

G MAX NW Series

Handheld Laser Welding Machine





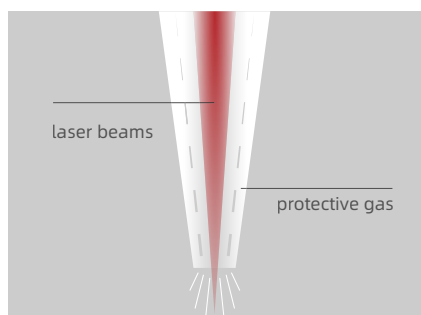
Wobble welding heads

Built-in dual-axis high speed servo motor

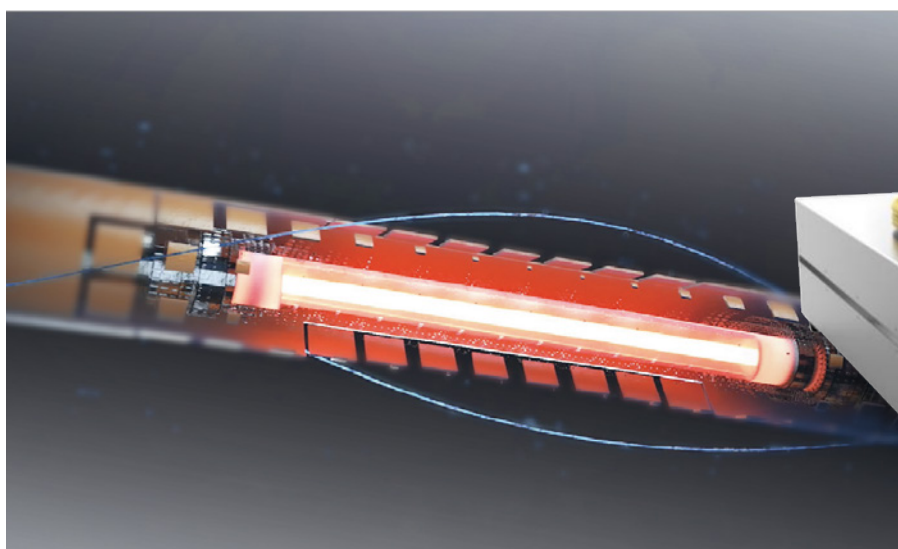
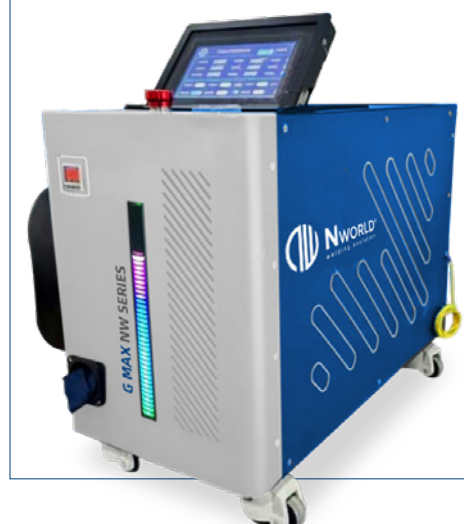
Available
air-cooled model 1,5 kW



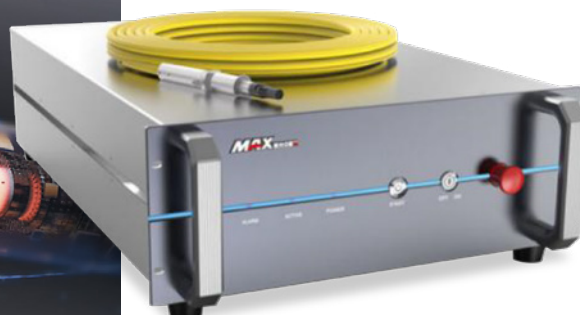
Circulating water circuit design
Rapid cooling of the gun body



Coaxial blowing mode of protective gas
It is no longer limited to linear welding



Second generation
optical fiber transmission system
Better and more stable beam quality



Max Photonic



Technical Specifications

Models	GMAX 1500	GMAX 2000	GMAX 3000
Laser Power	1500 W	2000 W	3000 W
Laser Wavelength	1070 NM	1070 NM	1070 NM
Fiber Cable Length	10 m	10 m	20 m
Cooling Method	Water	Water	Water
Positioning Method	Red laser dot	Red laser dot	Red laser dot
Welding speed	0-160mm/s	0-200mm/s	0-250mm/s
Voltage	220V 50/60 Hz	220V 50/60 Hz	380V 50/60 Hz
Power consumption	7 KW	9 KW	13 KW
Air pressure	10-15l/m	10-15l/m	10-15l/m
Max current	30A	40A	34A
Scan width	0~4mm	0~6mm	0~8mm
Laser gun	motor wobble	motor wobble	motor wobble
Focus length	150mm	150mm	150mm
Cryogenic water flow	13l/min	13l/min	13l/min
Chiller's water	Purified water or deionized water		
Protective gas	Argon gas could meet most of the requirement		
Welding wire diameter	0.8/1.0/1.2/1.6/2.0 mm		
Option	Double automatic wire feeder		

The advantages of laser welding

advanced technology for efficient and quality welding



High welding efficiency

1. 5 to 10 times faster than traditional TIG welding.
2. Low thermal distortion and the absence of spatter dramatically reduce the need for post-weld cleaning and the use of chemical reagents.



Energy savings and efficiency

1. Cost savings of 70-80% in practical production thanks to high production speed.
2. Reduced energy costs due to a maximum absorption capacity of 6 kW at 220 Volts.



Ease of use and rapid training:

1. It only takes 4 hours to learn how to use our lasers and apply them in production.
2. No specific skills are required; anyone can quickly learn how to use this equipment.



European product quality, fast and punctual customer service.

1. TUV Rheinland certification
2. Nworld customer service
3. European standard components

Components



High qualities components

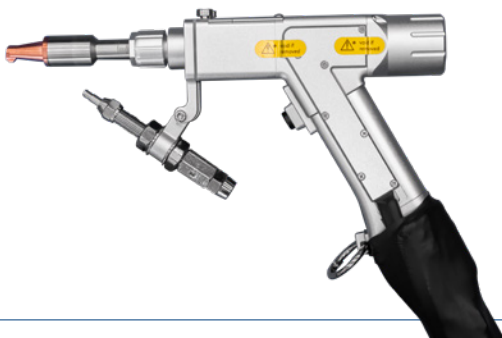
made by world well-known laser sources

MAX is currently largest manufacturer of fiber laser sources in the world. Now we chose the latest generation fiber source, protected against beam reflection. The latest model of the resonator achieves ultra-high power output, which translates into optimal performance and excellent weld quality.

The photovoltaic conversion efficiency is more than 30%.

Hanli Industrial chiller

1. Professional matching laser welding machine, small size, compatible with cabinets of various manufacturers;
2. A full range of environmentally friendly refrigerant systems;
3. One-button intelligent control, convenient operation, ISO9001 quality management system, fault code query system;
4. Integrated design, convenient maintenance;
5. Stable and reliable performance, low failure rate, energy saving and power saving;



Auto-wobble Head

The wobble welding joint is independently developed, with wobble welding mode, adjustable spot width and strong welding fault tolerance, which makes up for the disadvantage of small laser welding spot, expands the tolerance range and weld width of machined parts, and obtains better weld line forming. The weight for the welding head is only 0.8 kg.

Industrial applications



Types of welding



Tailor Welding



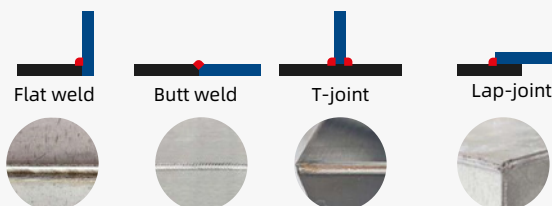
Fillet Welding



Stich Welding

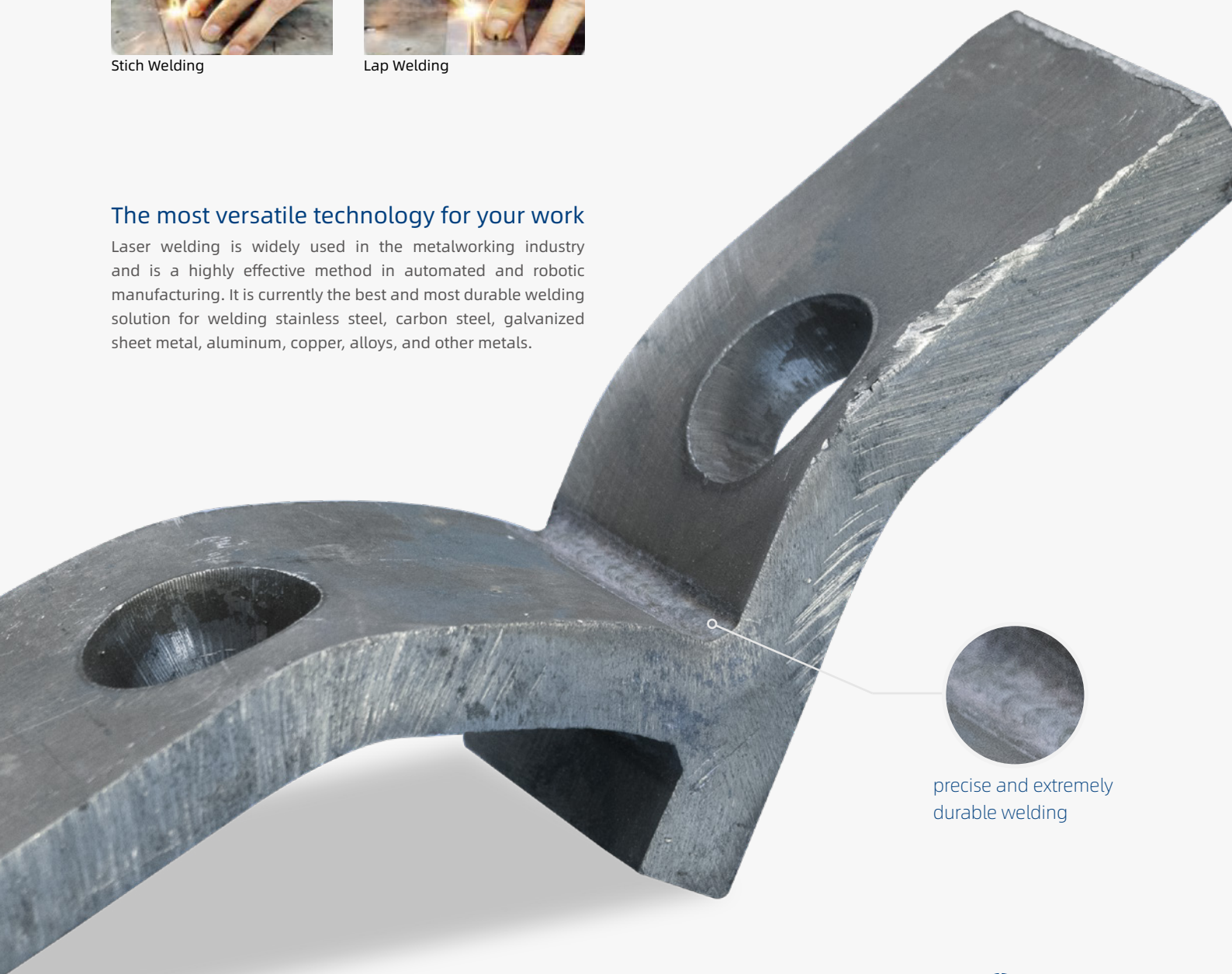


Lap Welding



The most versatile technology for your work

Laser welding is widely used in the metalworking industry and is a highly effective method in automated and robotic manufacturing. It is currently the best and most durable welding solution for welding stainless steel, carbon steel, galvanized sheet metal, aluminum, copper, alloys, and other metals.



precise and extremely
durable welding

Safety Barriers for Laser Welding

Full protection system easy to set and put in operation.

Technical Specifications Single Barrier :

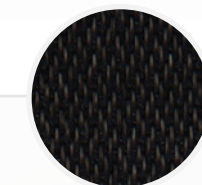
- Dimensions: 1,545 m x 2,56 mt (h)
- Mobile design
- GB7247/ EN60825/ IEC60825,
- PEL >15805,10 W/cm²



Direct exposition 3000 W for 10 seconds
Direct exposition 500 W for 100 seconds
without penetration

Advanced Laser Protections

Blocks high-power laser beams
Keeps eyes and skin safe from laser harm.
Strong and fireproof
Tested for heavy use.
Stops accidents
Safer area around laser machines.



Durable and fireproof
fabric to ensure
durability and safety



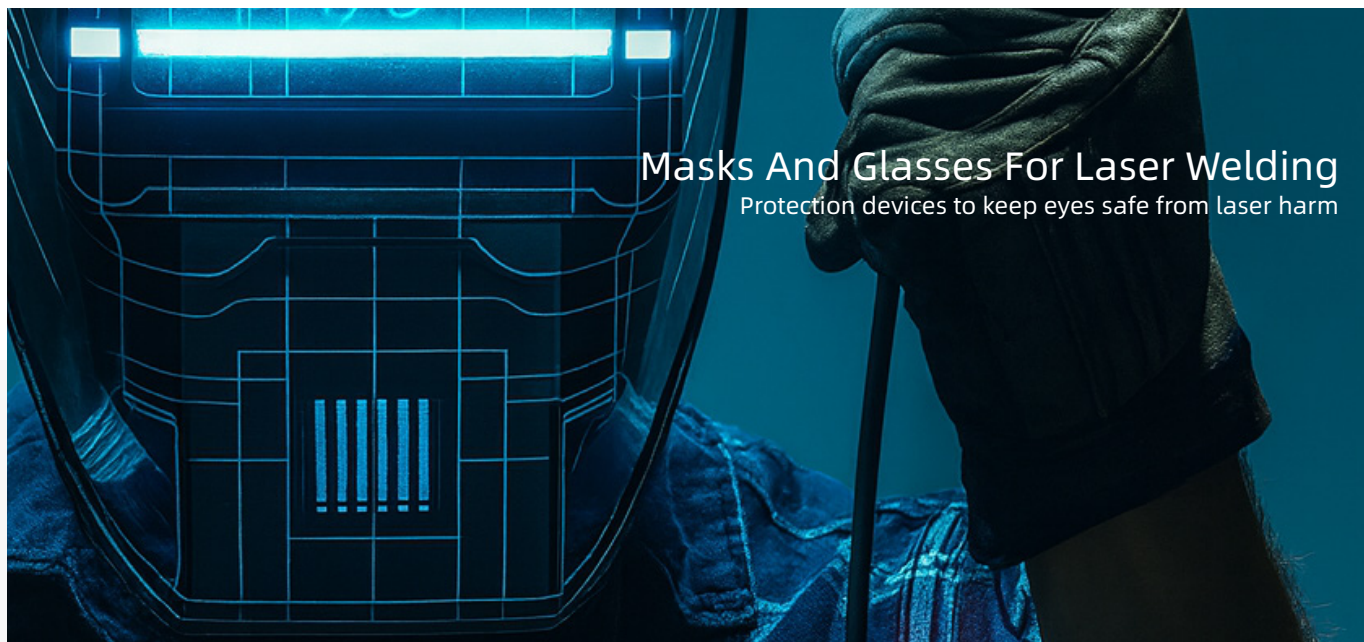
Fully customizable layout



Mobile design for barriers



Customizable layout
easy to put in operation






Masks And Glasses For Laser Welding

Protection devices to keep eyes safe from laser harm


Models



-  **Code**
LLNW00008
-  **Wavelength**
950-1100nm
-  **Optical Density**
OD8+@950-1100nm

Laser welding protective mask **LWM 01**



-  **Code**
LLNW00024
-  **Wavelength**
850-2000nm
-  **Optical Density**
OD6+@190-382nm
OD4+@855-896nm
OD5+@897-950nm
OD8+@951-2000nm

Laser welding protective mask **LWM 02**



-  **Code**
LLNW00025
-  **Wavelength**
190-400nm
800-1100nm
-  **Optical Density**
OD7+@190-400nm
&800-1100nm

Laser welding protective helmet **LWM 03**



-  **Code**
LLNW00007
-  **Wavelength**
190-450nm
800-1700nm
-  **Laser Fiber Type**
OD7+@962-1132nm

Laser welding protective glasses **LPG 01**

Maximum Protection
High Technology
Secured Performance

High and low temperature resistant.
Corrosion and flame resistant.
Protection against ultraviolet (UV)
and Infrared (IR) radiation.
Ergonomic design.
Effective protection.



Via Lega Lombarda 30 - 24040 Bonate Sopra BG Italy
tel. +39 035 494 33 54 - fax +39 035 494 29 25
commerciale@nworld.it - www.nworld.it