

PERFECT LASER

Handheld Fiber Laser Welding Machine with Portable Welding Gun

Model: PE-W1000G

PERFECT LASER



Integrated
Design



3mm Welding
Thickness



Handheld
Welding Gun



Multiple
Welding
Methods





Customer-orientated

Wish to provide benefit to agents and customers

Free pre-sales consulting, free sample service

Life-long service

Engineer overseas installation available

2-12 hours quick feedback & after-sales service

10000+ customers choice

Perfect Laser wish to be your reliable business partner

Perfect Laser' s handheld fiber laser welding machine (model: PE-W1000G) adopts continuous fiber laser as laser source. It' s a fiber laser welding machine for metal welding.

Adopt industrial integrated design, the structure is compact and beautiful, laser beam mode is excellent and can make the energy concentrate. So performance of handheld fiber laser welding machine is very stable and reliable, have long lifespan.

The fiber laser welding head adopts water-cooled design, so it won' t get over-heated during welding, have very small diameter, easy for hand-holding. It can also can be customized due to different materials.



Application

Applicable Materials

It is used for welding of various 3mm thin metal materials, such as: carbon steel, stainless steel, aluminum, galvanized sheet and so on.

Applicable industry

It is widely used in the advertising and metal industry, such as: LED letters, advertising signs and many other industries.



Control Panel



Welding Gun



Laser Source



Water Chiller





- ◆ This handheld laser welding machine is mainly for welding 3mm metal sheet. Unlike traditional YAG welding technology, it's easier to deform the thin plate metal welding.
- ◆ The laser mode of this handheld fiber laser welding machine is in continuous fiber laser mode, so the welding surface is smooth.
- ◆ Users can quickly learn to operate this handheld laser welding machine, it saves many labor costs.
- ◆ A variety of handheld laser welding heads are available to choose. Different handheld laser welding heads can be selected for various requirements, such as: metal parts, internal welding, right-angle welding, narrow-side welding, and large spot welding.
- ◆ Heat affected zone is small, no deformation, due to heat conduction is also lower.
- ◆ Higher efficiency. The traditional welding adopts arc welding, the work efficiency is low. This handheld laser welding machine breaks through the traditional method and adopts directional point-to-point welding, which is 10-15 times faster than ordinary welding method. Therefore, it has higher working efficiency.

1 Integrated Design

The machine adopts an integrated design, the control system, laser source and water chiller are integrated in one cabinet. So the machine size is compact, it just occupy small space and very convenient to move with universal wheels.



Traditional laser welding machine with 3 parts and very big size

2 / Handheld Welding Gun

Handheld welding gun is adopted for easy operation.

Different welding nozzle can be choose to adapt various angles of welding.



3 / Laser Source

Adopt 1000 watts high-power continuous fiber laser as the light source. The welding surface is smooth, and it is not easy to deform.

Compared with traditional YAG laser, fiber laser has higher energy density, smaller weld heat affected zone, longer service life, lower energy consumption, no consumables, and higher stability.



4 / 1.4 kw Water Chiller

Adopt 1.4 kw water chiller. It has double circulation system, heat-exchange titanium tube, over-heat alarm, flow protection, water level protection.

It can cool the heat during working, make the machine working in good condition and long lifespan.



Temperature Control Panel



Water Level Alarming System

5 Red Light Pointer

As laser beam is in-visible, the red light pointer will help you finding the laser welding point easily. It's very convenient for operation.



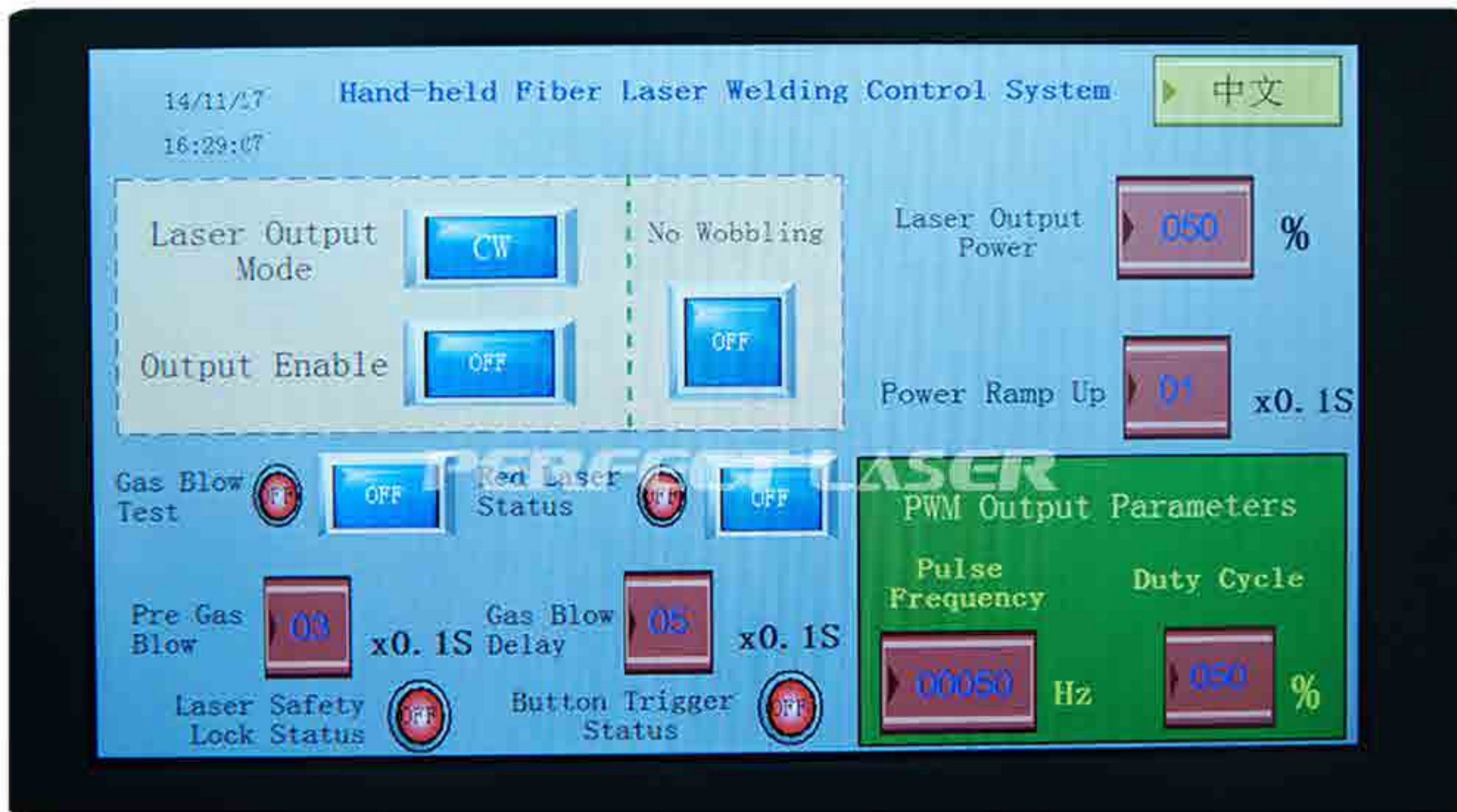
6 Assistant Gas

It's generally recommended that the auxiliary gas to be argon, which is in-expensive and can protect your materials.



7 / LCD Colorful Screen

All parameters have been set up before dispatching, so it's easy for you to start welding by simply setting the laser output power and duty cycle as needed.



1 / Welding Wire Auto Feeding System

It adopts microcomputer control, stepping reduction motor drive, high wire feeding precision and good repeatability. It is used to fill the welding empty space.



Wire Exit

2 / Exhaust Fan

Can exhaust the heat to prevent the machine from over-heating during long-time using.



| Product Name | Handheld Fiber Laser Welding Machine |
|----------------------------|---|
| Model | PE-W1000G |
| Input Voltage | 220V / 50HZ / 20A |
| Maximum Input Power | 3.5 KW |
| Fiber Laser Source | 1000 W |
| Welding Thickness | ≤ 3mm |
| Welding Head Configuration | QBH + double water cooling inside |
| Laser Mode | Continuous / Modulation |
| Laser Wavelength | 1070nm |
| Beam Divergence Angle | ≤1.2mrad/m |
| Welding Interface | QBH |
| Fiber Cable Length | 10m |
| Laser Spot Diameter | 0.2-2mm,adjustable |
| Targeting | Red light |
| Water Cooling System | 1000w water cooler inside, double circulation system, Heat-exchange titanium tube, over-heat alarm, flow protection, water level protection |
| Machine Size | 1030x600x1200mm |
| Whole Weight | 260 Kgs |



| Laser Optic Specification | |
|--|-------------------------|
| Rated Power (CW) | 1000 (-0,+10%)W |
| Operation Mode | Continuous / Modulation |
| Polarization | Random |
| Emission Wavelength | 1070nm |
| RF Width | < 6.0nm |
| Output Power Adjustable (CW) | 10 - 100% |
| Emission Wavelength | 630 - 680nm |
| Maximum Output Power | 1.0mW |
| QBH Optic Output Interface Specification | |
| NA (nominal) | 0.1 |
| M2 | 1.2 |
| Mode Field Diameter | 21.0 Micron |
| Core/Cladding Diameter | 20/400 Micron |
| Cable Length | 10 m |
| Maintainable Output Power (CW) | 10 - 100% |
| Emission Wavelength | 630 - 680nm |
| Maximum Output Power | 1.0mW |
| Fitting Parts (Free of Charge) | |
| Protect Mirror | 10 pieces |
| Filter Core | 1 piece |
| Welding Copper Nozzle | 2 pieces |



48 Hours Running Test



PERFECT LASER

72 Hours Aging Test



PERFECT LASER



12 Months
Guarantee

Life
long free
software
update

7-10
Working
Days Lead
Time

PERFECT LASER

2-12
Hours
Response

TT / Ali
Trade
Assurance
Payment

Sea /
Air
Shipping



Q1: Are you a factory or a trade company?

A1: We are a factory.

Q2: Where is your factory located? How can I visit there?

A2: Our factory is located in Wuhan, Hubei province, China.
All our clients are warmly welcome to visit us!

Q3: Do you have any certificates?

A3: All series of machines have passed CE certification.

Q4: What is the trade term?

A4: FOB/CIF/CFR/EXW are favorable.

Q5: What is the payment term?

A5: T/T.

Q6: Do you arrange shipment for the machines?

A6: Yes, We can arrange shipment based on FOB/CIF terms.
For EXW price, shipment should be arranged by your shipping agents.

Q7: Warranty?

A7: 12 months guarantee.

Q8: How is the packing?

A8: All the packing comply with exporting standard.

Q9: How long is the lead time?

A9: 7-10 working days.

For other questions,we will reply you ASAP after receiving your consult!

PERFECT LASER

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