

### **SXF Series Air-cooled Handheld Laser Welding Machines**



The advantages of air-cooled handheld laser welding machines mainly include the following points:

- Compact size and strong portability: Its size is similar to that of a computer host, so it is very suitable for on-site operations in terms of operation. On site operations or occasions that require mobile welding.
- Multiple power options available: offers three power options, 700W, 1200W and 1500W, which can adapt to different welding needs, whether it is precision welding or welding of thicker materials.
- Wide welding thickness range: 700W of power is suitable for welding with a thickness of 0.4 to 3
  mm, while 1500W of power can handle materials with a thickness of 0.4 to 5mm, covering the most
  common welding needs.
- Easy to operate: Simply press to start welding, suitable for operators with different skill levels.
- Accurate control of welding parameters: capable of accurately controlling key parameters during the welding process, ensuring welding quality, and meeting high standard welding requirements.

These advantages make air-cooled handheld laser welding machines efficient, flexible, and reliable welding tools, suitable for various industrial and manual welding scenarios.

**Technical Specifications** 

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|---------------------------|--------------------------------------------------------------------------------------|-------------------|-------------------|
| Model Number              | SXF-700W                                                                             | SXF-1200W         | SXF-1500W         |
| Laser power               | 700W                                                                                 | 1200W             | 1500W             |
| Dimension                 | 570x260x540mm                                                                        | 570x260x540mm     | 570x260x540mm     |
| Weight                    | 29kg                                                                                 | 43kg              | 48kh              |
| Max. power required       | 2.5kW                                                                                | 4kW               | 4.5kW             |
| Input voltage             | 220VAC, 50/60Hz                                                                      | 220VAC, 50/60Hz   | 220VAC, 50/60Hz   |
| Cooling method            | Air-cooled                                                                           | Air-cooled        | Air-cooled        |
| Operation temp.           | -20 ~ 40 degree C                                                                    | -20 ~ 40 degree C | -20 ~ 40 degree C |
| Laser wavelength          | 1070nm                                                                               | 1070nm            | 1070nm            |
| Welding handle length     | 10m                                                                                  | 10m               | 10m               |
| Welding speed             | 0-2m/min                                                                             | 0-2m/min          | 0-2m/min          |
| Welding thickness         | 0.4-3mm                                                                              | 0.4-4mm           | 0.4-5mm           |
| Scan width                | 0-8mm                                                                                | 0-8mm             | 0-8mm             |
| Welding material          | Carbon steel, stainless steel, aluminum, galvanized material & other metal materials |                   |                   |
| Pointing light            | Red light                                                                            | Red light         | Red light         |
| Capable of functionality  | Welding, cutting, cleaning                                                           |                   |                   |
| Adapted welding wire dia. | 0.8/1.0/1.2/1.6/2.0mm                                                                |                   |                   |
| Automatic wire feeding    | Standard configuration                                                               |                   |                   |
| Welding wire specs.       | Solid coiled wire, same as gas-shielded wire                                         |                   |                   |
| Welding wire material     | Same as welded base material                                                         |                   |                   |
| Protective gas            | Nitrogen, argon, carbon dioxide                                                      |                   |                   |
| Protective gas flow rate  | 10-15 liters per minute                                                              |                   |                   |
|                           |                                                                                      |                   |                   |



## **Product Features**



All electrical components adopt Schneider and other first-line brands Stable equipment





Dual protective lens design Longer lasting and more durable





Drawer type lens design, easy to replace, simple maintenance











Top of screen design Easy to operate





10 meters welding line Wide area of use



POINT

Complete specification of accessories





Compact device, easy to move



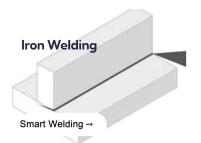




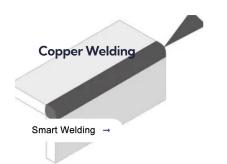














# Comparison with TIG/MIG Welding:





### **Advantages of air-cooled laser** welding machines

- No welding technology required
- Fast welding speed
- Beautiful weld seam
- No grinding
- Small heat distortion
- Low welding fume
- No glare during welding

# Water-cooled laser weling VS. air-cooled laser welding





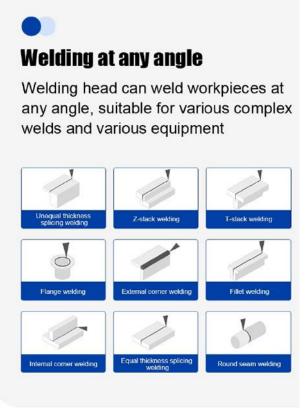
### **Advantages of air-cooled laser** welding machines

- Compact and easy to move
- Energy saving of 50% compared to water-cooled equipment
- No need to wait for the machine to start
- Maintenance-free mainframe, no need to add water and antifreeze
- Modular design, low failure rate



### Easy operating system Intelligent machining mode





# Flexible and convenient, Move according to one's heart, Act casually

Welding gun armor cable can be dragged.

## weight

Easy to move by one person

### volume

Less than 0.1 cubic meters



http://www.SintecOptronics.cn

Wechat: sintec168



## Not only ease of use and efficiency, but also welding art



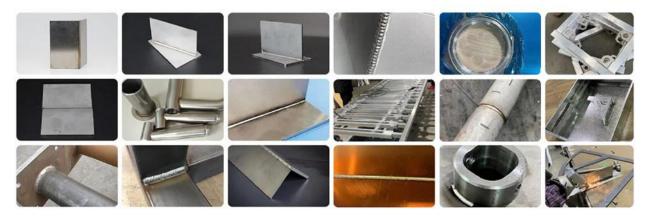


Through the intelligent operating system, users can quickly select welding parameters based on different materials and thicknesses, and beginners can also weld high-quality and consistent welds.

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# Application cases



#### **Packing List**

- 1) Laser welding machine, including 10m of welding wire, one unit
- 2) Wire feeder, including wire feed tube, wire feed wheel accessories, one set
- 3) Safety goggles, one pair
- 4) Welding nozzle, five pcs
- 5) Protective lens, 18\*2, five pcs (disposables)
- 6) Nozzle assembly, including 0.8/1.0/1.2/1.6mm wire nozzle and wire feeder, one set
- 7) Protective gas connection fittings, one piece



