

Features of Fiber Laser Welding Machine

High quality

Smaller focus diameter and high work efficiency.

High Welding speed

2-3times faster than YAG or Co2 Laser.

Low cost

Photoelectric conversion rate is up to 25%-30%.Low electric power consumption, it is only about 20%-30% of traditional welding machine.

Low maintenance

Fiber line transmission, no adjustment of optical path.

Stable

Adopting the top world import fiber lasers, stable performance, key parts can reach 100000 hours.

Easy

Fiber line transmission no need reflect lens, save maintenance cost.

High efficiency

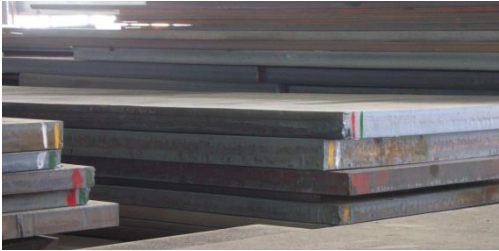
Compare with welding machine, fiber laser welding machine has three times photoelectric conversion efficiency.

Flexible

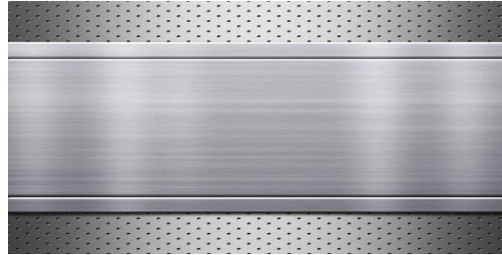
Compact design, easy to flexible manufacture requirements.

■ Applicable materials

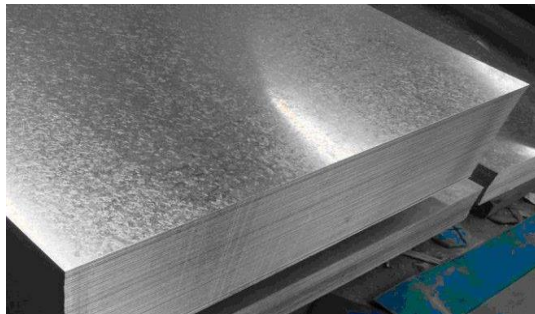
Suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, pickle plate, aluminum-plating Zinc plate, metallic copper and other metals.



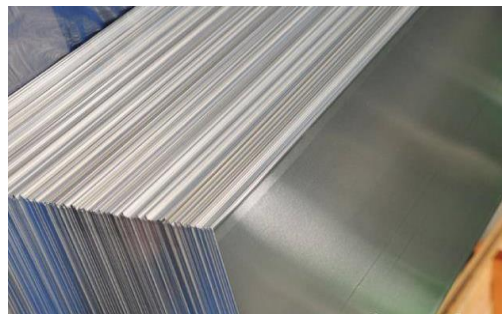
Steel



Stainless steel



Galvanized



Aluminum

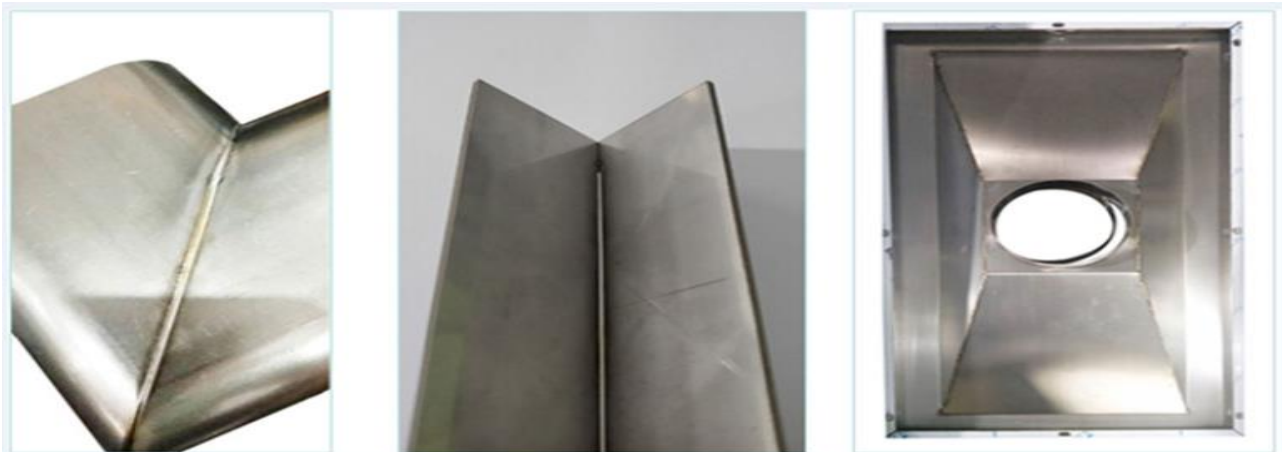
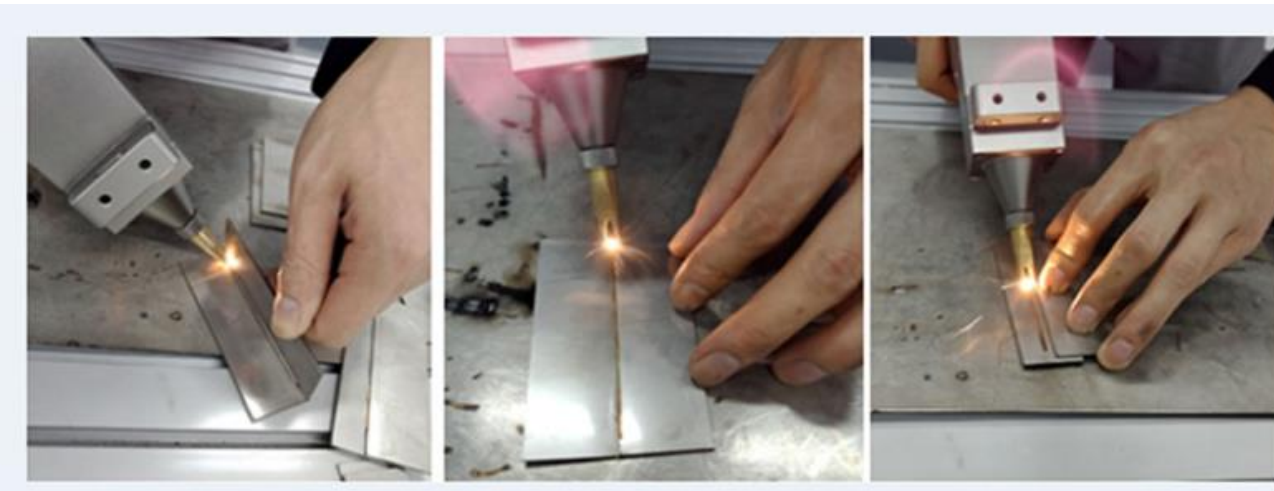
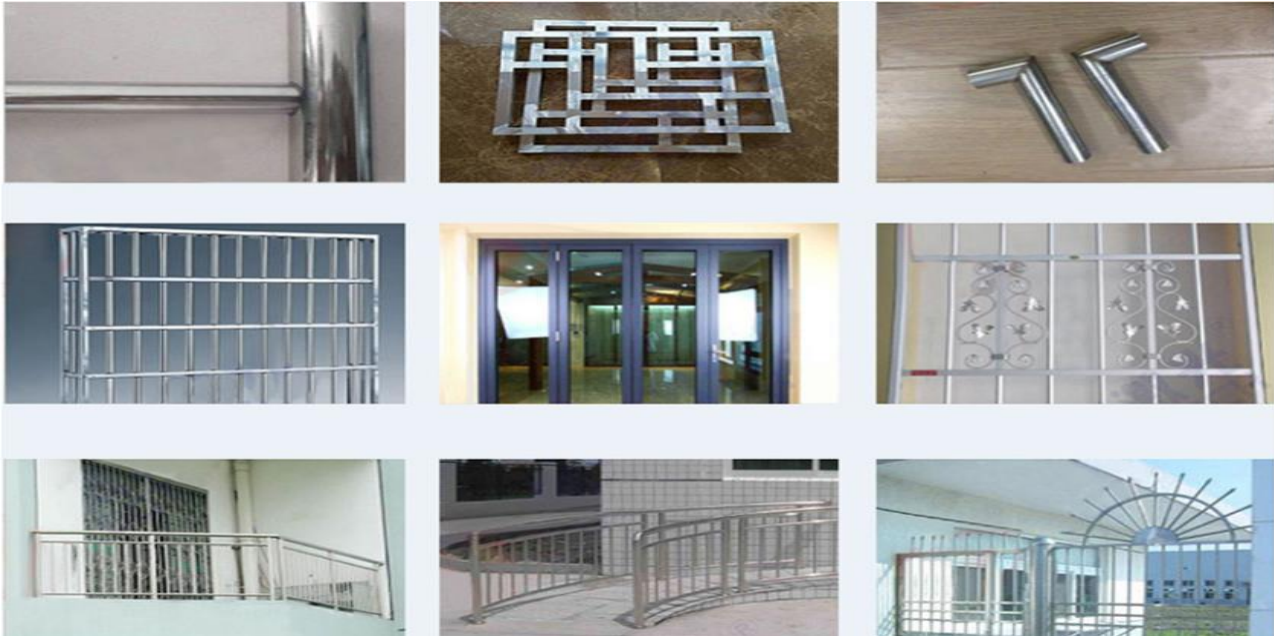


Brass



Red copper

Samples



Configuration of the Machine

Parts Name	Picture	Brand and Original
Laser source		 Raycus 1000W
Welding Head		 WSX
Control System		 WSX
Automatic Feeder		 WSX
Chiller		 Hanli

Parameters

Laser Power	1000W
Laser Medium	YVO4
Laser Welder Model	WSX ND18
Laser Wavelength	1070 nm ±20
dated Output Power	1000 W
Beam Quality	< 0.373mrad
Fiber Length	10000mm (15000mm optional)
Welding Speed	0-120mm/s
Welding Thickness	0.5mm-3mm
Dimension	1050mm*670mm*1200mm
Machine Weight	240KG
Rated voltage	AC 220V
Power Frequency	50Hz
Protection Level	IP54

■ Performance of Laser Welding for difference

Material	Gas	Thickness	500W	800W	1000W	1500W	2000W
Stainless Steel	Ar	0.5	✓	✓	✓	✓	✓
		0.8		✓	✓	✓	✓
		1		✓	✓	✓	✓
		1.2		✓	✓	✓	✓
		1.5				✓	✓
		2					✓
		2.5					✓
		3					
Carbon Steel	CO2	0.5	✓	✓	✓	✓	✓
		0.8		✓	✓	✓	✓
		1			✓	✓	✓
		1.2			✓	✓	✓
		1.5				✓	✓
		2					✓
		2.5					✓
		3					
Aluminum	N2	1			✓	✓	✓
		1.2			✓	✓	✓
		1.5				✓	✓
		2					✓
		2.5					✓
Galvanized sheet	Ar	0.5	✓	✓	✓	✓	✓
		0.8	✓	✓	✓	✓	✓
		1		✓	✓	✓	✓
		1.2			✓	✓	✓
		1.5				✓	✓
		2					✓
		2.5					✓

