AOTAI

ATW LASER

Handheld Laser Welding Machines

CS

SS

AL



Automobile Industry ▪ Electronic Industry ▪ Food machinery
Household appliances ▪ Metallurgical industry ▪ Signage

ATW LASER 3000L

Features and Benefits

- The robust and safe control system, multiple safety alarms, reliable operation
- Laser source specially for welding, better beam quality, more stable, low light attenuation, long-lasting service life
- The laser welding torch adopts an ergonomic design, which enjoys light weight, comfortable holding feeling, and can meet requirements for long-time welding
- Fully digitalized design, four-roller driven wire feeding mechanism, stable wire feeding
- Dual-temperature dual-control water cooler, segmented type control, high-precise temperature control, ensuring the service life of laser source and welding torch
- Save and recall nine sets of welding parameters
- Low heat input and small welding distortion, not affected by electromagnetic field
- Can be applied to weld a wide range of materials, and also can be applied to join different materials
- Can be applied to match with automation equipment and robot, to perform automated high-speed welding
- Double wire feeding, increased welding width



PRODUCT SPECIFICATIONS

Model	ATWLaser3000L
Equipment size (mm)	1210*715*1200
Total power of equipment (kW)	15
Equipment weight (kg /lb)	300 /661.3
Weldable thickness (mm)	≤6
Power of laser device (W)	3000
Wave length of laser device (nm)	1080
Length of optical fiber (m)	10
Diameter of optical fiber (μm)	50
Power of water cooler (W)	3000
Welding speed range (mm/s)	0-120
Wire diameter (mm)	1.0-2.0
System language	Chinese, English
Rated input voltage /frequency (V/Hz)	3 phase, AC380V±10%, 50 /60HZ
Temperature range of operating environment	-10-40°C

ACCESSORIES

STRONG WELDING CONTROL SYSTEM



- A strong control system, multiple safety alarms, smaller size, built-in nine sets of welding storage positions to save different welding process parameters, flexible operation, easy to operate
- More stable: all parameters are visible, real-time monitoring status of the whole machine, avoid problems in advance, more convenient to check and solve problems, ensuring stable operation for the welding head
- Process: all parameters are visible, more perfect welding quality, low distortion, deep penetration
- Stable parameters, high repeatability: greatly increased efficiency, lowering skill requirements for the operator
- Multiple safety alarms and active power-off, laser shutdown settings, safe and reliable system

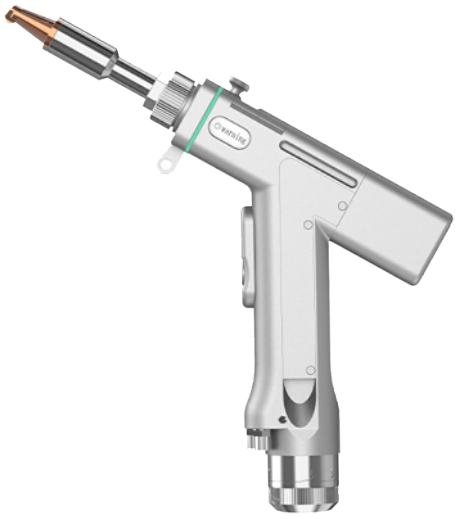
HIGHLY INTEGRATED LASER DEVICE



- The laser device is specially designed for welding and enjoys higher beam quality, higher stability, low light decay, and long-lasting service life.
- High-power output, compact size: combining the advantages of high power, handy size, humanized operation, high-quality beam, the high light conversion efficiency.
- Modular design, easy for maintenance: adopting photo-electric separating design, rapidly replacing module of the optical path or circuit on-site
- Independent control, reducing downtime: The device adopts single pump control technology that can achieve respective independent control. It can keep running even if a single abnormal pump is shut down.
- Intelligent monitoring, easy operation: The self-developed new-generation intelligent software is embedded to dynamically monitor various running indexes of the laser device in real-time.
- Highly integrated

ROBUST LASER WELDING TORCH

- Adopting swing welding head, swing width≥5mm, applicable for more complicated welding requirements.
  Initially created the anti-spatter structure of welding torch head
- The focus lens can be installed and disassembled promptly, which is more convenient for maintenance and repair
- The laser welding torch head adopts an ergonomic design, which enjoys light weight, comfortable holding sense, and can meet demands for long-time welding
- Self-developed welding head remedies the defect that the laser welding spot is small, enlarges the tolerance range and welds' width of the workpiece to achieve higher quality welding



HIGH-POWER COOLING SYSTEM



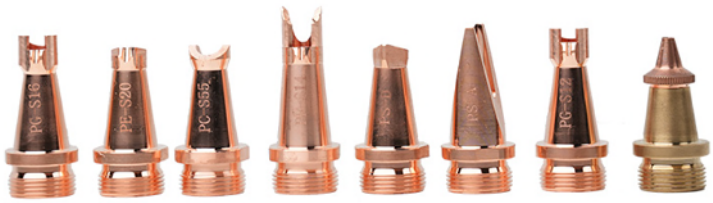
- Adopting dual-temperature dual-control water cooling machine, control in segments, and high-precise temperature control, which can output welding laser beam stably and ensure the service life of laser device and welding torch
- One-key type intelligent control system, convenient operation
- The integrated design is convenient for maintenance and repair
- Stable and robust performance, low fault rate, energy saving, and power saving
- Built-in filtering system, good cooling water quality
- Fault self-diagnosis function, error code display

STABLE WIRE FEEDER

- Fully digitalized design, operating status is clear at a glance
- φ0.8/1.0/1.2/1.6/2.0mm welding wires are applicable
- 4-roller driven wire feeding mechanism, stable wire feeding
- Wire feeding and retracting function



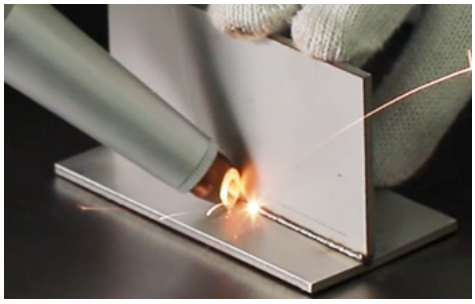
ABUNDANT OPTIONS FOR WELDING



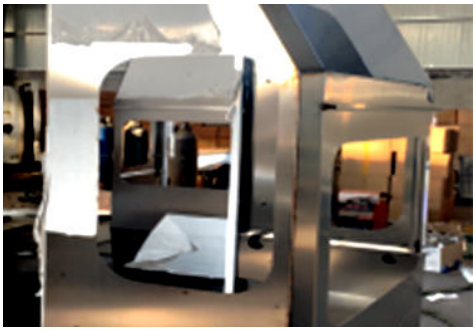
Nozzle

- Equipping nozzles of different models to meet application requirements for different scenarios

APPLICATIONS





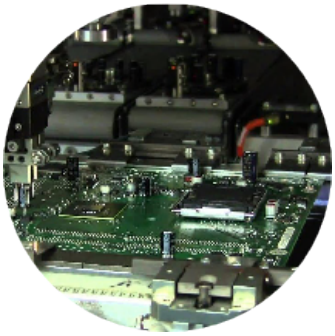



APPLICATED INDUSTRIES


Automobile Industry


Food machinery


Household appliances


Electronic Industry


Metallurgical industry

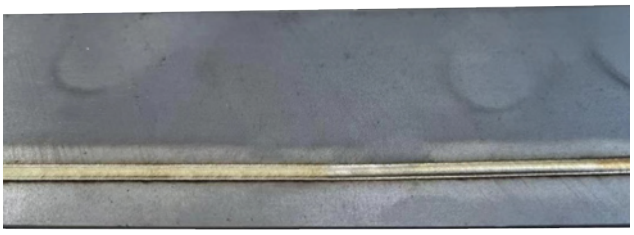

Signage

WELDING MATERIALS

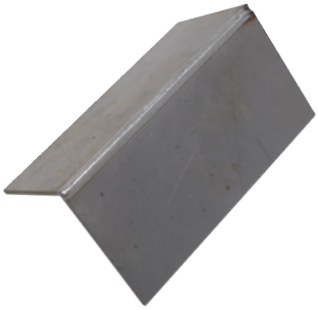
Laser welding machine can be applied to weld stainless steel, carbon steel, aluminum, chrome, titanium and other metals (The following pictures present welding effects from multiple types of laser devices)

Carbon steel welding





Stainless steel welding





Galvanized sheet welding



