

Handheld Laser Welder DT-HW-SM Smart Series

- Faster and easier to operate than traditional welding
- Internal cycle refrigeration for stable and continuous light output
- Integrated design makes the whole machine smaller and more portable



Handheld laser welding machine

In view of the large volume and other shortcomings of the current handheld welding laser equipment, LaserDelta has launched DT-HW-SM Series continuous fiber laser using internal circulation refrigeration (without external refrigeration). It has the advantages of integration and portability, and adopts a unique air-cooled output head. It can realize real walking and welding only by supporting welding gun and other equipment.

Product configuration

1500W-2000W power

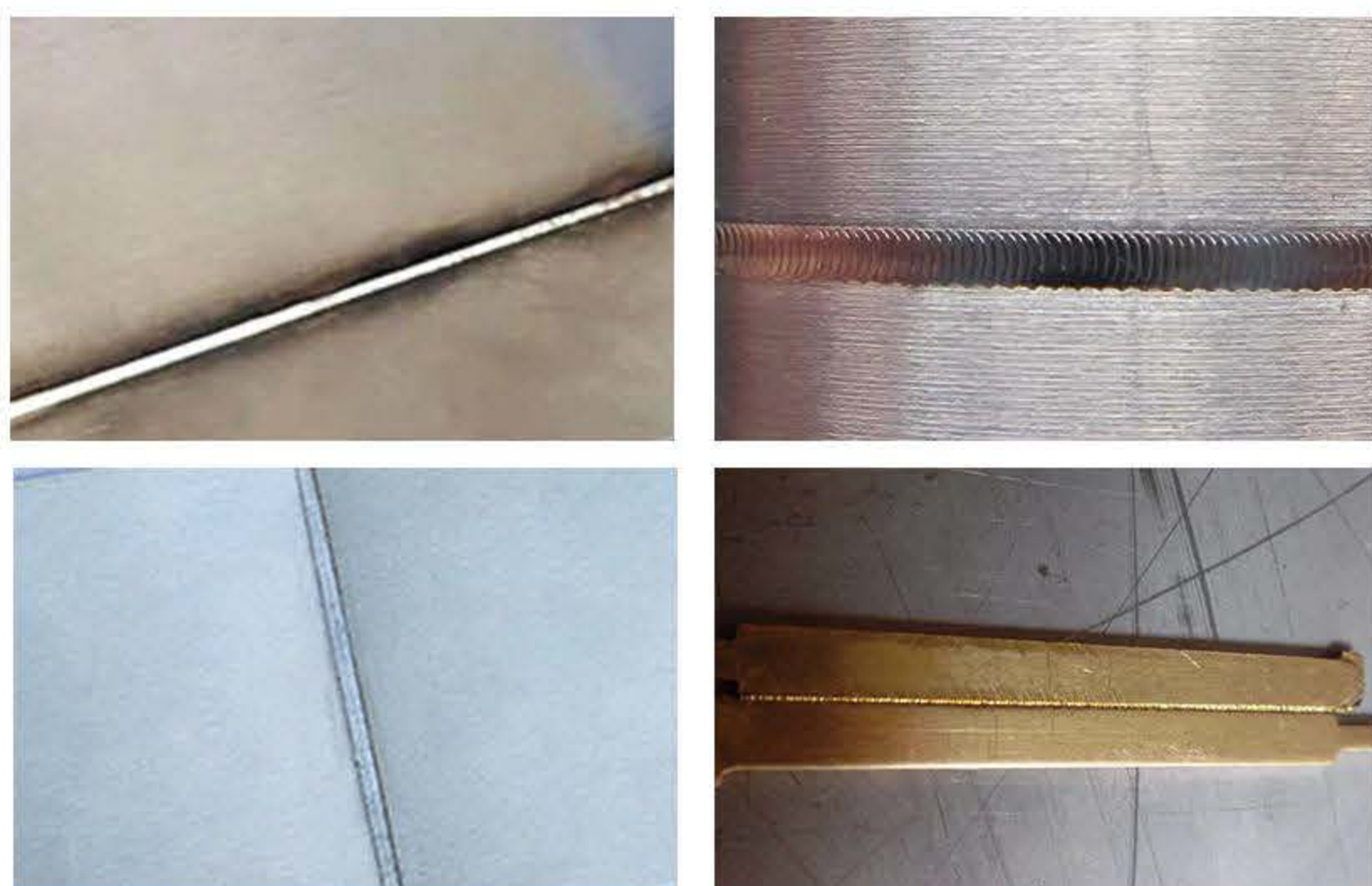
5m / 10m optical fiber

Optional welding wire machine

The welding nozzle can be replaced

Suitable for welding materials

It is applicable to the welding of thick materials, thin materials, high reaction materials and dissimilar metals without wire filling. It can weld metal materials such as stainless steel / carbon steel / aluminum / aluminum alloy / copper / galvanized sheet.



Material Science	Weld thickness reference	
	1500W	2000W
Stainless steel	0.5-5mm	0.5-6mm
carbon steel	0.5-5mm	0.5-6mm
Aluminum and Alloys	0.5-3mm	0.5-5mm
copper	0.3-1mm	0.3-1.5mm



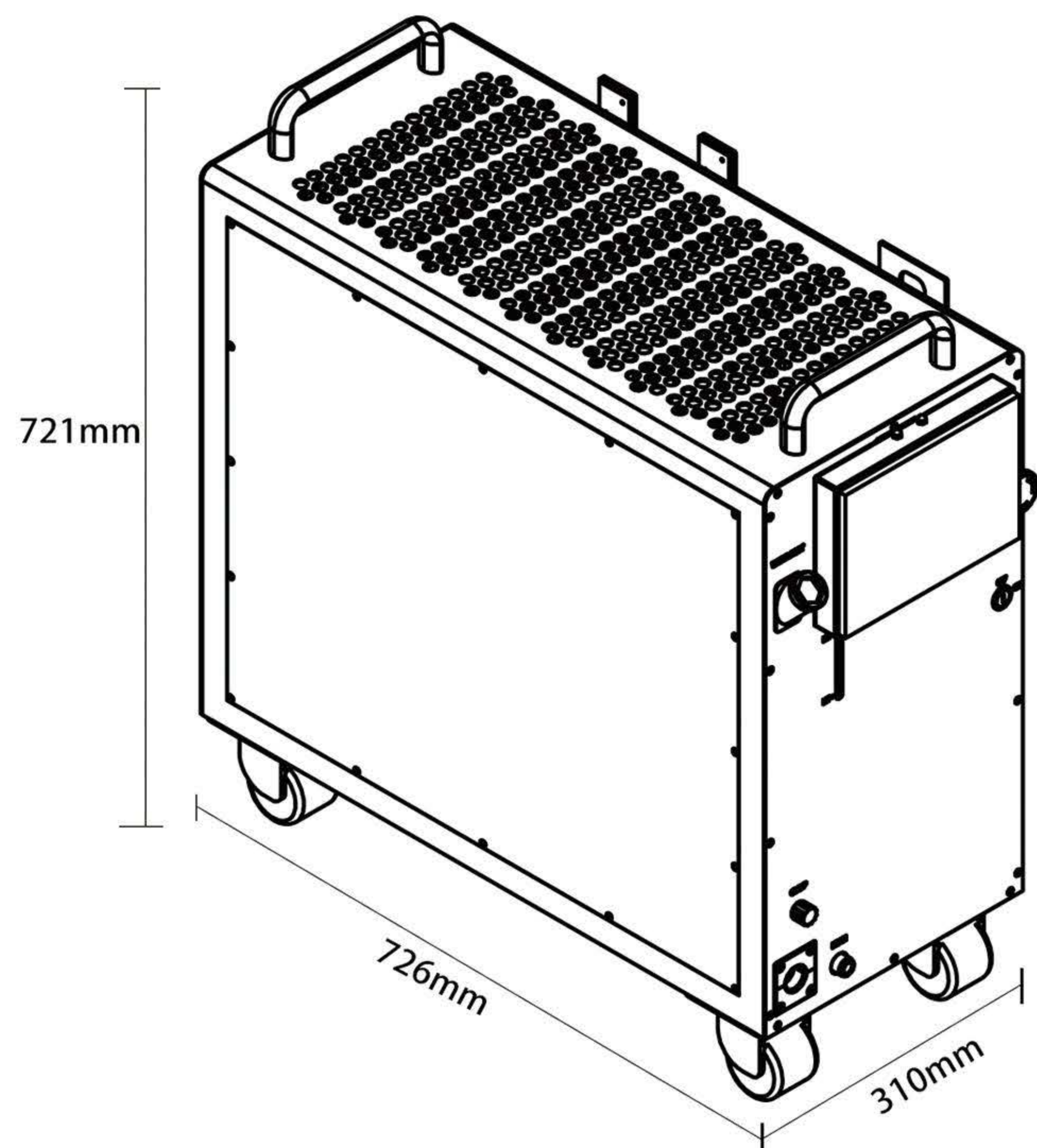
Product technical parameters

MODEL	DT-HW1500-SM	DT-HW2000-SM
Average power (W)	1500W	2000W
Working mode	Continuous/modulation	
Maximum modulation frequency (KHz)	20	
Central wavelength (nm)	1080 (±10)	
Bandwidth 3dB (nm)	<6	
Long term power stability (%)	<3	
Beam quality M ²	<1.3@20um	
Indicated red light power (uW)	>100	
Output mode	Standard QBH	
Optical fiber output core diameter (um)	50 (20/25/100)	
Length of armor cable (m)	5 (Customizable)	
Working voltage (VAC)	220V	
Rated power consumption (kW)	6	7.5
Working ambient temperature (°C)	5~45	
Cooling mode	Internal circulation	
Overall size (mm)	310*726*721	
Net weight (kg)	70±5	80±5

Machine advantages and features

Smaller footprint

The machine has the advantages of flexible and convenient integrated design. The laser and control parts are combined together. It covers a small area and has low requirements for the site. It is equipped with mobile pulley. The station can be adjusted at any time according to the site requirements, which is convenient and flexible. Hand held welding joint, 10 meters of transmission optical fiber can be selected, which breaks through the limitations of the workbench and can reach a wider welding range. It is suitable for all kinds of complex welds, and can carry out laser welding processing on any part and angle of the workpiece.



Internal circulation refrigeration, sustainable and stable light output

Internal circulation refrigeration mode is adopted without external refrigeration; The unique frequency conversion refrigeration technology of Gongda laser can ensure that the handheld welding equipment can work continuously at full power at -20° - 55° , which is compatible with all mainstream welding systems and handheld heads in the market, and can cool the handheld head by an independent waterway. Compared with the pure air-cooled handheld head, the temperature can be controlled lower, the failure rate can be reduced, and the gas consumption can be saved.

Get started quickly and can operate in an hour

Traditional MIG and TIG welding takes a lot of time to master. The LaserDelta handheld laser welding machine is easy to use. It can learn to operate in one hour. The setting is simple and fast. It can achieve consistent high-quality welding effect in the range of various materials and thickness without the need of an old master.

Lower use and maintenance costs

The electro-optic conversion efficiency of CW laser is more than 40%, which is 10 times higher than that of solid-state YAG laser, and the power stability is $\pm 0.5\%$; It is 3-5 times that of argon arc welding, and at least two welders and one grinder can be saved a year. There is no optical lens in the resonant cavity, and the service life of the pump source is more than 100000 hours, which is basically maintenance free.



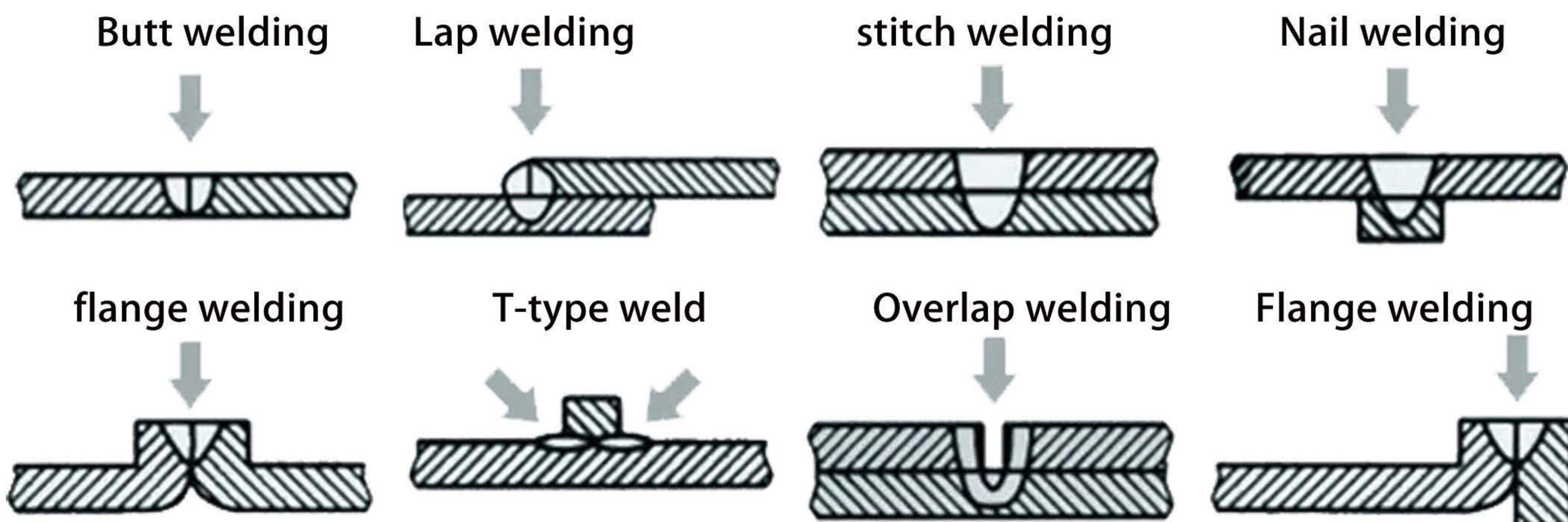
Handheld laser welding



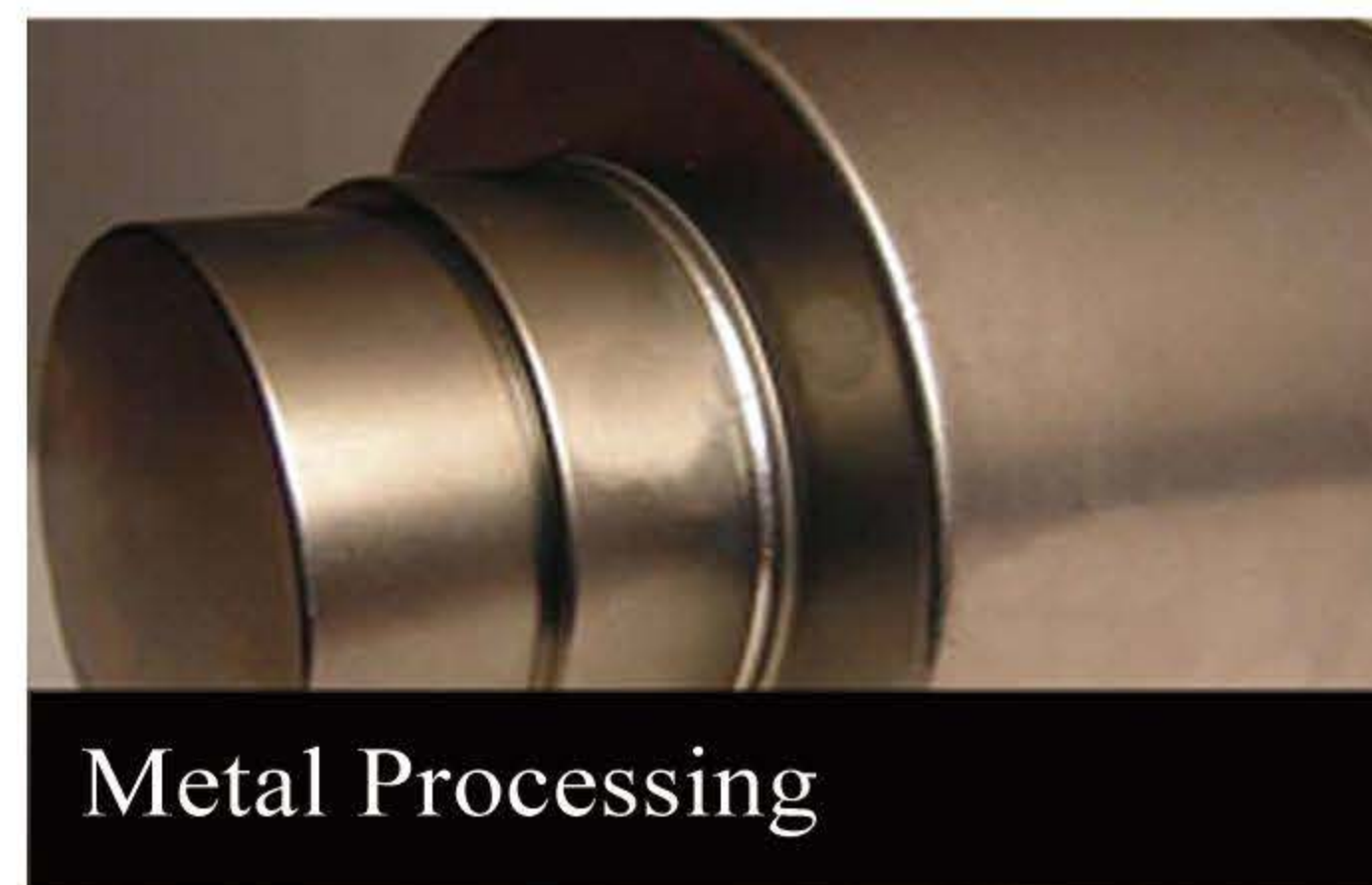
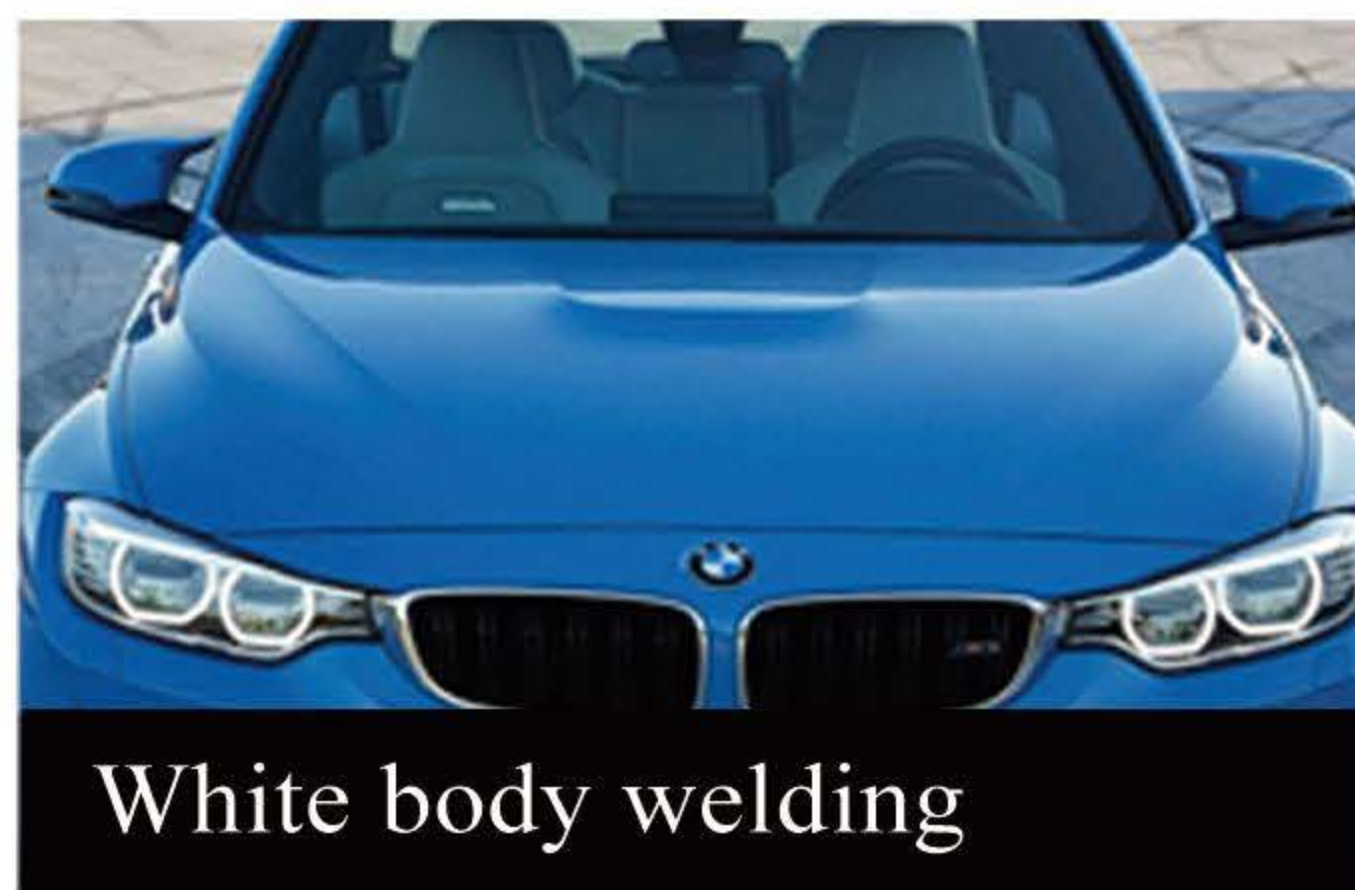
Traditional argon arc welding

Various Welding Methods

It can be used for any kind of angle welding, right angle/right angle/flat angle welding, complex seams/electrical welding of various devices, etc.



Application Industry



深圳市德塔激光科技有限公司

Laser Delta Co.,Ltd

Add:NO.90TH DAYANG ROAD, RENTIAN COMMUNITY, FUHAI STREET,
BAOAN DISTRICT, SHENZHEN, GUANGDONG, CHINA 518103
info@laserdt.com | 0086-135 1042 1114(Mob.\WeChat\WhatsApp)
www.laserdt.com

