

SMOOTH WELD

4 in 1

Handheld Laser Welding Machine

Welding / Cleaning / Cutting / Weld cleaning



Products Description

Do you have **headaches** because of the following problems?

1. Need to weld metal but **suffer from surface** rust ,paint and oil dirt 2. Chemical cleaning **damage to raw materials**, manual grinding can't clean well 3. Independent laser cleaning machines are **expensive** and less used.... Same price as laser welding machine we have brand new VLF series

The image displays four different laser tool heads and their corresponding HMI control screens. The tool heads are labeled with their functions: 'welding', 'cutting', 'weld seam cleaning', and 'remote cleaning'. The HMI screens show various control parameters and settings for each function.

HMI Screens:

- Handheld Laser Welding Control System:** Shows parameters for Laser Power (300W), Laser Freq (1000Hz), PWM (100%), Pulse Width (2.0mm), and Mode (Welding, Cut/Grind).
- Setting:** Shows parameters for Laser Power (200W), Gas Flow (200ml), Laser Freq (1000Hz), and Pulse Width (2.0mm).
- Setting:** Shows parameters for Wobble (On/Off), Wobble Size (7.5mm), Wobble Freq (100Hz), X-Offset (0.5mm), and X-Magn (3.0).
- Monitoring:** Shows status indicators for Laser, Chiller, and other system components.

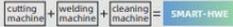
SMOOTH WELD

Fast switching

One machine with multiple functions

For workshop

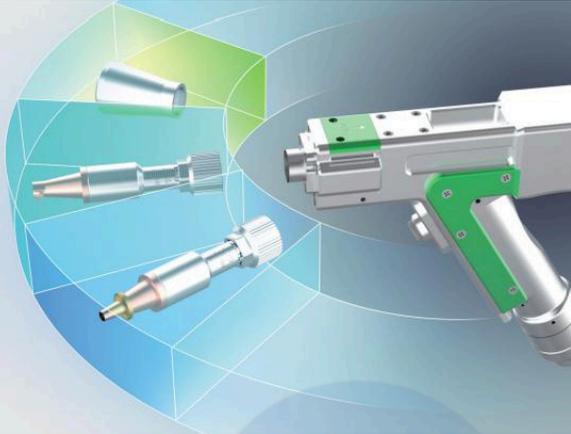
One machine can do all the work, saving space and cost.



For large production factory



Modify the capacity allocation at any time, and there are no more idle machines



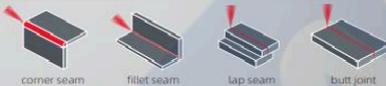
Laser Welding



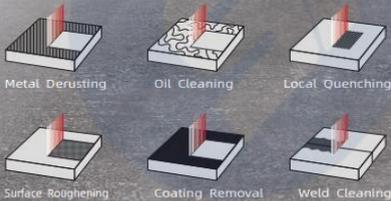
Simple and clear operation interface, easy to master and easy to adjust

Wobble welding heads

Built-in high-speed servo motor



Laser Cleaning



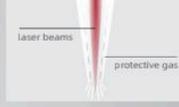
0~50mm

SMOOTH WELD

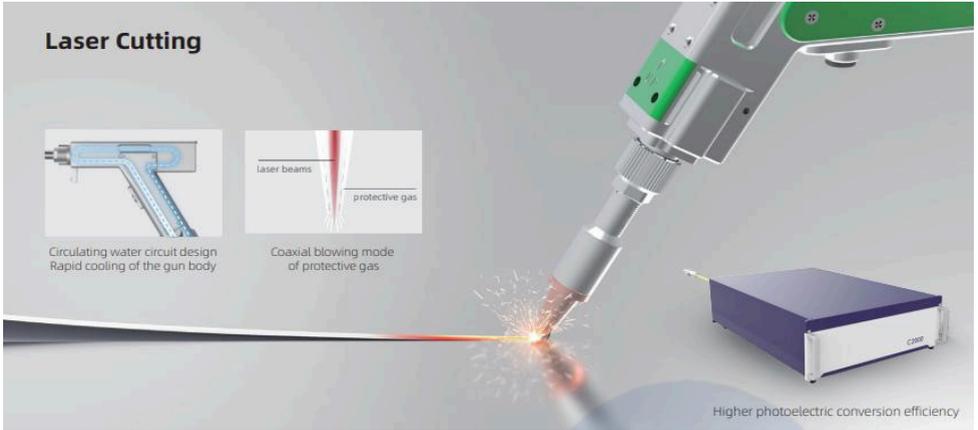
Laser Cutting



Circulating water circuit design
Rapid cooling of the gun body



laser beams
protective gas
Coaxial blowing mode
of protective gas



Higher photoelectric conversion efficiency



SMOOTH WELD



Product Parameters:

Model	VFC	LaserPower	1500W/2000W/3000W
Range of Adjustable Power	1-100%	LaserWavelength	1064nm
FiberLength	Standard10m,maximum support20m	WayofWorking	Continuous/Modulation
SpeedRange	0-120mm/s	RepeatPrecision	±0.01mm
Welding Gap Requirements	≤0.5mm	CoolingWater	Industrialthermostatic watertank
WorkingTemperature	15-35°C	WorkingHumidity	<70%nocondensation
Voltage	220V/380V	FocalSpot Diameter	0.2-2mm
WeldingDepth	0.1-10mm	PulseFrequency	0.1-100Hz

Welding ability thickness :

No.	Material	Max welding dept			
		1kw	1.5kw	2kw	3kw
1	Stainless Steel	≤2mm	≤3mm	≤5mm	≤7mm
2	Mild steel/Iron	≤3mm	≤4mm	≤6mm	≤8mm
3	Aluminum/brass	≤2mm	≤3mm	≤4mm	≤6mm

4-in-1 machine. One machine can do weld/clean/cut/weld cleaning

SMOOTH WELD



SAMPLE



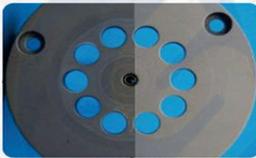
Mold cleaning



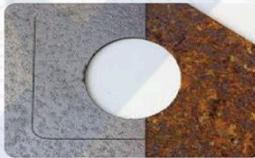
Sealing ring mold cleaning



Tire mold cleaning



Optical Fixture Cleaning



Laser rust removal



food container cleaning



Laser degreasing

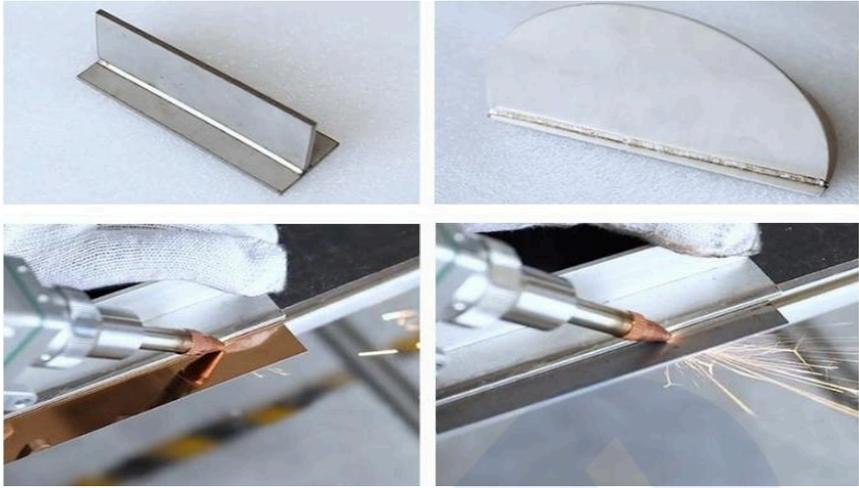


Insulation cup paint removal



Titanium alloy cleaning

SMOOTH WELD



SAMFI