

YOSOON LASER



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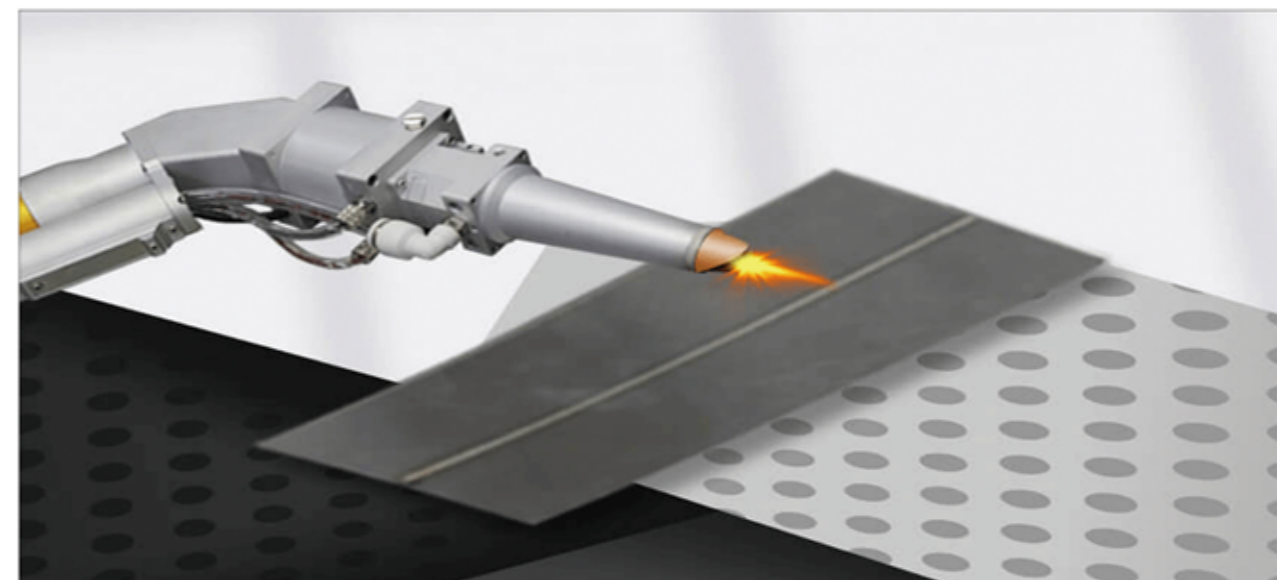
**YOSOON LASER
EQUIPMENT CO., LTD**

Hand-held Fiber Laser Welding Machine YS-1000

Overcome the limitation of the original worktable travel space which suitable for various complex welding seams, easy to operate the requirements of welding at various positions and angles .humanized design and technical upgrade are able to weld Smooth and beautiful welding seams.



Yosoon Laser Hand-held Welding Machine Six Core Highlights



1. Wobble Hand-held welding head with auto wire fuction

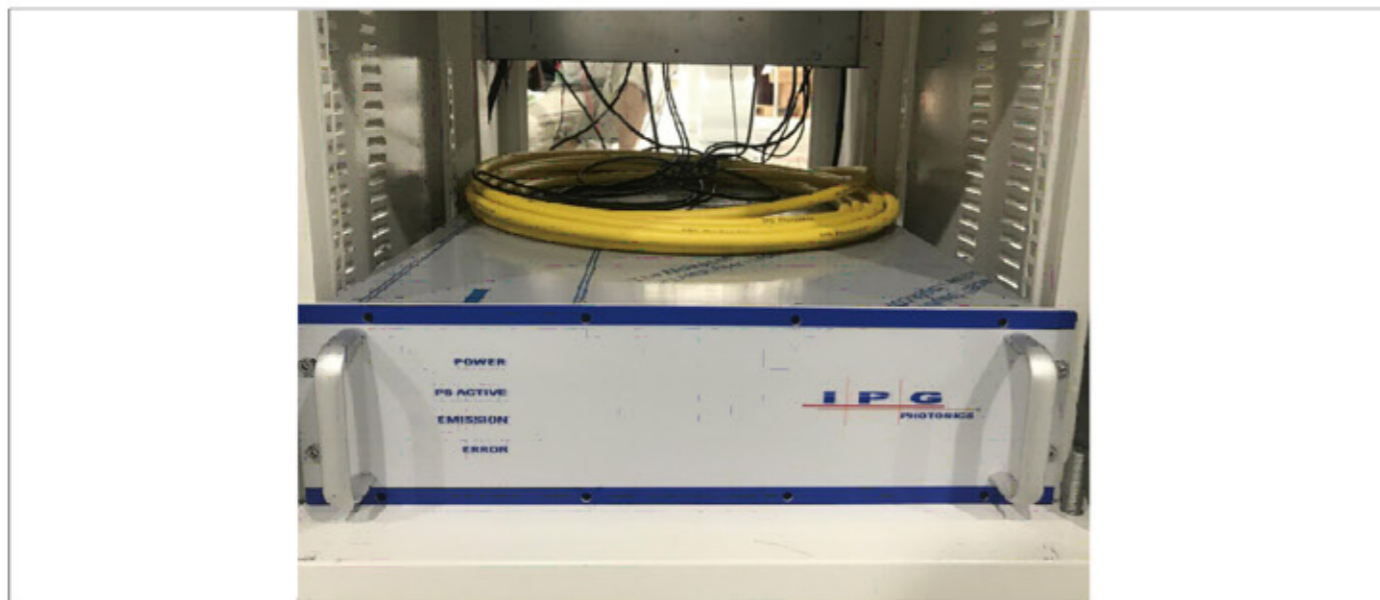
Portable and flexible to Hhndle,It can be welded to any part of the workpiece, and long-term work is not easy to fatigue.It can be used for 1000W/1500W/2000W laser power.

2. Masterhood and Beauty, Easy to Move

Push-pull Handle on Top, Big Casters on the Bottom.



3. IPG Laser Source



4. S&A Water Cooler



5. Seamless Welding



6. Ultra-long Solder Connection Fiber

10-20 meters imported brand optical fiber can be realize ultra-long distance operation, wide reach distance, flexible and convenient.



Comparative Analysis of Several Different Welding Methods

Compare Items	Traditional Welding	Laser Welding
Heat input to the workpiece	Very high	Low
Bonding strength with base material	General	Very good
Subsequent processing	Polish	No sanding, or little sanding
Welding speed	general	More than 2 times of argon arc welding
Applicable materials	Stainless steel, carbon steel, galvanized sheet	Stainless steel, carbon steel, galvanized sheet
Consumables	More consumables	Less consumables
Operation difficulty	complex	sample
Operator safety	Unsafe	safe
Environmental impact	Not environmentally	friendly
Welding fault tolerance	good	good
Swing welding	Not	YES
Adjustable spot width	Not	YES
Welding quality comparison	bad	well

Technical Data

1Kw welding ability			
NO.	Material	Depth of fusion	Penetration thickness
1	Stainless Steel	≅4mm	≅3mm
2	Mild Steel/Iron	≅4mm	≅3mm
3	Galvanized sheet	≅3mm	≅2mm
4	Aluminum/brass	≅2mm	≅1mm
1.5Kw welding ability			
NO.	Material	Depth of fusion	Penetration thickness
1	Stainless Steel	≅5mm	≅4mm
2	Mild Steel/Iron	≅5mm	≅4mm
3	Galvanized sheet	≅4mm	≅3mm
4	Aluminum/brass	≅3mm	≅2mm
2Kw welding ability			
NO.	Material	Depth of fusion	Penetration thickness
1	Stainless Steel	≅6mm	≅5mm
2	Mild Steel/Iron	≅6mm	≅5mm
3	Galvanized sheet	≅5mm	≅4mm
4	Aluminum/brass	≅4mm	≅3mm

Material	Thickness (mm)	Speed (mm/s)	Laser Power (w)
Carbon steel (Q235B)	0.5	50~55	500
	1	25~30	
	1.5	15~20	
Stainless Steel (SUS304)	0.5	55~60	
	1	30~35	
	1.5	15~20	
Brass	0.5	20~30	

Material	Thickness (mm)	Speed (mm/s)	Laser Power (w)
Carbon steel (Q235B)	0.5	70~80	1000
	1	50~60	
	1.5	30~40	
	2	20~30	
Stainless Steel (SUS304)	0.5	80~90	
	1	60~70	
	1.5	40~50	
	2	30~40	
Brass	0.5	55~65	
	1	40~55	
	1.5	20~30	
1-3 series aluminum alloy	0.5	70~80	
	1	50~60	
	1.5	30~40	
	2	20~30	
4-7 series aluminum alloy	0.5	45~55	
	1	35~45	
	1.5	20~30	

Material	Thickness (mm)	Speed (mm/s)	Laser Power (w)
Carbon steel (Q235B)	0.5	80~90	1500
	1	70~80	
	1.5	50~60	
	2	30~40	
	3	20~30	
	4	15~20	
Stainless Steel (SUS304)	0.5	90~100	
	1	80~90	
	1.5	60~70	
	2	40~50	
	3	30~40	
	4	20~30	
Brass	0.5	70~80	
	1	50~60	
	1.5	40~50	
	2	20~30	
1-3 series aluminum alloy	0.5	80~90	
	1	70~80	
	1.5	50~60	
	2	30~40	
	3	10~20	
4-7 series aluminum alloy	0.5	60~65	
	1	40~50	
	1.5	30~40	
	2	20~30	
Red copper	0.5	40~50	

Material	Thickness (mm)	Speed (mm/s)	Laser Power (w)
Carbon steel (Q235B)	0.5	90~100	2000w Single Module
	1	80~90	
	1.5	60~70	
	2	40~50	
	3	30~40	
	4	20~30	
Stainless Steel (SUS304)	0.5	100~110	
	1	90~100	
	1.5	70~80	
	2	50~60	
	3	40~50	
	4	30~40	
Brass	0.5	80~90	
	1	60~70	
	1.5	40~50	
	2	30~40	
1-3 series aluminum alloy	0.5	90~100	
	1	80~90	
	1.5	70~80	
	2	40~50	
	3	20~30	
4-7 series aluminum alloy	0.5	70~80	
	1	60~70	
	1.5	40~50	
Red copper	0.5	60~70	
	1	20~30	

Material	Thickness (mm)	Speed (mm/s)	Laser Power (w)
Carbon steel (Q235B)	0.5	80~90	2000W Multi-module
	1	70~80	
	1.5	50~60	
	2	30~40	
	3	20~30	
	4	15~20	
Stainless Steel (SUS304)	0.5	90~100	
	1	80~90	
	1.5	60~70	
	2	40~50	
	3	30~40	
	4	20~30	
Brass	0.5	70~80	
	1	50~60	
	1.5	40~50	
	2	20~30	
1-3 series aluminum alloy	1	70~80	
	1.5	50~60	
	2	30~40	
4-7 series aluminum alloy	1	40~50	
	1.5	30~40	
	2	20~30	

Application Industry

Laser welding machine can weld whatever you want	
Styles of welding	Overlay welding Vertical welding Tailor welding Fillet welding Precision welding
Industry 1	Kitchenware
Industry 2	Appliance industry
Industry 3	Furniture industry
Industry 4	Stainless steel door
Industry 5	medical instruments
Industry 6	Advertising industry
Industry 7	Shelf
Industry 8	Chassis cabinet

Technical Parameter

A. Main Configuration

Serial Number	project	parameter
1	Laser Generator	IPG 1000W/锐科 1000W IPG1000W/Raycus 1000W
2	Fiber Length	20 meters is standard for IPG/Raycus is standard with 10 meters
3	Laser Welded joint	Hold The Second Generation Wobble Welding Head
4	The Cooling Water Tank	Hand-held Laser
5	The Workbench	Not Have
6	The operating System	Touch-Type human-computer interaction system
7	Ailed At Positional	Red Light Positioning

B. Product Parameter

NO.	Project	Parameter
1	Device Name	Hand-held welding machine
2	Product Size	1105L*720W*1005H mm
3	Laser Power	1000W
4	The Laser Wavelength	1070nm ± 10nm
5	Fiber Length	20 meters is standard for IPG/Raycus is standard with 10 meters
6	Way to work	Continuous/Pulse
7	Almed At positioning	Red Light Positioning
8	Welding Thickness Recommendation	Stainless steel/ Carbon steel 0.5-2mm
9	Weld Clearance Requirements	≤0.3mm
10	Working Voltage	Raycus AC380V, IPG AC220V
11	Shielding Gas	Nitrogen(Purity not less than 99.9%)

