

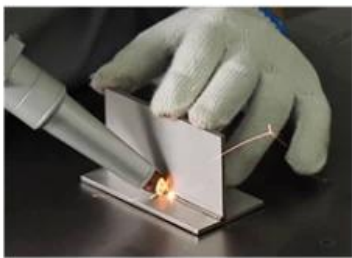
## Product Information

### Product Description:

Laser welding is a high efficient precision welding method which is in the use of high energy density laser beam as a heat source. Laser welding is one of the important aspects of laser processing technology. Laser radiates and heats the work piece surface, The surface heat diffuses to the inside through heat conduction, Then the laser makes the work piece melting and form the specific welding pool by controlling the laser pulse width, energy, peak power and repetition frequency. Due to its unique advantages, it has been successfully applied to the precise welding for micro parts and small parts.

Laser welding is fusing welding technology, laser welder puts laser beam as the energy source, and make it impact on the weld element joints to realize welding .

### WELDING METHOD



Vertical Welding



Parallel Welding



Stitch Welding

### Machine Features:

- 1.The energy density is high, the heat input is low, the amount of thermal deformation is small, and the melting zone and the heat-affected zone are narrow and deep.
- 2.High cooling rate, which can weld fine weld structure and good joint performance.
- 3.Compared with contact welding, laser welding eliminates the need for electrodes, reducing daily maintenance costs and greatly increasing work efficiency.
- 4.The weld seam is thin, the penetration depth is large, the taper is small, the precision is high, the appearance is smooth, flat and beautiful.
- 5.No consumables, small size, flexible processing, low operating and maintenance costs.
- 6.The laser is transmitted through fiber optics and can be used in conjunction with a pipeline or robot.

### Machine Advantage:

1□High efficiency

Speed is faster than the traditional welding speed by more than two times.

2□High quality

Smooth and beautiful welding seam,without subsequent grinding, saving time and cost.

3□Low cost

80% to 90% power savings, processing costs are reduced by 30%

4□Flexible operation

Easy operation,no need experience can do a good job.



### Application Industries□

Laser welding machine is widely used in the IT industry, medical equipment, communications equipment, aerospace, machinery manufacturing, battery manufacturing, elevator manufacturing, craft gifts, household appliances manufacturing, tooling, gears, automobile shipbuilding, watches and clocks, jewelry and other industries.

### Applicable materials:

This machine is suitable for welding of gold, silver, titanium, nickel, tin, copper, aluminum and other metal and its alloy material, can achieve the same precision welding between metal and dissimilar metals, has been widely used in aerospace equipment, shipbuilding, instrumentation, mechanical and electrical products, automotive and other industries.



### Machine Technical Parameters:

Model	CHLW-500W/800W/1000W
Laser power	500W / 800W / 1000W
Laser Source	Raycus / JPT / MAX
Operating Voltage	AC380V 50Hz
Gross Power	≤ 5000W
Center wavelength	1080±5nm
Output power stability	<2%
Laser frequency	50Hz-5KHz
Adjustable power range	5-95%
Beam quality	1.1
Optimal operating environment	Temperature 10-35 ° C, humidity 20% -80%
Electricity demand	AC220V
Output fiber length	5/10/15m (Optional)
Cooling method	Water Cooling
Gas Source	0.2Mpa (Argon, Nitrogen )
Packing Dimensions	115*70*128cm
Gross Weight	218kg
Cooling water temperature	20-25 ° C
Average consumed power	2000/4000W



## **Our Service:**

### **□ Pre-sale service**

(1) Free sample marking

For free sample testing, please send us your file, we will do marking here and make video to show you the effect, or send sample to you for checking quality.

(2) Customized machine design

According to customer's application, we may revise our machine accordingly for customer's convenience and high production efficiency.

### **□ After-sale Service**

(1) Installation:

After the machine reach the buyer's site, the engineers from the seller are responsible for machine installation and commissioning by using the special tools under the help of the buyer. Buyer should pay for our engineer visa fee, air tickets, accommodation, meals etc.

(2) Training:

In order to provide training in safe operation, programming and maintenance, Machine Supplier shall provide qualified instructors after Buyer finally installs the equipment.

1. Mechanical maintenance training

2. Gas / electronic maintenance training

3. Optical maintenance training

4. Programming training

5. Advanced operation training

6. Laser safety training

**Welding Samples of stainless steel**



Factory



## Certificate&Exhibition



## Packing List

P/N	Item Name		Quantity
	Hanheld Welding Machine	Carmanhaas	1 set
<b>Free Accessories</b>			
1	Protective Lens		1 piece
2	Nozzle	Marking Software	1 piece
3	Welding Head Cable	EU/USA/National Standard	1 set
4	Inner hexagon wrench		1 set
5	Ruler	30cm	1 piece
6	User Manual& Laser Source Report		1 piece
7	Laser Protective Goggles	1064nm	1 piece

Packing details	One set in a wooden case
package size	110x64x48cm
Single gross weight	264Kg
Delivery time	Shipped in 2-5 days after receiving full payment



### Return Policy:

We provide a free ONE YEAR Full Machine WARRANTY and TWO YEARS Laser Source WARRANTY  
Should returns be required:

Step 1) Contact us with this website email.

Step 2) Provide as much detail as possible about the problem you are having.



- Step 3) Authorization to return the item will be issued.  
Step 4) Return the item for the agreed replacement or refund.

### **Logistics:**

Optics order ship by DHL, UPS, FedEx, TNT, EMS etc For Laser machine order delivery, can be optional with terms of Exwork, FOB, CNF, CIF by air or by sea based on the buyer's forwarder or ours

## FAQ

Q1. Are you a manufacturer?

A1: Yes, we are professional and experienced manufacturer with our own molds and production lines.

Q2. How about quality of products?

A2: Our technicians and QC teams test the products one by one using aging line, professional devices and instruments to ensure the quality for all products.

Q3. How about price?

A3: We are a manufacturer and always offer our customers the most competitive prices.

Q4. How to place an order?

A4: Contact with online service, or sent email to us directly, we will reply to you with product price, specifications, packing etc. soon. Thank you.

Q5. May I send material to test marking performance?

A5: Yes! You are welcome to send material to test our superior quality and service.

Q6. Can I visit your factory?

A6: Yes, welcome to visit our factory at your convenient time.

Q7. How can I make OEM or ODM orders?

A7: We have different print processing for different OEM/ODM orders. Please contact us with online service or send email to us directly.

Q8. How should I pay for my orders?

A8: You can pay by T/T would be available for qualified bank and MOQ required for each order.