

G·WEIKE[®]
LASER 金威列



TECHNICAL SOLUTION

LCW Series

Handle Laser Welding-Cutting-Cleaning Machine

CATALOG

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Quotation List

From:		Quotation Date:		
GWEIKE TECH CO., LTD. C-504, Yinhe Mansion, Jinan City 250013, China Email: adam@wklaser.com		2023.3.25		
To:		Quotation Validity:		
		15 days		
Description of Goods	Model	Laser Source	INCOTERMS	Price
Laser Welding Machine	LCW3000 II	3000W	FOB Qingdao	13,700 USD
	LCW2000 II	2000W	FOB Qingdao	11,600 USD
Standard Specifications Overview	<ol style="list-style-type: none"> 1. Laser source: Raycus 2. Laser head: Qilin 3. Control system: Qilin 4. Wire feeder 5. Packing size and weight: 1120*860*880mm / 340kg 			
Amount Chargeable:	Delivery Time:			
US DOLLARS	7 working days			
Packing:	Payment Terms:			
Wooden case	30% deposit , 70% before shipping			

Product Description

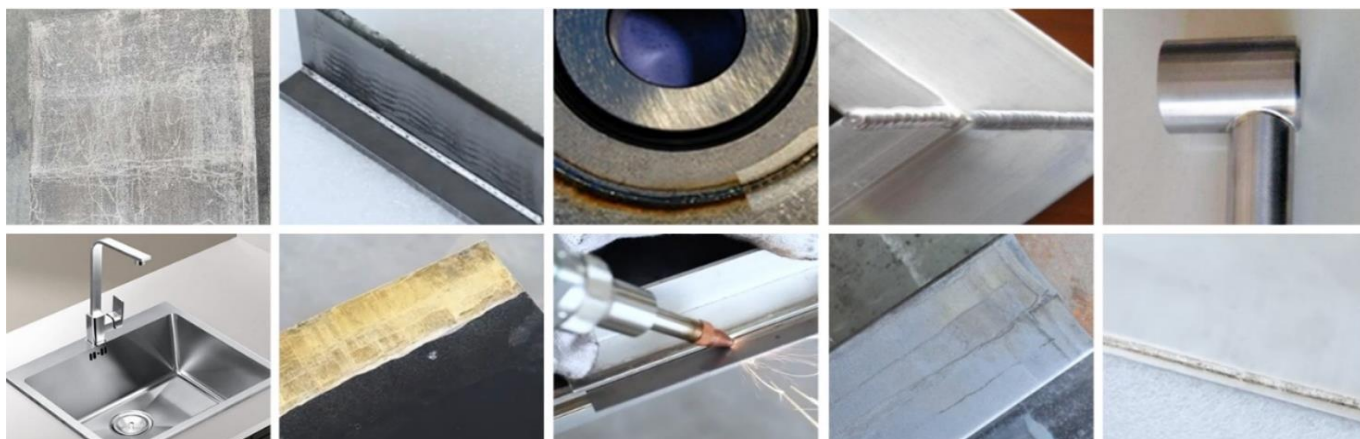


GWEIKE handheld laser welding-cleaning-cutting machine adopts the latest generation of fiber laser to realize multiple optical fiber output. Compared with traditional hard optical fiber transmission system, it can not only improve the freedom of welding, but achieve simultaneously machining of multiple beams and multi- station machining. So, a more precise welding is achieved.

With advantages of simple operation, beautiful bam, fast peed and no consumables, GWEIKE handheld laser welding-cleaning-cutting machine can be used to weld, clean and cut metal materials such as stainless-steel plate, iron plate and galvanized plate, which can perfectly take the place of argon arc welding, electric arc welding and other technics. So, it can be widely used in complex and irregular welding processes in kitchen cabinets, stair elevators, shelves, ovens, stainless steel door and window guardrails, distribution boxes, and stainless-steel home design.

With the integration of three functions – welding, cleaning, cutting, this machine will help to save much cost for users. This multifunctional feature can be easily achieved by easily change the nozzles and mirrors of the machine. Machine Video: <https://youtu.be/DelgKCZwPZO>

Sample Showing



Detailed Pictures



Technical Parameters

Device name	Handel laser welding-cleaning-cutting machine
Laser source	Raycus
Laser head	Qilin
Machine body	Gweike
Control system	Qilin
Cooling chiller	Industrial water chiller
Laser power	1500W 2000W 3000W
Laser wavelength	1064nm
Fiber length	Standard 10M
Welding thickness	0.5-7mm
Welding speed range	0~120 mm/s
Working temperature	15~35 °C
Voltage	220V/60HZ/3Phase
Weight of laser head	0.7KG

Fiber Laser Welding Advantages

Easy-operation and Convenient



- ◆ Easy to operate, no deformation of welding line;
- ◆ Stable laser output, to ensure the weld consistency;
- ◆ High power density after laser focusing;
- ◆ High machining efficiency.

Practical and Functional



No welding scar



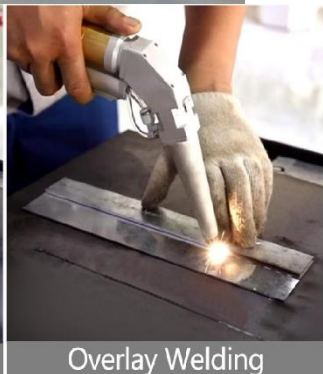
360° seamless welding line

- ◆ The weld seam is Smooth and beautiful weld seam;
- ◆ No deformation of work workpieces
- ◆ No welding scars
- ◆ Solid welding, free from follow-up grinding
- ◆ Time-saving and economic

360° Seamless Micro-welding



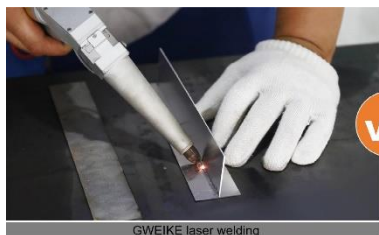
Butt Welding



Overlay Welding

After the laser beam is focused, a small spot can be obtained which can be accurately positioned and used in the group welding of micro and small size workpieces for mass production, which is mainly used in thin-walled materials and precision parts. It can realize spot welding, butt welding, stack welding, sealing welding, etc.

Economic Solution



GWEIKE laser welding

VS



Traditional welding

The welding speed is 2-10 times faster than traditional welding, one machine can take the place of at least 2 welders a year.

Laser welding machine has low cost in consumables (mirrors).

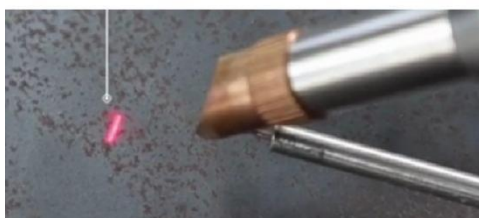
Gweike Machine Features

01 Double Protection Lenses



The first protection lens is placed in an independent drawer, the second one is in another drawer together with the focus lens, so it is convenient to disassemble and install mirrors. As the cost of focus lens is normally high among all of the quick-wearing spare parts, so this "double protection to focus lens" will decrease the breakdown rate and prolong the service time of focus lens.

02 Wireless Module Function



The display screen on laser head will show the parameters such as wire speed, peak power and frequency when working on different materials. These data can be saved by operators to be used next time. Besides, operators can adjust the laser pot size and welding mode quickly through the display screen on laser head, rather than make modifications on the control panel of the machine body, which will increase work efficiency and is more man-machine friendly.

03 Multiple Welding Modes



The machine has multiple welding modes, including continuous, point shooting, spot welding, fish scale welding, to satisfy verified welding demands.

04 Multifunction Purpose



There are two nozzles for welding with leveling function and wire feeding function; gas nozzle for cleaning; one nozzle for cutting. The machine set with 1000W can usually cut 2mm metal plate, and 1500W can usually cut 3mm metal plate. It is recommended to provide Nitrogen when cutting, and provide Argon when welding.

05 Intelligent Operating System



- Touch screen design, easy and quick to click and set parameters, with real-time fault reading/ feedback/ alarm functions
- There is a processing parameter library which can realize rapid storage and recall of parameters.
- The machine control system supports many languages including English, Chinese, Spanish, Korean. If customers have other needs, we can also customize.

Welding Parameter

Welding Parameters (Laser power: 1000W)							
Material	thickness (mm)	weld penetration (mm)	output power	speed (m/s)	pressure	swing speed	Wire-feeding weld seam
Carbon steel Stainless steel	0.6	0.2	16%	0.02	2bar	90	0.2mm
	0.8	0.2	20%	0.02	2bar	90	0.2mm
	1	0.3	25%	0.02	2bar	90	0.2mm
	1.2	0.3	30%	0.02	2bar	90	0.2mm
	1.8	0.3	40%	0.02	2bar	90	0.2mm
	2.5	0.5	40-45%	0.02	2.3bar	90-100	0.2mm
	3	0.7	60%	0.02	2.3bar	90-100	0.2mm
Aluminum Copper	0.5	0.3	70-80%	0.02	2.5bar	90-100	0.2mm
	1	0.5	80-90%	0.02	2.5bar	90-100	0.2mm
	1.5	0.6	85-95%	0.02	2.5bar	90-100	0.2mm
Welding Parameters (Laser power: 1500W)							
Material	thickness (mm)	weld penetration (mm)	output power	speed (m/s)	pressure	swing speed	Wire-feeding weld seam
Carbon steel Stainless steel	0.6	0.3	15%	0.02	2.0bar	90	0.2mm
	0.8	0.3	20%	0.02	2.0bar	90	0.2mm
	1	0.5	25%	0.02	2.0bar	90	0.2mm
	1.2	0.5	30%	0.02	2.0bar	90	0.2mm
	1.8	0.7	40%	0.02	2.0bar	90	0.2mm
	2.5	0.8	40-45%	0.02	2.3bar	90-100	0.2mm
	3	1.2	60%	0.02	2.3bar	90-100	0.2mm
	5	1.5	70-80%	0.02	2.3bar	90-100	0.2mm
Aluminum Copper	0.5	0.3	70-80%	0.02	2.0bar	90-100	0.2mm
	1	0.5	80-90%	0.02	2.0bar	90-100	0.2mm
	1.5	0.6	80-90%	0.02	2.3bar	90-100	0.2mm
	2	0.8	85-95%	0.02	2.3bar	90-100	0.2mm
Welding Parameters (Laser power: 2000W)							
Material	thickness (mm)	weld penetration (mm)	output power	speed (m/s)	pressure	swing speed	Wire-feeding weld seam
Carbon steel Stainless steel	0.6	0.3	10%	0.02	2.0bar	90	0.2mm
	0.8	0.4	15%	0.02	2.0bar	90	0.2mm
	1	0.5	20%	0.02	2.0bar	90	0.2mm
	1.2	0.6	25%	0.02	2.0bar	90	0.2mm
	1.8	0.8	35%	0.02	2.0bar	90	0.2mm
	2.5	1	35-45%	0.02	2.3bar	90-100	0.2mm
	3	1.4	50%	0.02	2.3bar	90-100	0.2mm
	5	2.1	70-80%	0.02	2.3bar	90-100	0.2mm
	6	2.5	80-90%	0.02	2.3bar	90-100	0.2mm
	7	3	80-90%	0.02	2.3bar	90-100	0.2mm
Aluminum Copper	0.5	0.4	60-80%	0.02	2.0bar	90-100	0.2mm
	1	0.8	80-90%	0.02	2.0bar	90-100	0.2mm
	1.5	0.8	80-90%	0.02	2.3bar	90-100	0.2mm
	2	1	85-95%	0.02	2.3bar	90-100	0.2mm
	4	2	90-100%	0.01	2.3bar	90-100	0.2mm

Quality Control and Packing

① Incoming Quality Inspection

1. Laser Source Test



2. Laser Head Test



3. Rack Detection



4. Motor / Reducer Testing



5. Machine Parts Qualification and Certification



② Production Process Quality Control

1. Machine Bed Welding



2. Machine Bed Heat Treatment



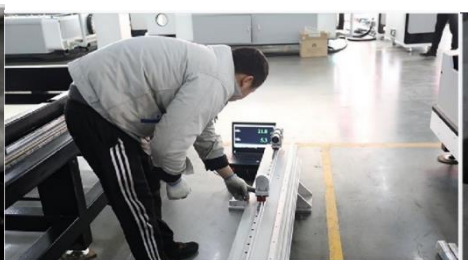
3. Milling Machine



4. Accurate Installation



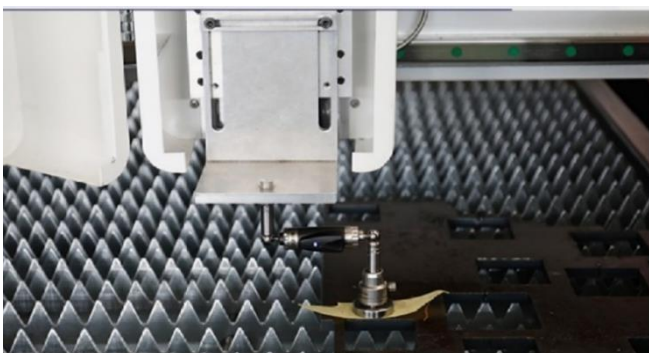
5. Collimator Tests



6. Marble Square Ruler



7. Double Ball Bar Test



8. Laser Interferometer Test



③ Before Package

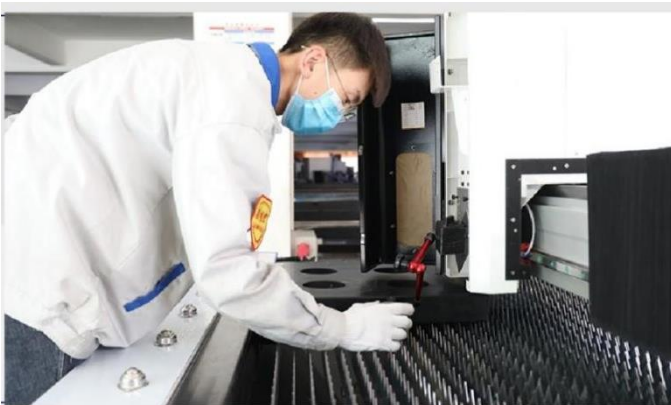
1. Machine Running Test



2. Machine Cutting Test



3. Outlook Quality Test

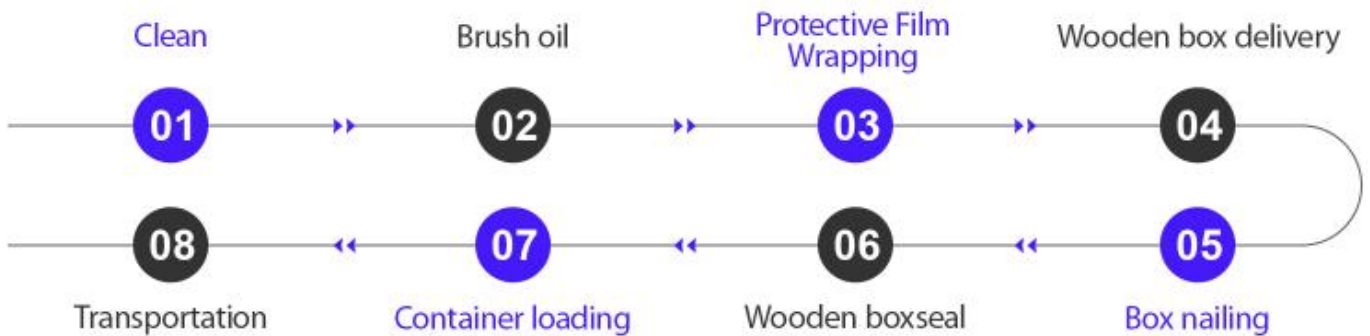


4. Quality Check Report

光纤切割机质检报告					
GWEIKE					
机器编号: 2678	机器型号: 13255	伺服电机:	伺服电机:	品牌:	
控制:	控制:	光纤激光器编号:	型号:		
控制头型号:	控制头编号:	版本型号:			
以下检测内容请操作人员注意:					
序号	检测内容	检测方法/标准	检测工具	责任人	确认日期
1	X轴导轨、丝杆、齿条垂直度、平行度	X轴导轨垂直度 ≤ 0.04 MM, 齿条与导轨平行度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/10
2	检测丝杆	X轴丝杆、丝杆、齿条垂直度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/17
3	X轴导轨、丝杆、齿条垂直度、平行度	X轴导轨垂直度 ≤ 0.04 MM, 齿条与导轨平行度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/17
4	检测丝杆	X轴丝杆、丝杆、齿条垂直度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/17
5	Z轴轴垂直度检测	Z轴垂直度 ≤ 0.04 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/17
6	导轨、丝杆、齿条	导轨垂直度 ≤ 0.04 MM, 齿条与导轨平行度 ≤ 0.03 MM	大理石平台、百分表		2/17

④ Packing and Delivery

Strict packing process is executed to protect machine from extrusion, collision or other damages



Machine Certificates

Established in 2004, Gweike is the first enterprise in Northern China engaged in providing one-stop laser processing equipment solution, our product including laser cutter, laser engraver, laser welder, laser cleaner, laser marker, automatic bending center, production line ... All products have been certified by EU CE, USA FDA, and ISO9001. Over the past 18 years, it has got the award of more than 100 patents for products and technologies; only in the first half of 2019, Gweike applied for more than 30 patents.

In the era of industry 4.0, Gweike is striving to provide basic equipment and customized solution for the future industrial production, help enterprises increase productivity, and make contributions to "Made with Wisdom".



After-Sales Service

Guarantee Policy

The guarantee period of quality shall be 1 years counting from the date on which the commodity arrives at the port of destination.

Except the damage is artificial, we are responsible for offering the fittings free of charge during the guarantee period, but you must send the damaged fittings to us by courier with your charge before we send back the alternative fittings to you (unless some problemed parts need no return). Out of the guaranteed period, should the parts required to be repaired or replaced, if any, service and parts will be charged.

After-Sales Service

Technology support

- ① We welcome all our buyers come to visit our factory for directly free training, Gweike will provide our professional engineer to support you study the machine operation.
- ② We will supply machine operation manual, training videos and machine cutting parameters, our engineer will supply online machine installation and training.
- ③ We will send our engineer to the customers' place to help install the machine, train the customers' technique, our engineer will stay at customers' place for 5-7 days, customers should pay for the round-trip air tickets /hotels/ food / visa of Gweike engineer.

24 hours online service

The customers' technicians can keep in touch with our engineer at any time, through WeChat/ WhatsApp/ mobile phone or email, our engineer will help to solve your problems as soon as possible.

Exhibition Support

If our agents need our technical support at their show, our engineer will go to, your show and work together, customers should pay for the round-trip air tickets /hotels/ food of Gweike engineer.

Free Maintenance Service

We provide free maintenance service and technical supports for the fault caused by non-human factors during the period of warranty; round ticket and traveling expenses shall be borne by the user. Before maintenance, please show warranty card or invoice to our technicians.

Contact Us

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