



Angel India Cad Cam Pvt. Ltd.

HAND-HELD LASER WELDING MACHINE



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#### FIBER LASER WELDING

LASER welding is a method of joining metals using LASER light. An intense LASER beam focuses on an interface between metals to melt the material. A highly - controllable melt pool is formed, which joins the materials once it cools and solidifies. LASER Welding can provide fast, deep, narrow and consistent welds that are very strong. LASER welding is gaining momentum in High-Volume applications such as automotive and consumer appliance production. With faster welding speed, high efficiency and smaller heat affected zone (HAZ) good weld joint quality can be achieved. High power LASER Welding machine is now an important equipment in the welding industry.

Hand-Held LASER Welding Machine uses the latest Fiber LASER Technology to provide a continues LASER beam for high quality and beautiful welding. This technology has filled in the gap between the LASER technology and Industrial welding process, with the ease of its use now any one can weld with precise accuracy and high finish. Fiber LASER welding has the advantages of simple operation, aesthetic welding, high speed welding and negligible consumables compared to any other welding process.

Fiber LASER Welding of thin Stainless Steel sheets, Iron sheets, Galvanized sheets and other metals can perfectly replace the traditional Argon Arc Welding, Electric Welding and other welding process. This Handheld Fiber LASER Welding can widely be used in cabinets, kitchens, staircases, elevators, racks, ovens, stainless steel doors, window guardrail, distribution boxes and many more other complex and irregular welding requirements.



### Technical Parameters:

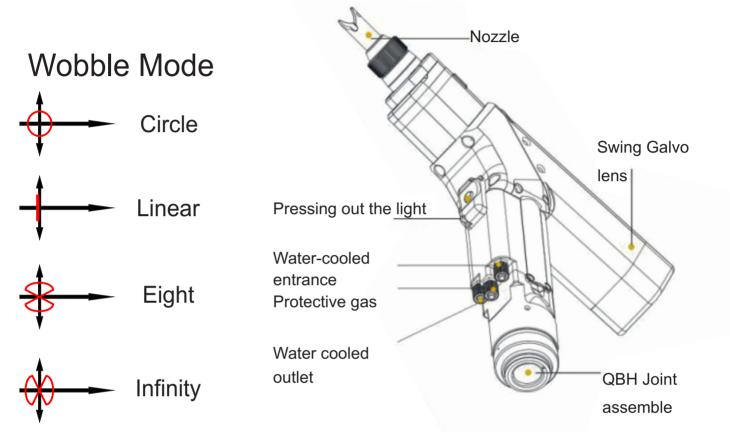
EQUIPMENT NAME	Handheld continuous laser welding machine		
MODEL	500W	800W	1000W
Power supply demand	220V±5%,50Hz Rated power: ≤5KW Rated current: ≤40A		
Environment Requirements	Temperature 40°C Humidity 10-90%		
Working time	24Hrs (continue to operate)		
failure rate	≤2%		
Pass rate	≥99.5%(does not contain incoming materials)		
Utilization rate	≥95%		
Staffing	1人		



## HAND-HELD LASER WELDING MACHINE

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### **WOBBLING HEAD**



- 1) Light Shape. Weight is only 1.36KGS, Easy to operate.
- 2) **High Speed.** We use High Speed Galvo Lens Wobbing Head, Speed is 8000mm/s. Normal Motor Welding head speed is only 400mm/s.
- 3) **Adjustable nozzle**. Our wobbling head nozzle is easy to adjust focus length and angle when you are welding.
- 4) **Adjustable spot size**. Our wobbling head laser spot size is 0.5-5mm, adjustable. Normal head is only 2mm spot size, cannot be adjusted. So cannot weld for big gap.
- 5) With automatic sensor on the wobbing head. It is only working on metal, will not Hurt the operator accidently. With multiple safety alarms, it automatically locks light afer removing the workpiece, which is safe.
- 6)Long lifespan for nozzle and protecti e lens. One month lifespan for nozzle, 15 days or more for protecti e lens. Our nozzle is made of yellow copper, with more tolerance. Normal motor wobbling head consumable parts lifetime is only 1-3 days.



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### **MACHINE FEATURES**

- The welding speed is 2 -10 times faster than the traditional welding speed. It can help you to save at least two welders a year.
- Laser welding consumes less material and has a long-life
- Easy to operate, no need welding work license, new comer can also weld products beautifully.
- The welding seam is smooth and beautiful, which reduces the subsequent grinding process and saves time and cost.
- No deformation, no weld scar, welding firmly
- Safer and more environmentally friendly.
- We independently developed wobbing welding head, which made up for the disadvantage of small laser spot, expanded the tolerance range of processing parts and weld width, and obtained better weld formation.

Work Way	Continously / Modulated	
Speed range	0-1000 mm/s	
Water Chiller	Industrail thermostatic water tank	
Working environment temparature	15-35° C	
Working environment humidity	<70% without condensation	
Weld beam spot	≤0.5mm	
Working Voltage	AV220V	

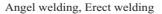






No deformation of the part







Splice welding

Superimposed welding