

LIGHTWELD™ 1500 Handheld Laser Welding System



Light**WELD** enables dramatically faster welding, is easier to learn and operate, and provides higher-quality, consistent results across a wider range of materials and thicknesses than MIG or TIG with minimal distortion, undercut or burn-through. The heat affected zone is dramatically minimized, as is the need for traditional post-processing grinding or polishing for increased productivity, less scrap and lower cost-per-part.

Light WELD Laser Welding					
High Speed	Up to 4X Faster than traditional methods - increased productivity for lower costs-per-part				
High Quality	Consistent welding of thick, thin and reflective metals without distortion, undercut or burn-through - minimal heat affected zone				
Easy to Use	Simple set up, easy to learn and operate for consistent high-quality welds				
Enhanced Material Capability	Metals with dissimilar thicknesses, ultra-thin parts, copper welding, materials with low and helectrical conductivity				
Wobble Welding	Up to 5 mm of additional weld width - increases capability and creates highly aesthetic seams				
Operator Safety	Multi-level sensors and interlock safety features				

Laser Power	High Peak Power	Mode Storage Capacity	Wobble Length	Wobble Frequency	Dimensions LxWxH	Weight
Up to 1500 W	Up to 2500 W	74	Up to 5 mm	Up to 300 Hz	641 x 316 x 534 mm 25.2" x 12.4" x 21"	53 kg 118 lbs



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CONTROL PANEL:



Wobble length up to 5 mm for increased seam size

Laser power up to 1500 W is easily adjusted with intuitive controls to quickly dial in optimum weld settings for various materials and thicknesses. With 74 stored preset and user-defined process parameters, novice welders can be trained and welding in a matter of hours. Select stored modes provide up to 2500 W of high peak power for even greater welding capability.

CONNECTIONS:



Clearly labeled rear connections make getting started fast and easy. Laser delivery, gas and gun control is pre-wired in a 5 m (optional 10 m) cable. Just plug in the power cord and gas connection, attach the clamp to your work surface and you are ready to go. An ethernet connection provides access to advanced parameter settings to fine tune and save process parameters.

HANDHELD GUN & NOZZLE TIPS:



The handheld welding gun is compact, ergonomic and proven to be the most comfortable, well balanced and easy to use gun available with a selection of nozzle tips to optimize different joint types. The light weight and built-in wobble functionality enables operators to produce high-quality welds consistently throughout the day and safely with its 2-step trigger.

SAFETY FEATURES:

Light**WELD** is a Class IV laser system and routine precautions are required for the safe operation of the equipment.

BUILT-IN FEATURES INCLUDE:

- Key switch control of laser source and Emergency-stop button ensure deliberate operation
- Fiber laser interlock verifies integrity of laser delivery to the welding gun
- 2-step weld gun trigger, enable and then fire, for intentional operation
- Part contact electrical interlock turns off the laser power if the welding head is not in contact with the welded parts

Operator protective equipment including welding gloves, welding shield and 1070 nm laser-safe glasses are required





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HANDHELDLASERWELDER.COM

MAX. AVERAGE OUTPUT POWER: 2500W MAX. PEAK OUTPUT POWER: 5000W PULSE DURATION: 2 50 us PULSE REPETITION RATE: 0 - 10kHz WAVELENGTH RANGE: 900 - 1200nm DANGER
INVISIBLE LASER RADIATION
CLASS 4 LASER PRODUCT
CLASS 4 INVISIBLE LASER RADIATION
WHEN OPEN
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
IEC 60825-1:2014

LASER RADIATION
DO NOT STARE INTO THE BEAM OR VIEW
DIRECTLY WITH OPTICAL INSTRUMENTS
CLASS 2M LASER PRODUCT:
MAX AVERAGE POWER: 1mW
WAVELENGTH RANGE: 600 - 700mm
LEG 60825-1:2014

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