



## Hanheld Laser Welder

**A1SE40**

Shanghai Raysoar Electromechanical Equipment Co.,Ltd.

[www.raysoar.cn](http://www.raysoar.cn)

## Six-Level Safety Protection Protecting Both Equipment And Operator

Handheld laser welding is the Class IV laser, and comprehensive protective measures are required to ensure the safe operation of the equipment.



Operators and personnel entering the welding area must wear all personal protective suit and device, including heat-resistant and flame retardant gloves, hats, clothing and accessories, and ensure that the welding work area is free from flammable and explosive materials.

## More Nozzle Application



Flat welding  
ND18-019T



Flat wire-feeding  
ND18A-05-024T



External corner  
ND18-021T



0.8-1.0 Wire feeding  
ND18-187T



1.2-1.6 Wire feeding  
ND18-188T

## Specification Sheet

Specification	Model	Weight	Volume	Dimension	Laser wavelength
Data	FWII-1200	<38kg	<0.1m <sup>3</sup>	667*276*542mm	1080nm

Specification	Working Mode	Output Power	Input Voltage	Swing Width	Swing Frequency
Data	Continuou s/ Pulse	1200w	220v	0~4mm	0~300hz

Specification	Preset Process Parameters	Rated Power	Welding torch interface type	
Data	32	6000w	QCS	

## Packing List

1	Handheld Laser Welder A1SE40	1unit
2	Welding Torch	1pc
3	Wire Feeder (individually Packaged)/ Including wire feeding tube and wire feeding wheel	1set
4	Power Cable	10m
5	Groud Wire	10m
6	Eye Protection (supportt OD6+)	3pcs
7	Gun Head Rack/ Including hexagon socket head countersunk head screws(4pcs)	1set
8	Armored Cable Rack Including hexagon socket countersunk head screws(8pcs)	1set
9	Copper nozzles 1,3,A, B and flat nozzles	5pcs
10	Protective Lensφ20*3	5pcs
11	Lock Ring Wrench	1pc
12	Filament Nozzle Assembly/ 0.8/1.0/1.2/1.6mm wire feed nozzle and wire frame	1set
13	Tip Holder for use of disassembly and assembly of collimating and focusing lens	1set
14	Cotton Swab 25sticks	1pack
15	Cotton Swab 25sticks	1pack
16	Soundproof Earplugs (3M)	5pairs
17	High level dustproof Mask	2pcs
18	Screwdrive(inner hexagon)	1pc

# 01 High Standard

## New Generation of Handheld Laser Welder More Application Material & Easier Operation

FW II-1200 as a new generation of handheld laser welder developed by HR laser which is a company belongs MAX Laser features in fast welding speed, good effects, easy to learn and operate. It can greatly improve the production efficiency and reduce welding costs.

### Good performance

4.0mm ultimate welding depth for stainless steel,  
1.5mm ultimate welding depth for copper

### Good effect

Precision laser control system, stable beam quality, high welding strength, and beautiful welding seams.

### Long service life

Phase change heat dissipation technology, adaptive fan speed regulation, 2-year warranty for the laser source

### Wide application

Suitable for welding various materials, thicknesses, and ultra-thin parts

### Fast speed

4-10 times faster than traditional welding ways, improving production efficiency

### Remarkable energy-saving

Compared to xenon arc welding, it saves about 80% to 90% of electricity.

### Easy Operation

7-inch touch screen, a new generation intelligent operating system.

### Safe enough

Six-level safety measures, pressure monitoring, and high protection for the safety of operators and equipment.

Welding Material	Stainless Steel	Carbon Steel	Galvanized Sheet	Aluminium	Brass	Red Copper
Single sided depth of welding	4mm	4mm	4mm	3mm	3mm	1.5mm
Double sided depth of welding	8mm	8mm	8mm	6mm	6mm	3mm

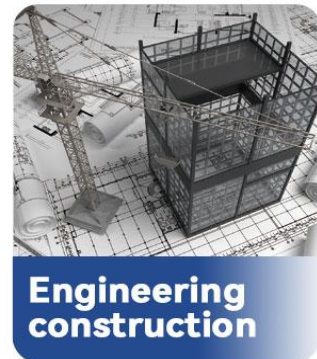
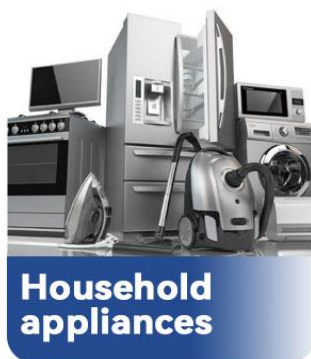
## 02 Core Technology

**Not Only Easy Operation And Efficiency But Also Welding Art**



Through the intelligent operating system, users can quickly select the welding parameters based on different materials and thicknesses, high-quality and consistent welds can be achieved by beginners.

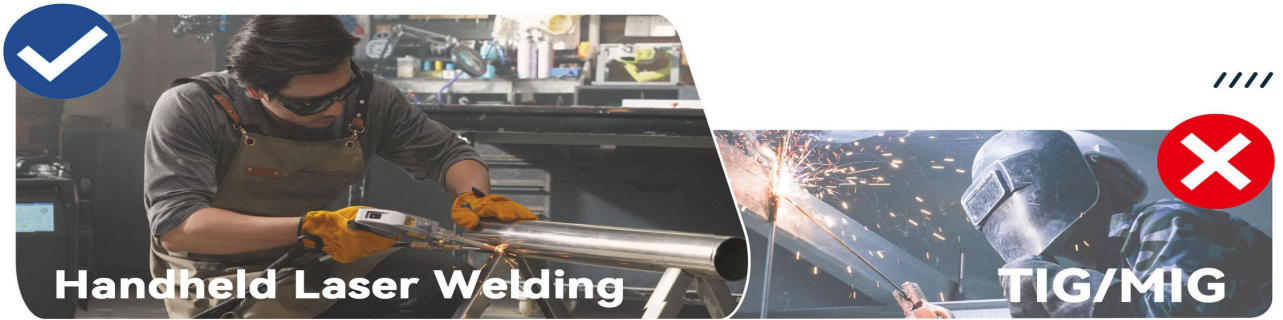
### Application Field



# 03

## Industry Upgrade

**Say Goodbye To Traditional Welding And Enhance Productivity By Laser**



	Traditional Welding	vs	Huanri Handheld Laser Welding
Labor Costs	Difficult employment and high labor costs		Simple Operation and low labor costs
Physical Hazards	Occupational disease with great physical harm		Non-direct radiation, low radiation, only laser goggles are needed to filter out strong light.
Welding Speed	Slow speed and low efficiency		4-10 times faster than traditional welding
HAZ	Large		Small
Bending Deformation	Extremely subject to deformation		Not easily deformed
Welding Quality	The weld seam is coarse and irregular, requiring polishing		Fine and beautiful welding seams, deep depth and high strength of welding
Welding Seam Damage	There are pores and are easy to weld through		The weld depth is uniform and has good consistency
Welding Material	Be subject to certain welding material		Wide range of welding materials
Learning Difficulty	High technical threshold, requiring professional welders		Beginners only need half an hour to master the operation proficiently

## 04 Easy To Take

Small volume and weight make it can be taken by anyway you like.



## 05 Product Lightest

Compact Handheld Design Makes The Welding Work Like Playing



**Weight**  
**680g**

By applying the collimating QCS interface, it remarkably reduces the dimension and weight of the welding torch which weighs only 680g. The optic design and QCS output perfectly match with each other and enhance the transmission efficiency. The ergonomic design of the welding gun make it can be handed comfortably and easily. What's more the laser swing function configured inside the welding torch makes welding the wide seam possible.

## 06 Easy Operation

### Simple Operation System and Intelligent Welding Mode

The new generation handheld laser welding adopts a 7-inch industrial grade LED touch screen, intelligent operating system, and supports simple operation modes, making it easy to learn and operate quickly.

For beginners, it only takes 30 minutes of training to master welding operations, thereby saving training and production costs. 32 sets of preset and user-defined process parameters allow users to quickly select welding parameters based on different materials and thicknesses. Beginners can also weld high-quality and consistent welds.

