fields such as saw blades, silicon steel sheets, stator punching sheets, stationery cabinets, glasses, circuit boards, signs, jewelry and

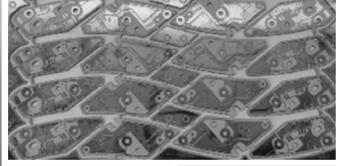


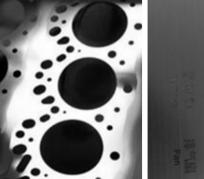








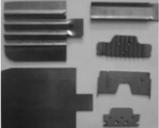


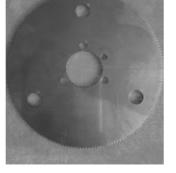


















Small metal thin-shell structural components, especially suitable for 2D laser processing of digital product shells (3C products refer to the combination of computer, communication and consumer electronics, known as "information appliances". Due to the small size of 3C products, they are often described as "small", hence collectively referred to as "3C small appliances").

High-precision cutting of stator and rotor silicon steel sheets







Used for cutting glasses legs and frames.



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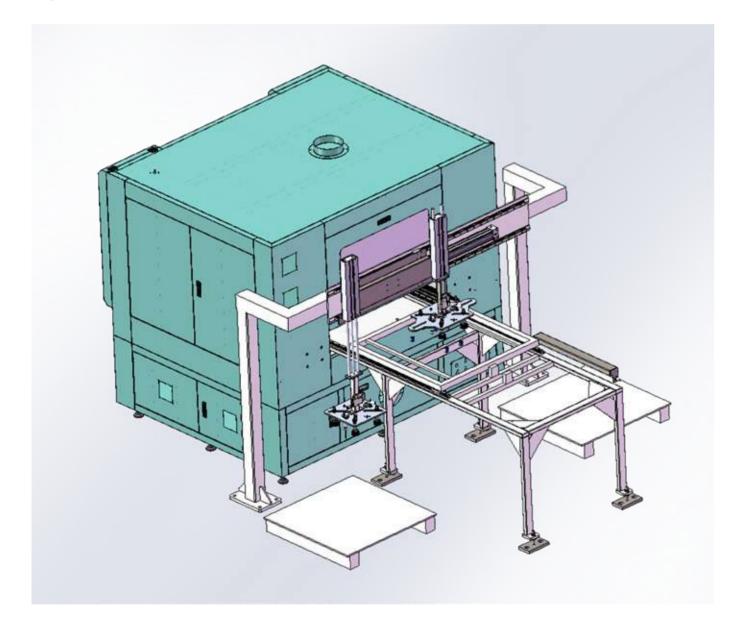
Expanded Peripherals

Automatic Loading and Unloading Device

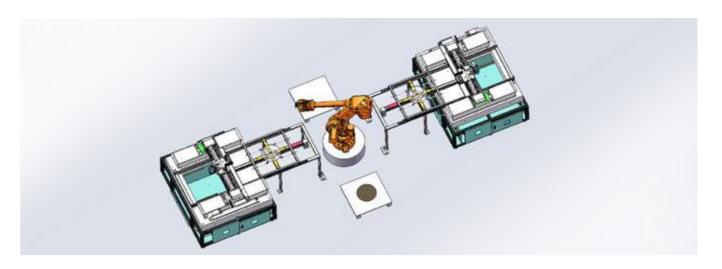
Composition:

- Loading and unloading racks (can be equipped with AGV cart or manual loading)
- Vertical loading and unloading mechanism
- Horizontal movement mechanism
- Mobile workbench
- Workbench clamp and positioning device

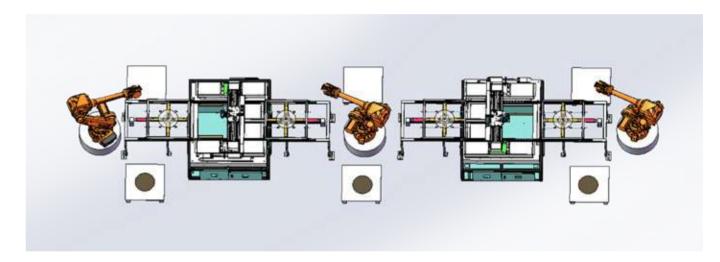
Plan 1



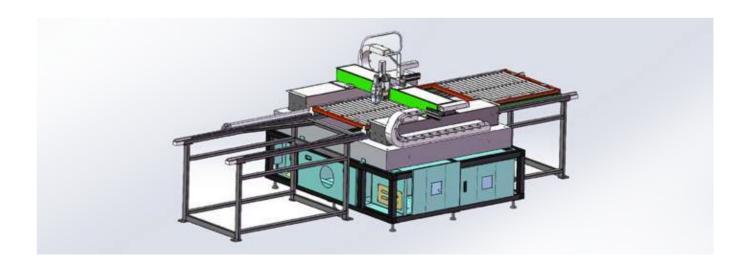
Plan 2



Plan 3



Plan 4



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Service Commitment

ADH has always adhered to the service concept of "customer-centric" and provides comprehensive pre-sales and after-sales services for your company, including installation, commissioning, training, and maintenance.



Before signing the contract, our company will provide customers with various production process plans, technical consultation, sample testing, equipment selection, and price consultation services.

We sincerely welcome customers to visit our company. We have equipped specialized reception personnel to provide customers with convenient conditions such as catering, transportation, and so on.



On Sale

During the sales process, according to the contract agreement, our company will deliver the equipment free of charge to the installation site designated by the customer and dispatch technical service engineers for on-site installation to ensure that the equipment is safe and reliable.

We provide free technical training services for customers. After completing equipment installation and commissioning, we will provide at least 3-5 days of technical training for customer operators at their site or in our training center until they can operate it proficiently.

The training content includes:

- Operating procedures for turning on and off the equipment;
- The meaning and selection range of panel and control parameters;
- Operation of cutting control software;
- Basic cleaning and maintenance of equipment;
- Common hardware failure handling;
- Issues to be aware of during operation;
- In addition, we will also provide technical support related to the products produced by our customers.



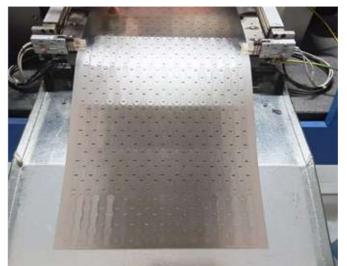
After Sales

We provide comprehensive after-sales service for our customers, including:

- Free one-year warranty and lifetime maintenance for the equipment.
- Response time to customer service requests is no more than 24 hours.
- We will still provide repair services even after the equipment warranty period has expired.
- After the warranty period expires, we will also provide extensive software and hardware support, allowing customers to enjoy free upgrade services for life.

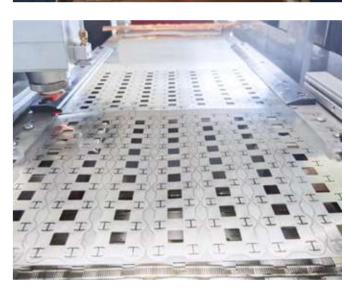


On-site Pictures











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