

# Hand-held Fiber Laser Welding Machine



#### **Feature**

Laser welding is a high-energy-density laser beam as a heat source, which locally heats the material in a small area and melts the material to form a specific molten pool to achieve the effect of welding. Laser welding is mainly used for welding of thin-wall materials, precision parts, etc., which can realize spot welding, splicing welding, seal welding, overlap welding, etc. The heat distortion is small, the weld seam is beautiful and smooth, and the weld seam quality is high, and no secondary grinding treatment is required. In recent years, laser welding has been widely used for welding stainless steel, carbon steel, galvanized sheet, copper, aluminum and other products.

The hand-held laser welding machine uses a hand-held swing welding head, which is flexible and simple to operate without the need for professional welder technology, Suitable for small batch and large batch production.

Widely used in sheet metal processing, kitchen cabinets, cabinets, stair handrails, elevator escalators, display shelves, doors and windows, advertising models, stainless steel products and many other industries.









深圳市威斯利激光设备有限公司 SHENZHEN WISELY LASER MACHINERY CO., LIMITED #10 BUILDING, #4 INDUSTRY ZONE HESHUIKOU,
MATIAN, GUANGMING DISTRICT, SHENZHEN 518106 CHINA
M:+86-150-13509330 E:sales@wwlaser.com W:www.wiselylaser.com
智•信•銳意•敢擔當——威斯利激光

Technical Parameters				
Model	MY-W1000H	MY-W1500H	MY-W2000H	
Power	1000W	1500W	2000W	
Fiber Laser Source	China Raycus			
Laser Wavelength	1080±5nm			
Working Mode	Continuous / Modulatable			
Thickness of material for welding	≦4mm			
Fiber Length	10M (20m optional)			
Maximum Frequency	20Khz			
Lifespan of Fiber Laser Source	Max. 100 000H			
Output Power of Laser	5-95% Adjustable			
Scanning Speed	≦8000mm			
Welding Speed	1-120mm/s			
Auxiliary Gas	Nitrogen (purity 99.999%)			
Power Stability (8h)	2%			
System Operation Environment	15~35 ℃ (TEMPERATURE) / 10-70% (HUMIDITY)			
Cooling Mode	Water Cooling (BUILT-IN)			
Power Input	AC220V/50Hz/1P or AC110V/60Hz/1P			
Power Comsuption	~10KW	~12KW	~13KW	
Dimension (L*W*H)	62*125*140cm (Welder) 70*20*45cm (Wire Feeder)	62*125*140cm (Welder) 70*20*45cm (Wire Feeder)	62*125*140cm (Welder) 70*20*45cm (Wire Feeder)	
Net Weight	270KG	280KG	300KG	
Gross Weight	360KG	370KG	390KG	

## **Process Comparison**

= = = = = = = = = = = = = = = = = = = =				
Compare Items	Traditional Welding	Laser Welding		
Heat on workpiece	Very high	Low		
Deformation of workpiece, undercut	Big	Small		
Bonding Strength with base material	General	Very good		
Follow-up Process	Sanding	No sanding or little sanding required		
Welding Speed	General	3 times more than argon arc welding		
Applicable Materials	Stainless steel, carbon steel, galvanized sheet	Stainless steel, carbon steel, galvanized sheet, aluminum alloy, copper		
Operating	Complex	Easy		
Operator safety	Unsafe	Safe		
Environmental Impact	Not friendly	Environmental protection		
Welding Fault Tolerance	Good	Good		
Sewing Welding	No	Yes		
Spot width Adjustable	No	Yes		
Welding Scar	Clear	Unclear		
Power Consumption	High	Low		
Cost of Consumables	High	Low		
Welding quality	General	Very Good		

#### **Shipment**

Within 3~7 working days after receiving your payment.

#### **Training**

The local training is not necessary, because the client can operate the machine very well after he takes 30 minutes to watch our videos and read the user manual.









## **WARRANTY PERIOD FOR MACHINE & PARTS**

No.	Item	Picture	Warranty Period	Remarks
1	Machine Frame	Table 1	2 Years	
2	Fiber Laser Source		2 Years	
3	Controller for fiber laser source		1 Year	
4	Controller for laser head		1 Year	
5	Touch Screen		1 Year	
6	Water-cooling Chiller	Town-100 NAA	1 Year	
7	Protecting Mirror 3 months		3 months	<u>Consumable</u>
8	Focal Lens	N/A	6 months	<u>Consumable</u>
9	Collimating Lens	N/A	6 months	Consumable
10	1.2mm Nozzle		3 months	For external corner welding for 1.0mm wire Consumable
11	1.4mm Nozzle		3 months	For external corner welding for 1.2mm wire Consumable
12	1.8mm Nozzle		3 months	For external corner welding for 1.4mm wire Consumable
13	1.4mm Nozzle		3 months	For internal corner welding for 1.0/1.2mm wire Consumable
14	1.8mm Nozzle	1.8mm Nozzle		For internal corner welding for 1.2/1.4mm wire Consumable
15	U-shaped Nozzle		3 months	For welding without gas <u>Consumable</u>
16	Cutting Nozzle		3 months	For thin material cutting Consumable







## **PACKING LIST**

#### - free of charge

No.	Item	Specification	Quantity	Remarks
		1000/1500/2000W fiber laser source	1 pc	Built-in
		Water-cooling Chiller	1 pc	Built-in
1	1 Machine	Controller for fiber laser source	1 pc	Built-in
		Controller for laser head	1 pc	Built-in
	Touch Screen	1 pc	Built-in	
2	Wire Feeder	Standard	1 pc	
3	Wire	1.0mm 304# S.S.	1 pc	for 1.2mm Nozzle
4	Wire	1.0mm 5356 aluminum	1 pc	for 1.2/1.4mm Nozzle
5	Protecting Mirror	Standard	5 pcs	
		1.2mm	5 pcs	
6	Nozzle	1.4mm	5 pcs	For external corner welding
	1.8mm	5 pcs		
7	Nozzle	1.4mm	5 pcs	For internal welding
		1.8mm	5 pcs	
8	Nozzle	U-shaped	2 pcs	For welding without gas
9	Nozzle	For Cutting	2 pcs	For thin material cutting
10	Tool Kits	Standard	1 set	

## **Recommended Accessories for stock**

#### - to be paid

	- to be paid			
No.	ltem	Specification	Quantity	Remarks
		1.0mm 304# S.S.	1 pc	We advise you to buy it from your local market
1	1 Wire	1.2mm 304# S.S.	1 pc	
	1.6mm 304# S.S.	1 pc	your lood market	
2	O W//	1.0mm 5356 aluminum	1 pc	We advise you to buy it from
2	Wire	1.2mm 5356 aluminum	1 pc	your local market
3	Protecting Mirror	Standard	5 pcs	
4	Focal Lens	Standard	1 pc	
5	Collimating Lens	Standard	1 pc	
		1.2mm	5 pcs	
6 Nozzle	1.4mm	5 pcs	For external corner welding	
	1.8mm	5 pcs		
7 Nozz	Nozzle	1.4mm	5 pcs	For internal corner welding
		1.8mm	5 pcs	
8	Nozzle	U-shaped	2 pcs	For welding without gas
9	Nozzle	For Cutting	2 pcs	For thin material cutting







深圳市威斯利激光设备有限公司 SHENZHEN WISELY LASER MACHINERY CO., LIMITED #10 BUILDING, #4 INDUSTRY ZONE HESHUIKOU, MATIAN, GUANGMING DISTRICT, SHENZHEN 518106 CHINA M:+86-150-13509330 E:sales@wwlaser.com W:www.wiselylaser.com 智•信•銳意•敢擔當—威斯利激光

# **SAMPLE GALLERY**





