

4 in 1

LASER WELDING MACHINE



Welding



Cleaning



Cutting



Seam Cleaning



Manufacturer

No Middleman



No Worries

After Sales



On Time

Directly Supply



OEM

Customization

Welding Parameter

Power	Material	Thickness
1500W	AL	3mm
	CS/GS/SS	3mm
2000W	AL	4mm
	CS/GS/SS	5mm
3000W	AL	7mm
	CS/GS/SS	8mm

- AL:Aluminium
- CS:Carbon Steel
- GS:Galvanized Sheet
- SS:Stainless Steel

Please refer to the welding parameter table for more detailed parameters

Cleaning Parameter

Power (w)	Material	Cleaning Depth	Cleaning Efficiency (m ² /h)
1500	Rust	0.02mm	150
	Paint	0.1mm	60
	Rust Corrosion	0.12mm	40
2000	Rust	0.02mm	200
	Paint	0.1mm	80
	Rust Corrosion	0.12mm	50
3000	Rust	0.02mm	300
	Paint	0.1mm	140
	Rust Corrosion	0.12mm	90

Cutting Parameter

below 2mm for all metal

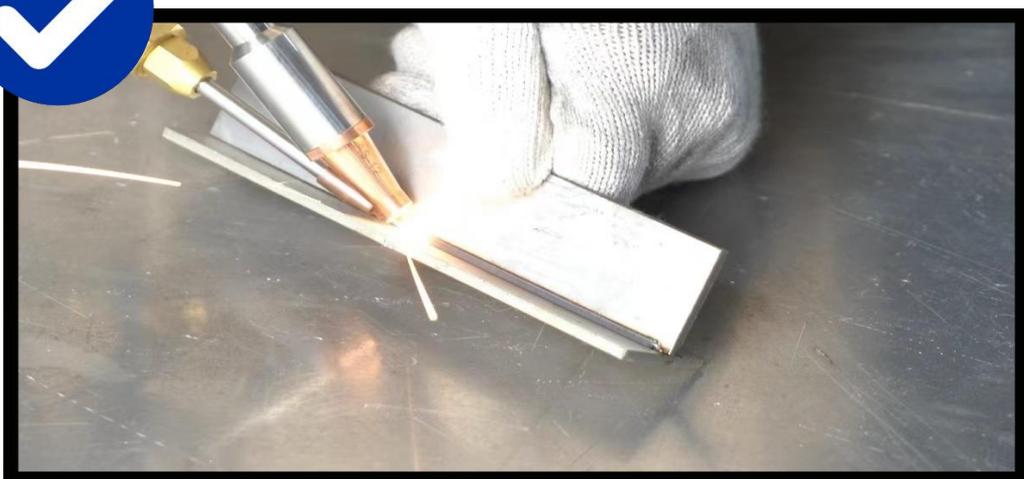
Comparison



TIG welding can generate extreme heat that deforms thin materials and produces poor visual finishes. Welding copper is difficult and welding metals of dissimilar thicknesses is limited. TIG welding is a highly skilled process, and experienced TIG welders are a scarce resource.



MIG welding requires consumable wire, material pre-cleaning, and beveled joints for full penetration of thick metals. Travel and work angles are limited, and vertical positions are extremely challenging. MIG is a high-heat process that can cause part deformation.



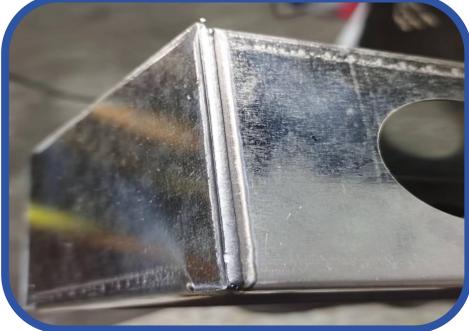
Laser systems are easier to learn and operate and are 4X faster than TIG welding. The low heat input and extensive material and thickness capabilities increase productivity, repeatability, and improve weld quality for operators of all skill levels.

LG-H-W8, LG-H-W18, LG-H-W58 offer laser cleaning capability in addition to welding. Pre-weld cleaning remove oxides, rust, paint, oil, or grease from surfaces to be welded. Post-weld cleaning removes soot and weld-related debris.

Laser Welding

VS

Traditional welding



- Save 80%-90% electric energy
- No need polishing
- No need professional welder
- Slight discoloration
- Beautiful weld seam
- Not easily deformed
- Small radiation,protective glasses
- No splashing
- 4-10 times faster



- High power energy
- Need polishing
- Need professional welder
- Severe discoloration
- Ugly weld seam
- Easily deformed
- Smoke & dust do harm to body
- Severe splashing
- Slow speed&inefficient



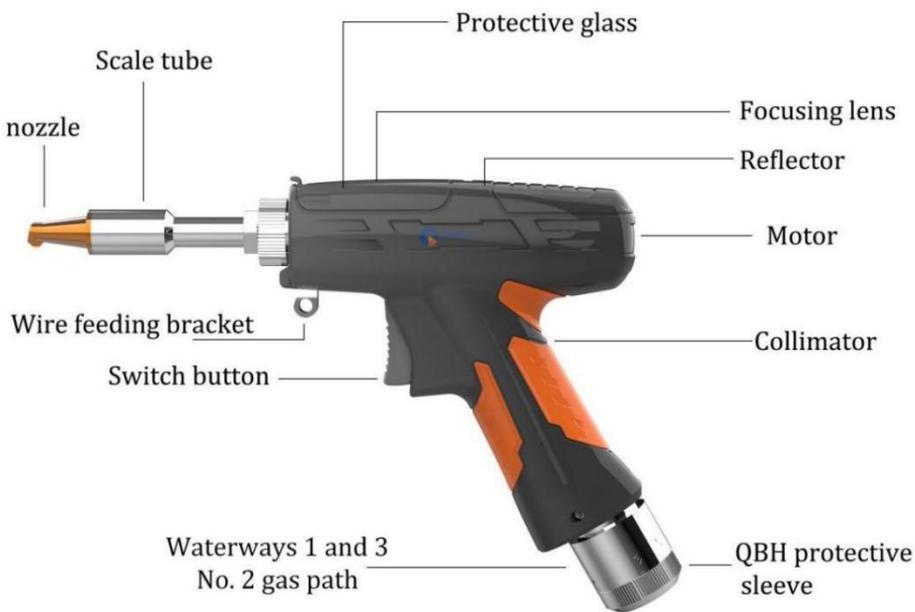
Configuration

-Welder



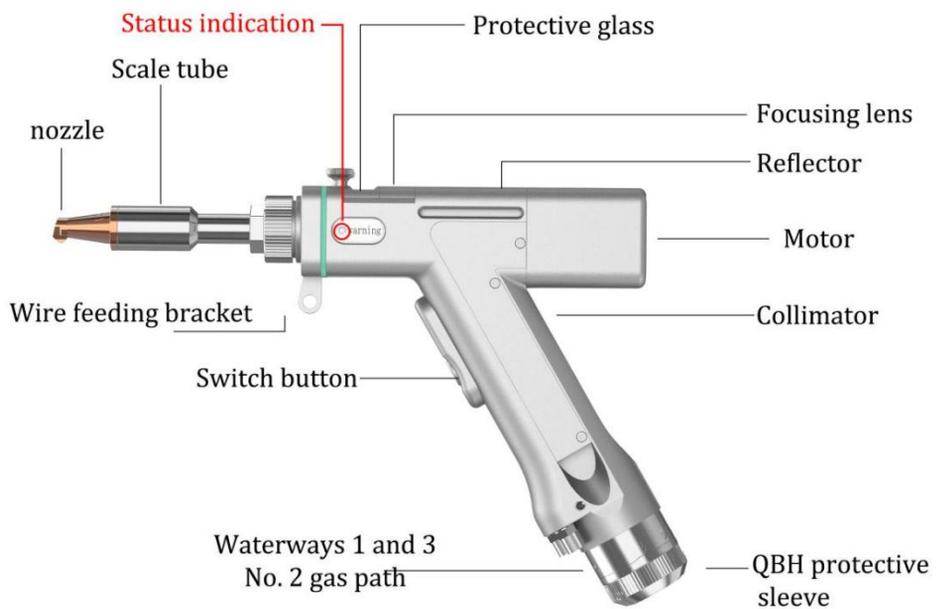
	LG-H-W58	LG-H-W18	LG-H-W8
Welding capability: stainless steel carbon steel galvanized sheet	8mm	6mm	4mm
Welding capability: aluminum	6mm	5mm	4mm
Laser source	Raycus/MAX/B WT	Raycus/MAX/B WT	BWT
Water tank	58L	18L	8L
Wire feeder	Double	Single	Single
Voltage	380 3P	220 1P	220 1P
Weight	240kg	140kg	69kg
Size	1250*1300*700	800*540*1100	630*325*670
Fiber length	10m		
Welding speed	0-120cm/min		
Cleaning scan width	30mm-120mm		
Working temperture	-30°C~ 40°C. Antifreeze is required in low temperature environments		

-Welding Head



common standard

21T



higher standard

23T



Perfectly Safe

Self-developed safe system, real-time temperature monitoring.



High Efficiency

Focusing Lens&protective Lens&collimator lens integrated with QBH convenient for on-site replacement.



Portable

Lighter in weight more flexible in operation, easier to use and better in hand.



Multifunction

Support handheld continuous welding, spot welding, cleaning,cutting. Password authorization, real-time monitoring, convenient on-site assembly,remote support.

	21T	23T
input voltage (V)	220V±10% AC 50/60Hz	
Installation environment	Flat, no vibration and impact	
Working environment temperature: (°C)	10 ~ 40	
Working environment humidity: (%)	< 70	
Applicable wavelength	1064nm (±10nm)	
Maximum air pressure support	15Bar	
Focus of vertical adjustment range	±10mm	
Scan width-weld	0~8mm	
Scan width-Clean	F150-0~30mm	
	F400-0~60mm	
	F800-0~120mm	
Temperature indicator light	×	√



21T welding gun&system

23T welding gun&system



C



FS-16



ES-12



AS-12



CS-12



BS-16



AS-20D



CUTTING



SCALE TUBE



PROTECTIVE LENS

**BASIC
CONSUMABLES**

-System

→ Cutting Mode

→ Cleaning Mode

→ Welding Mode

Basic features

A self-developed three in one control system that allows for flexible switching of welding, cleaning, and cutting, with multiple safety alarms set, and easy and flexible operation.

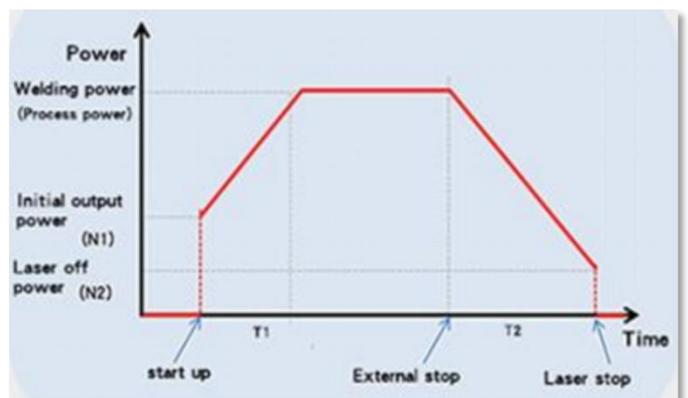
All parameters are visible, real-time monitoring of the entire machine status, early avoidance of problems, convenient troubleshooting and problem-solving, ensuring stable system operation.

More stable

Process

Process parameters can be set, allowing for flexible experimentation with various process effects.

As long as the laser power is stable, the process parameters can be repeated for the determined nozzle pressure and lens state, greatly improving efficiency.



-Laser Source



Raycus/MAX/IPG/ (optional) ,with higher photoelectric conversion efficiency, Compared with traditional laser, fiber laser has higher photoelectric conversion efficiency, lower power consumption and higher beam quality. Fiber laser is compact and can be used at any time. Because of its flexible laser output mode, it can be easily integrated with the system equipment

Features

1. High reliability ----100,000 hours lifespan
2. High power stability ---- Continuous 24 hours of light
3. High electro-optical conversion efficiency
4. 40% light conversion rate, high efficiency and energy saving
5. The maintenance-free operation system equipment is integrated with the software sid

-Chiller



8L



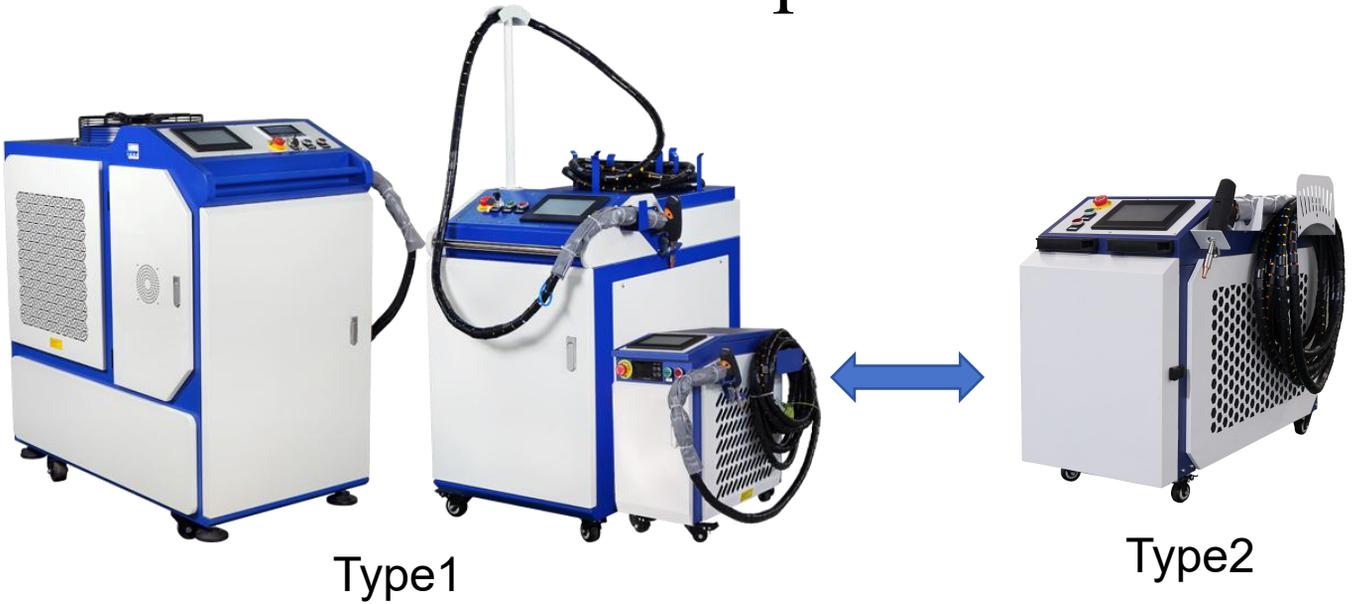
18L



58L

Dual Temperature Laser Chiller

Chiller Comparison



Type1

Type2

1 & 2

Type	Refrigeration flow rate	Compressor size	Heating function
Type1	high	big	yes
Type2	low	small	no

The obvious comparison of its advantages is that Type1 have a heating pump, which can quickly cool and reach the working state in cold countries, while Type2 can't. The compressor of Type1 is larger and has a larger cooling capacity than Type2. Type1 can achieve a flow rate of 58L/min, with better water circulation and faster cooling speed, while Type2 cannot.

-Wire Feeder



Single Wire Feeder

Feature

Touch screen display, four-wheel dual drive wire feeding structure, wire feeding speed of 25-600cm/min (adjustable), support for continuous wire feeding mode and pulse wire feeding mode

Application

Laser welding automatic wire feeding, robotic arm automatic wire feeding, plasma automatic wire feeding, argon arc welding automatic wire feeding, etc



Double Wire Feeder

	Single	Double
Applicable power	1500W/2000W	3000W
Rated input	220±5% 50/60hz	
Maximum power and current	60W/2.5A	150W/6.5A
Rated wire feed speed	15~600cm/min	
Applicable welding wire	0.8/1.0/1.2/1.6 mm	1.6/2.0/2.5 mm
Suitable for welding wire disc	Shaft diameter: MIN 50mm	
	Outer diameter: MAX 300mm	
	Width: MAX 105 mm	
	Weight: < 20 kg	
Net weight of product	13.2kg	30kg
Product size	560*250*350(mm)	575*250*670(mm)

-Wiring Circuit

our wiring circuit VS others wiring circuit

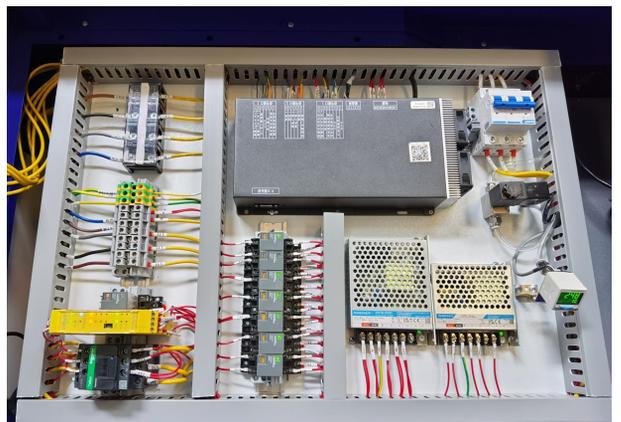


Set up logical wiring diagram, flow alarm valve for long service life. Neat wiring diagram, set up a flow alarm valve inside to prevent the welding gun from burning and extend the service life.

We adopt Raycus laser source which with light utilization rate of 40%, high -quality BY water pump, Schneider electric relay, Airtac flow alarm valve.

We can also achieve European standards!
All accessories below are in compliance with
European CE standards

our regular circuit VS our EURO-STANDARD circuit





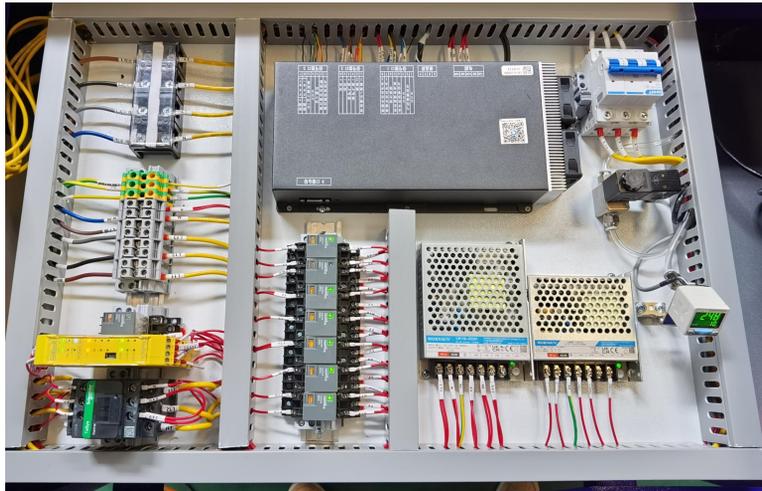
Safety payload switch



Foot switch



Heavy duty connector



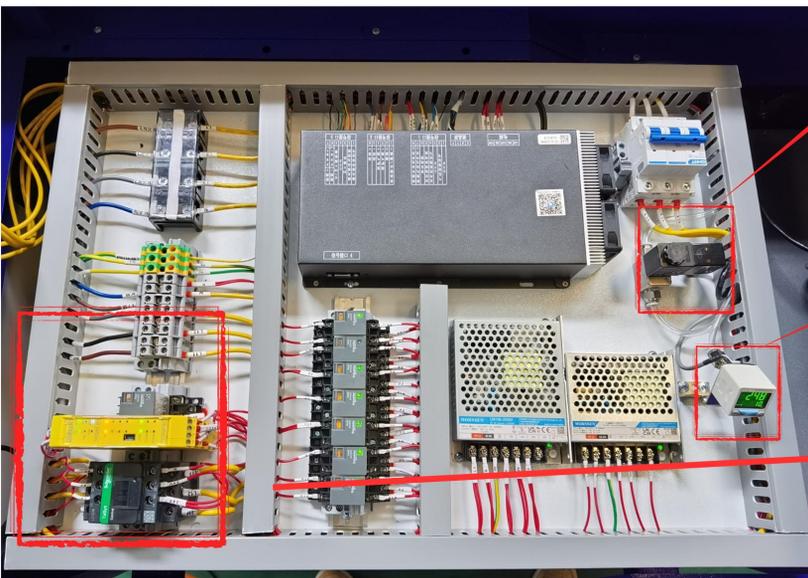
AirTAC proportional valve



Reer safety relay



AirTAC flow alarm valve



used for control the appropriate airflow to the laser head

AirTAC Proportional Valve



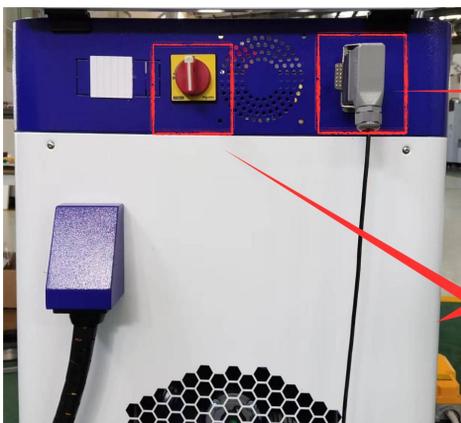
detect the airflow pressure, and when it is insufficient alarm and stop emitting light to protect welding head

AirTAC Flow Alarm Valve



PLC program control

Reer Safety Controller



used for connect wire feeder signal line

Heavy Duty Connector



main switch of the machine

Schneider Safety Payload Switch



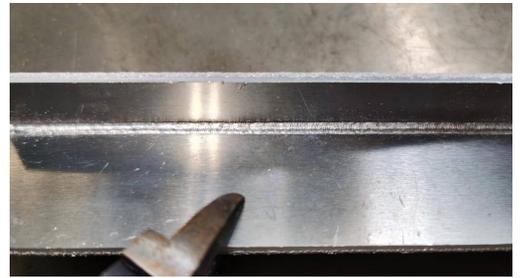
when the foot switch is pressed, press the welding head button within 10 seconds, and the laser head will start to emit light

KACON Foot Switch

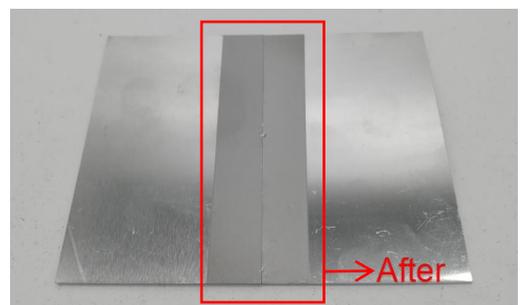
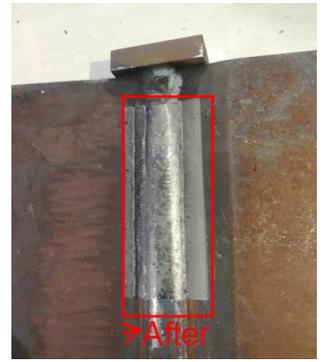
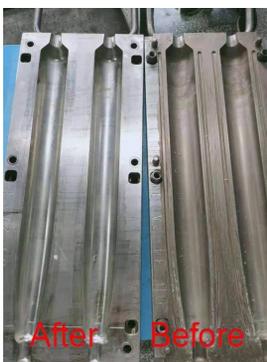
CE
European
Standard

Sample Display

Welding



Cleaning



Why choose us

Nowadays, the laser welding market is becoming increasingly large. In the fields of traditional automobiles and new energy vehicles, handheld laser welding and robot laser welding are emerging, gradually replacing traditional welding due to their fast welding speed, low pollution, and high yield.

Our company has ten years of experience in the field of laser welding, from water-cooled handheld welding to air-cooled handheld welding, from the original 1000W to the current 3000W. We have always strictly controlled the quality of our machines. Our gun head and system have been tested for many years and are quite stable. In terms of lasers, we prioritize industry-renowned lasers such as Raycus and MAX. Our chiller has a heating pump that can cool and heat, with a flow rate of up to 58L/min. The compressor has a high power, so its cooling and heating capacity is very strong, far superior to the low-priced configuration in the market.

In addition, our company is very sensitive to market trends and can keep up with the latest industry trends, providing you with the latest industry information, the most detailed pre-sales and after-sales first-hand information, the most comprehensive online and offline after-sales service, and 24-hour service guidance, so that you never have any worries.

- Easy to operate
- 1-10×more efficient
- operate proficiently in 2 hours
- Welding without experience
- Save on the cost of professional welding
- Multiple protection system(Laser head protection,Conduction status protection,Welding gun status protection,Trigger button protection,System leakage protection)



Package

Packing List	
Welding Machine	1
Welding Gun	1
Protective Lens	10
Wire Nozzles	8
Single Wire Feeder	1
Power Line of Wire Feeder	1
Single Wire Tube	1
Ground Clamp	1
Single Wire Guide Nozzle	4
Wire Guide Tube	1
Safety Glasses	1
Spanner	1
Wire Feed Roller	4
Glove	2



Applicable Industries



Thin sheet metal



Rail transit



Aviation



Robot



Automobile



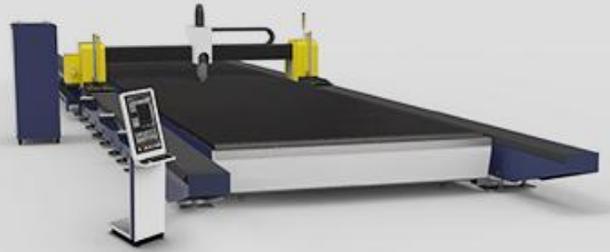
Guardrail

And more industries applications.....

Main products of us



ENCLOSED LASER CUTTING MACHINE



GANTRY LASER CUTTING MACHINE



SINGLE TABLE CUTTING MACHINE



HANDHELD WELDING MACHINE



ROBOTIC LASER WELDING MACHINE



TUBE LASER CUTTING MACHINE

One-stop welding solution

Service support



Pre-service

- Free sample cutting,
For free sample welding/testing, please send us your request, we will do welding here and make video to show you , or send sample to you check welding quality.
- Customized machine design
According to customer's application, we may revise our machine accordingly for customer's convenience and high production efficiency.

After-sales

- Machine will be supplied with training video and user's manual in English for installation, operation, maintenance and trouble-shooting, and shall give technical guide by e-mail, fax, telephone, skype ... for fast solution.
- Customer may come to our factory for training. We will offer training of installation, operation, machine trouble-shooting, and maintenance.
- We offer technician to customer site for installation and training, customer covers travel cost and local living cost.

Warranty

- Complete machine: 1 years warranty. Laser source: 2 years warranty
- Free Warranty Service: We will send replacement parts on our cost first, keep customer's machine running is top concern.
- If machine needs onsite service for quality issue, we send technician to anywhere on our cost. You may inquire any of our old international customers for reference!

Our company



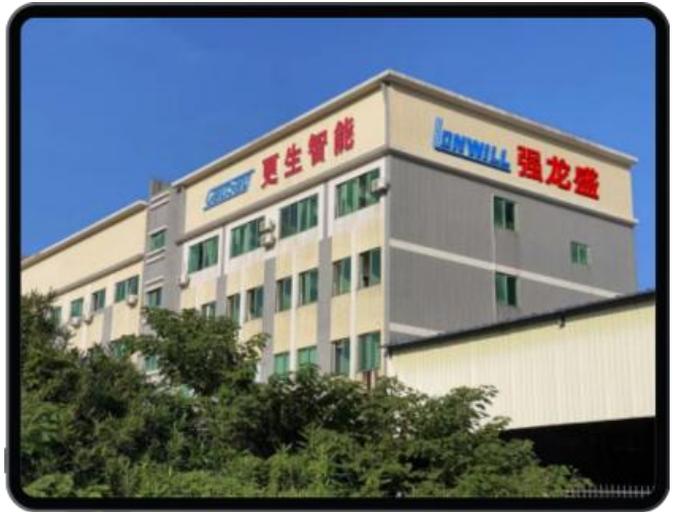
18 Years Experience



OEM&ODM Service



Free Mark Samples



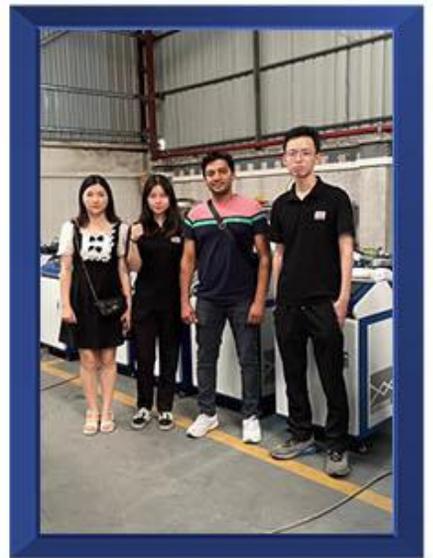
We specialized in CNC cutting&welding&marking automation solutions with professional engineer team from HYD.CNC, we have started to supply CNC control system for plasma&oxyful cutting since 2004. Gradually we expanded our business to turn-key system integration and complete cutting machine design and assembly. We got into laser cutting field in 2008 when YAG laser cutting machine was very hot on market, almost all YAG cutting machine manufacturers like DNE laser, HSG laser..used our CHC-300 cap sensors for laser cutting height control.

We started to offer complete fiber laser cutting machine, and machine integration service like robotic laser cutting, customized laser welding...which opened a new world for us! More and more professional engineers jointed our team in recent years, which enable us to make more and more automation solutions to clients around the world, we can support you to make machine on your own, or supply complete machine according to your request, welcome to visit our factory in Foshan.

Factory exhibition



Customer show



Welcome to visit