

FASTWELDER W-FH HANDHELD LASER WELDER



- FastWelder W1000FH
 - FastWelder W1500FH
 - FastWelder W2000FH
 - FastWelder W3000FH
- Easy to learn, without professional welders
Efficiency is 4 times the traditional welding
Multifunctional equipment for welding and cleaning



SIEMENS Electronic System
Durable and Contact

**Self-Developed LYUSWELD
Operating Software**
Full touch operation display
Unique and powerful

**Built-in Constant
Industrial Water Chiller**
Intelligent control, superior performance and environmentally friendly

Brand Laser Source
Good beam quality,
High energy density,
High electro-optical efficiency

Human Design Handle
Reasonable design,
Comfortable grip, Easy to move

Universal Pulley
Strong bearing capacity, universal movement, quiet and wear-resistant

10 Meters Optical Fiber Cable
Suitable for long-distance welding

INTRODUCTION

Handheld Laser welder adopts continuous fiber laser source, and is equipped with self-developed hand-held welding head. In terms of shape, structure and human-machine interface, it is optimized based on humanization and work efficiency. The hand-held welding joint can be customized according to actual production, which is not often used in non-standard production. It adopts water-cooled design, long-time welding without burning, small diameter and hand-held easily. It has the advantages of simple operation, beautiful welding effect, fast welding speed, As well as welding, it has cleaning and cutting function.



Options / Accessories

New Generation Automatic Wire Feeder
Automatic retract , speed up to 6 m/min, suitable for large welding seam processing

⚠ If upgrading technology, subject to actual confirmation

3 IN 1 LASER HEAD

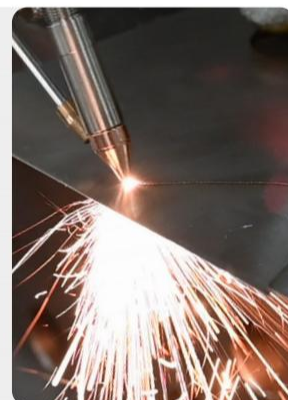
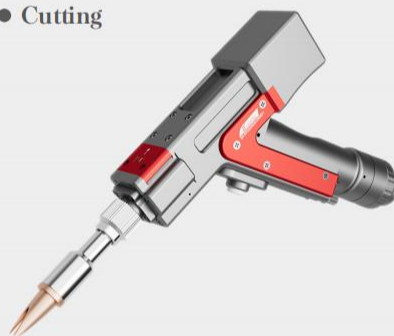
Including welding , cleaning and cutting functions. Multifunctional usage, meet a variety of processing needs. Easy to hold, only weight 0.71kgs



● **Welding**



● **Cutting**



● **Cleaning**



Max. Scan Width: 80MM

Various Copper Nozzle

Meet different welding requests



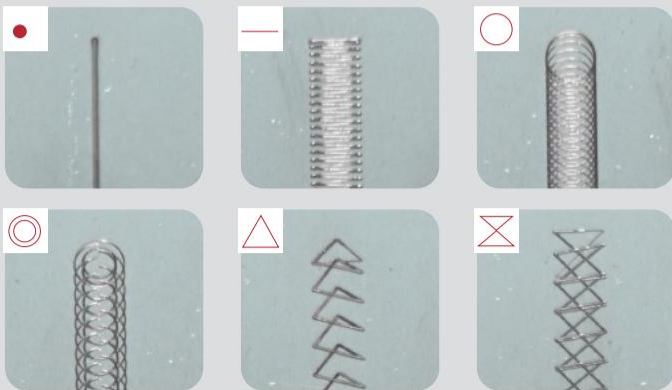
Built-in Wobble Welding

Wobble width up to 5mm



OPTIONS / ACCESSORIES
Wobble Head - Special for Welding

Various welding functions, meet different welding material and shape. Weight 0.9kgs


Six Spot Mode, Exquisite Welds

MACHINERY SAFETY
Lens Protector
1

The protective lens is connected to the temperature sensor, once the mirror is broken or dirty and got high temperature, it will receive protection signal and stop the laser to protect the gun and machine.

Water Cooling Protection
2

Equipped with an inside water circle inner industrial chiller, it will give signal to control system and alarm fault beep when getting problem with water circle, then stop laser.

Emergency Stop
3

The device is a fail-safe mechanism that allows machinery to be immediately switched off in the event of an accident or other serious incident. also supported extending second emergency stop switch, if over-voltage and over-current happened, it will shut down immediately automatically.

Safety Earthwire Clamp
4

The welding gun is equipped safety earthwire clamp, which must clamp to the metal material to form a connected state of the ground wire, or the laser cannot come out.

Safety Tools
5

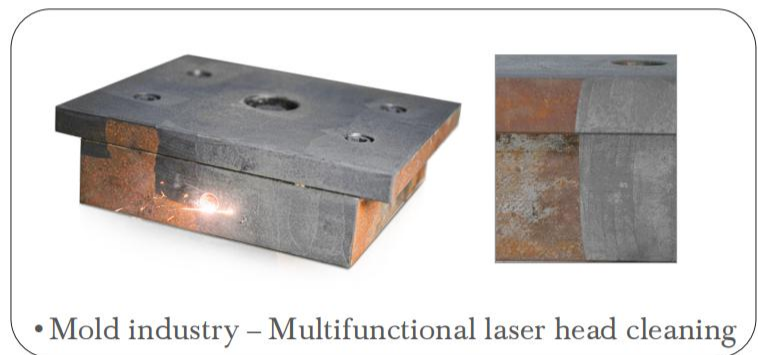
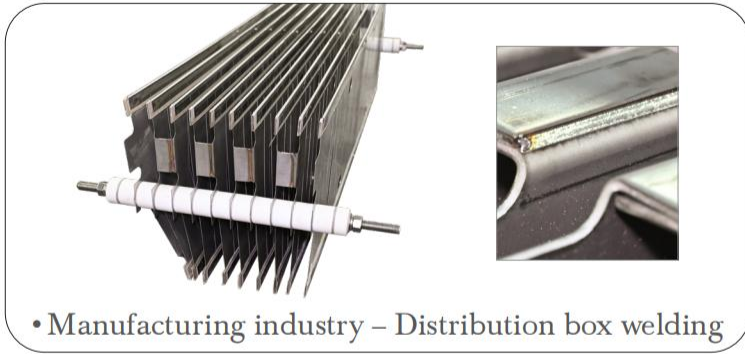
Protective glasses for the eyes. Protective helmets to prevent welding spatter and laser radiation.

Safety Guarding Suggestion
6

The goal of machine safety is to guarantee the health and safety of people exposed to the installation, operation, adjustment and maintenance of machinery. Laser equipment manufacturers suggest that users set up enclosed safe operating areas and use solid material isolation walls for isolation.

APPLICATION INDUSTRY

It is easy to handle Thick Metal / Thin Metal / High Reflection Metal, including galvanized sheet, aluminum, alloy, stainless steel and other materials. It is mostly suitable for Metal fabrication shops, Construction and piping, Maintenance and repair, Automotive, Advertising, Farm, Furniture & appliances, Medical instruments, Aerospace & transportation.



MATERIAL RANGE

Material	Thickness Single-side Weld	Thickness Double-side Weld
Stainless Steel	Up to 5mm(0.197 in)	Up to 15mm(0.590 in)
Galvanized Steel	Up to 5mm(0.197 in)	Up to 15mm(0.590 in)
Mild Steel	Up to 5mm(0.197 in)	Up to 15mm(0.590 in)
Aluminum	Up to 4mm(0.157 in)	Up to 8mm (0.315 in)

FASTWELDER W-FH VS TRADITIONAL WELDING MACHINE

Type	FastWelder W-FH	Traditional Welder (MIG, TIG)
Speed	Up to 2-10 X	Average
Weld Types	> 6 Types (Including Fish Scale Patterns, etc.)	Single
Welding Heat Quality	Consistent High-Quality Results	Depends on User Experience
Learning Curve	Quick and Easy	Steep
Material Flexibility	Wide Range with No Set Up	Limited with Consumables Changes
Distortion & Deformation	Very Low	High
Heat Affected Zone	Small or None	Large with Burning Color
Wobble Welding	Yes - Additional Weld Width Up to 5mm(0.197 in)	No
Harmfulness	Small	Large
Environmental Pollution	Small	Large


WELDING TYPE


DATA-SHEET

Model	FastWelder W1000FH	FastWelder W1500FH	FastWelder W2000FH	FastWelder W3000FH
Laser Power	1000W	1500W	2000W	3000W
Laser Type	CW Fiber			
Wavelength	1080±5nm			
Voltage	220V±10% / 50-60Hz / 30A			380V±10% / 50-60Hz / 40A
Gross Power	< 8000W			
Welding Thickness	< 8mm (0.315 in)			
Welding Gap Requirements	≤ 0.5mm (0.019 in)			
Welding Speed	0 -120 mm/s (0 - 4.724 in/s)			
Welding Head Configuration	Wobble Welding Head			
Beam Divergence Angle	≤ 1.2mrad / m			
Welding Joint Interface	QBH			
Laser Operation	Continuous / Modulation			
Cable Length	< 10m (39.370 in)			
Spot Dia	0.2-2mm Adjustable			
Positioning	Red Pointer			
Cooling	Water Cooled - Inner Industrial Chiller			
Accessories	Safety Glasses, Power Connecting Plug			
Process Gas	Argon, Helium, Argon + CO2 Mix Pressure Approx. 620 kPa, (90 psi)			
Work Environment	5-35 °C (41-95 °F)			
Dimensions (L × W × H)	1232mm (48.503 in) × 600mm (23.622 in) × 1620mm (63.780 in)			
Weight	245Kgs (540 lbs)			285Kgs (628 lbs)

LYUSTEC LASER

Specializing in developing, manufacturing and selling of industrial laser equipment system and customized automation devices. At present, it has developed into a global laser intelligent equipment service provider integrating automation solutions.

 www.lyustec.com
 sales@lyustec.com