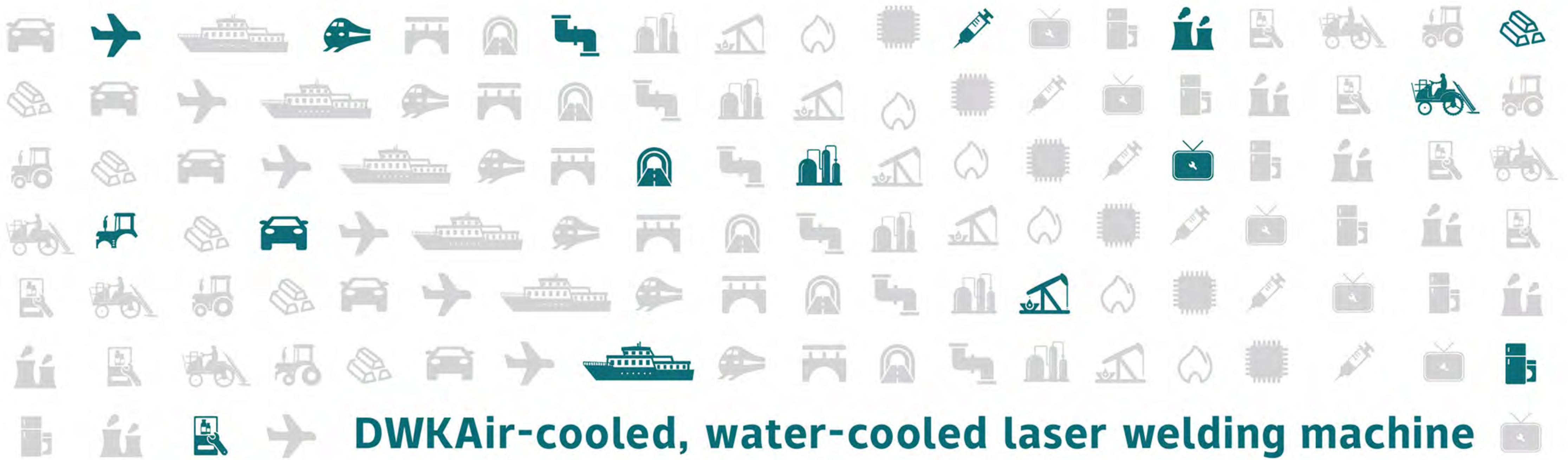


# Handheld Laser Welding Machine



**High Quality Productivity Tools**

**Enhancing Production Efficiency**

## Laser welding machine L-series display / Laser Welding Machine



**DWK laser welding machine(Single wire feeder)**

L3-1200 series

**DWK laser welding machine(Single wire feeder)**

L5-1500 series

**DWK laser welding machine(Single wire feeder )**

L7-2000 series

Standard Built-in single wire feeder design

## Laser welding machine T-series display / Laser Welding Machine



**DWK laser welding machine(Double wire feeder)**

T5-1500 series

**DWK laser welding machine(Double wire feeder)**

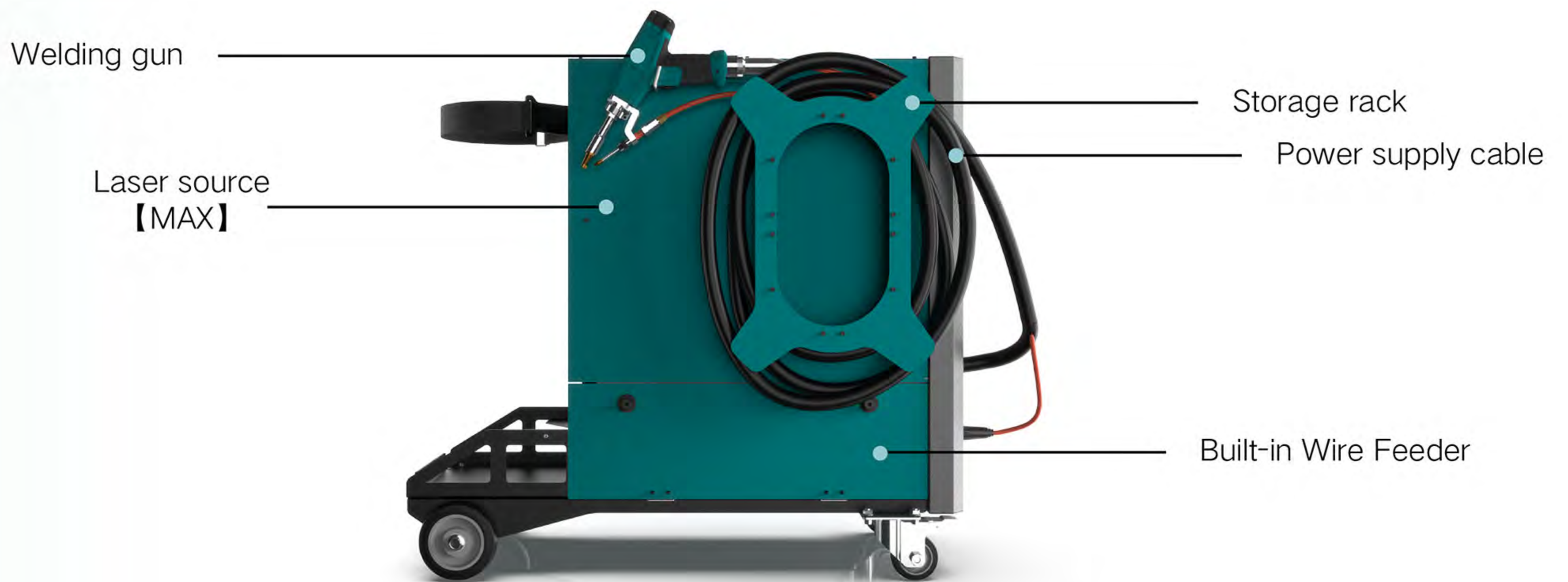
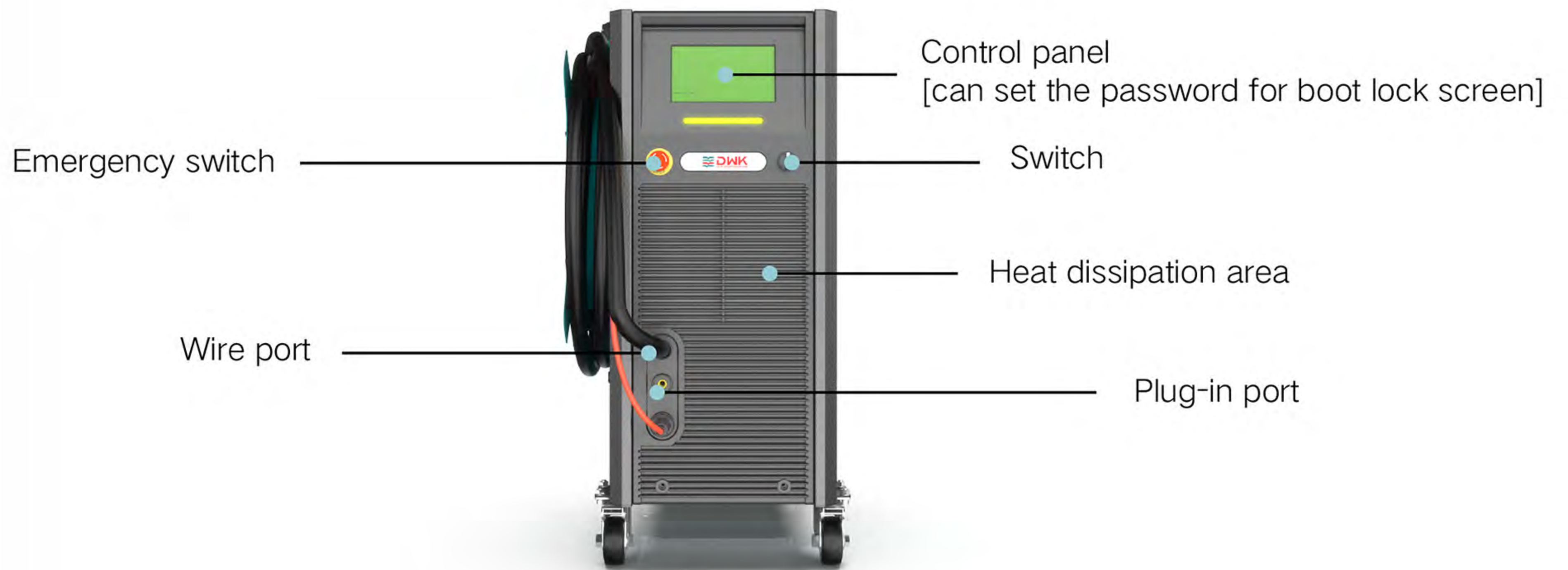
T7-2000 series

**DWK laser welding machine(Double wire feeder)**

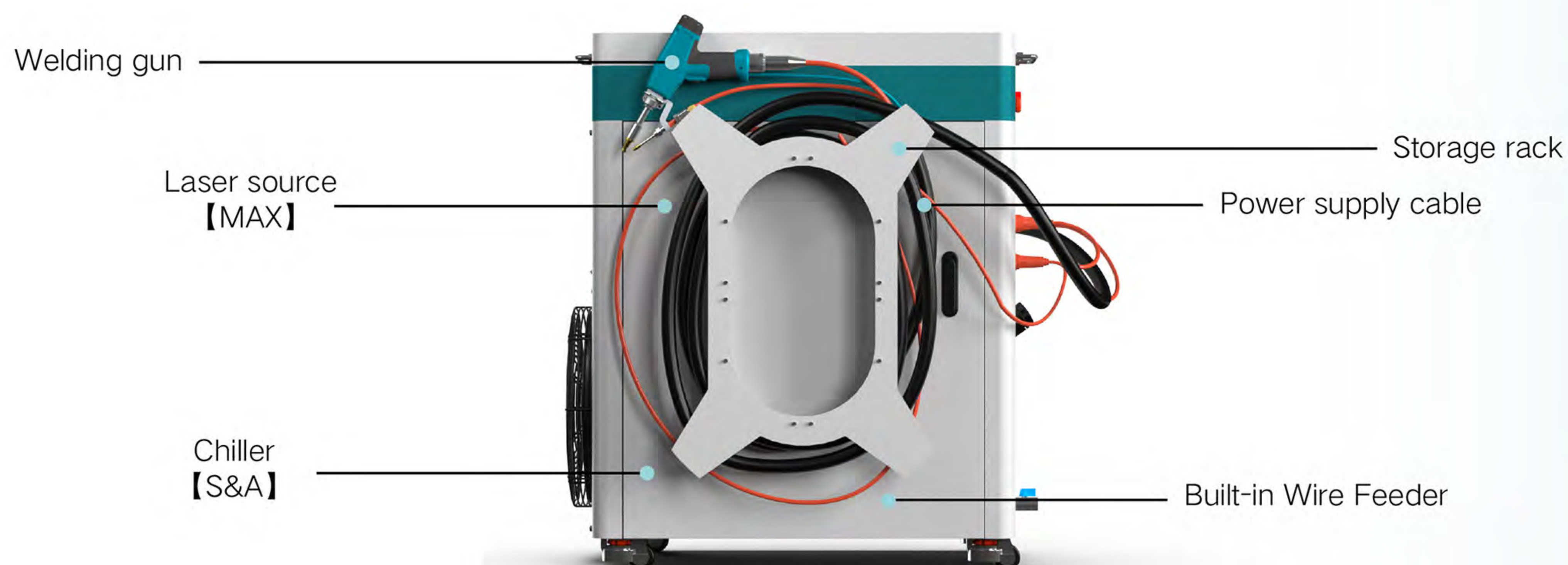
T9-3000 series

Standard built-in double wire feeder design

# Front, side, and rear displays of L-series laser welding machines / Laser Welding Machine



## Front, side, and rear displays of T-series laser welding machines / Laser Welding Machine



## The welding gun is lightweight and has high transmission efficiency

### Easy to operate / Laser Welding Machine

The fully enclosed and interface-free integrated welding gun brings a better welding experience:

Energy loss is reduced, transmission efficiency is high, and welding effect is good;

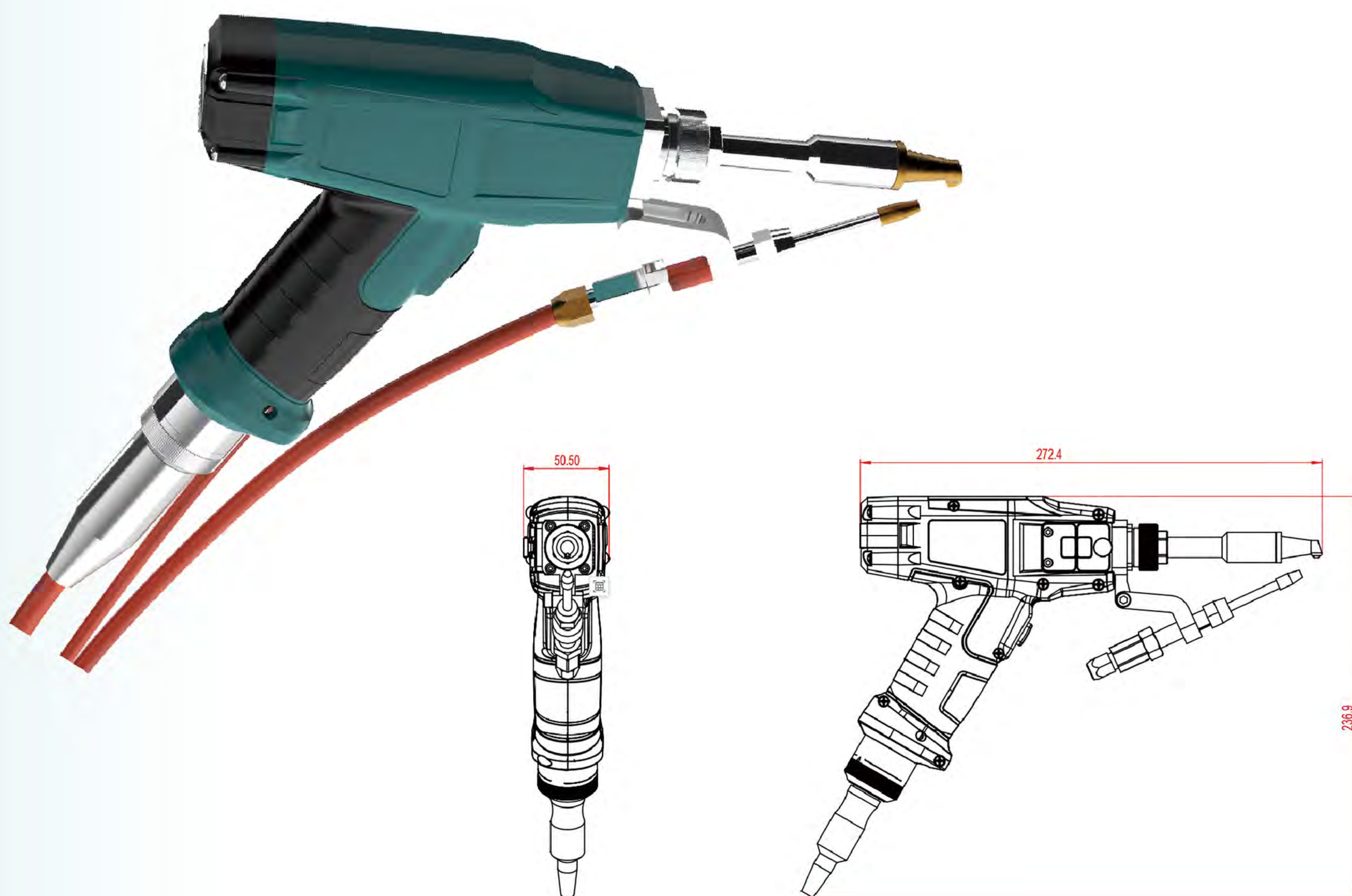
failure probability is reduced and equipment service life is extended;

Ensure uninterrupted normal operation in harsh environments;

configure a unique output air path to effectively suppress splash;

Ergonomic design, 120° turning angle for comfortable grip,

50°~60° scientific wire feeding without fatigue for long time operation.



size : 约272.4mm x 236.9mm net weight :850g

## Scientific design

### Five safety protection / Laser Welding Machine

#### Welding LOOP security

The equipment is equipped with a safety clamp to prevent accidental light emission after lifting the gun.

#### Light warning protection

The welding gun and equipment are equipped with obvious light indicators to provide clear warnings.

#### Air pressure protection

The equipment is equipped with air pressure protection, and light is allowed to emit under normal conditions when the external gas connection is normal.



#### Welding gun temperature protection

The design of the welding gun effectively avoids heat generation and prevents personal injury caused by high temperature.

#### Emergency switch

There is a convenient switch button on the top of the device. When an accident occurs, Convenient to stop the equipment working immediately.



## Innovating traditional arc welding technology

### Effectively improve welding efficiency / Laser Welding Machine

Compare with traditional welding technology

	DWK-Series laser welding machine	Traditional argon arc welding
Welding effect	Neat weld seam	Welding seams need to be polished later
Dissimilar metal splicing	Ok	No
Workpiece deformation	Small	Big
Welding efficiency	The welding efficiency is 2~5 times that of argon arc welding	Energy is not concentrated and efficiency is wasted
Processing technology	High processing precision and controllable welding process	High requirements for welders process operations
Operation difficulty	Small	Big
Filling convenience	Adaptive automatic wire filling	Artificial silk filling
The cost	It only requires general workers to operate, saving labor costs	Requires advanced welder operation
Weld seam forming	Laser welding only requires dragging, and the weld seam is smooth	Relying on manual movements to form fish scale patterns
Physical hazard	The radiation is low and protective glasses can shield the strong light	Requires close observation of arc status Greatly affected by light and heat High risk, high incidence of occupational diseases
Environmental pollution	Little photoelectric pollution and basically no volatile matter Green and safe, more environmentally friendly operation and use	A large amount of heat is converted into smoke and dust very polluted
Welding consumables	Welding can be achieved without filling wire, saving production costs	Welding requires welding rods to maintain welding effect

## Product functions and features / Laser Welding Machine

- There are six types of laser powers available: L series 1200W/1500W/2000W, T series 1500W/2000W/3000W, to meet the different needs of customers
- Multiple welding oscillation modes are available, including O-type, linear, and spot types. The oscillation width can be adjusted within the range of 0.2 to 5mm.
- Utilizing a touchscreen control panel facilitates easy modification of process parameters.
- By utilizing air cooling or water cooling systems, we can simultaneously meet the diverse cooling requirements of both the laser source and welding head, ensuring prolonged stable operation for both components.
- Adding a digital pressure gauge allows for low-pressure alarms, ensuring equipment safety during operation.
- We offer a wide range of peripheral accessories for users to choose from, providing greater versatility and customization options.



## DWK Laser welding machine L&T-series / Laser Welding Machine

### Professional laser welding machine

Launch tool level air-cooled [1200W, 1500W, 2000W] and water-cooled laser machines [1500W, 2000W, 3000W], bringing a new welding technology that is easy, efficient, stable, and reliable

### Stability

Passing high-temperature lifespan tests and eight stability and reliability quality tests are required before factory release.

High-temperature lifespan testing, 100% performance testing, 100% welding testing, high-frequency vibration testing/collision testing.

EMC testing, dust-proof and waterproof IP52 testing, 100% 72-hour burn-in testing, 100 cycles of high and low-temperature cycling testing.

### Portable

Integrated design eliminates the cost and hassle of regular maintenance.

The air-cooled machine requires no water, preventing condensation in summer and freezing in winter. Lightweight with built-in bottom rollers for easy mobility and usage.

### Safety

Reliability testing and protective measures for wiring connections.

Protection gas pressure detection and safety alarm.

Welding gun button switch, laser switch

LOOP Safety lock

Emergency stop button, laser power switch

Alarm light



L-series

T-series

  
 L-Weight  
 ≈75KG  
  
 T-Weight  
 ≈85KG

## Energy-saving effect and penetration depth / Laser Welding Machine

### Neat Welding, welding deeper; truly achieving high penetration depth.

The beam quality is excellent, resulting in greater depth and minimal deformation; the L7-2000W can achieve true penetration welding of 5mm aluminum plates on one side.

### Fast speed and excellent performance; work more efficiently.

Compared to traditional welding, it is 2 to 5 times faster, significantly reducing welding time and improving work efficiency.

### Smart operation; easy to get started.

Self-developed built-in wire feeder, making the work environment tidier, coupled with welding process packages for adaptive wire feeding, enabling a "skill-free" welding experience, even beginners can easily get started.



External wire feeder used by peers

Not portable, weight doubled.



DWK Internal wire feeder (double)

Customizable with either a single internal wire feeder or a double internal wire feeder.

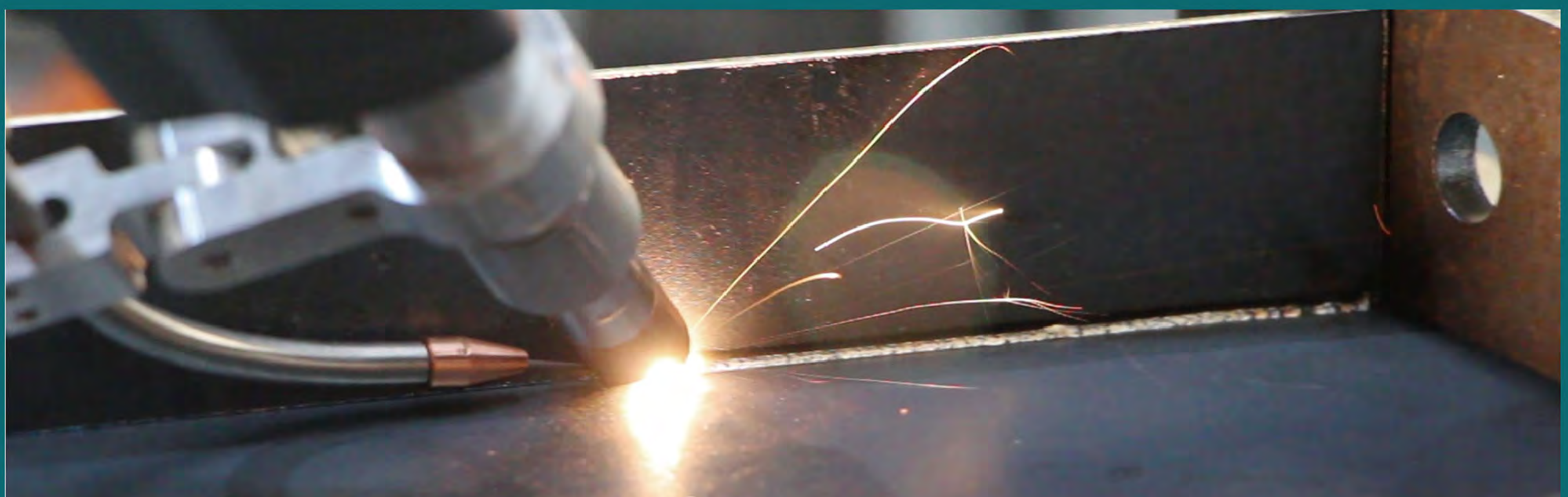
**Good environmental adaptability.**

**High-precision welding for continuous worry-free operation.**

Handheld laser welding machines can provide highly precise welding, whether facing micro-component manufacturing with strict requirements for welding positions and depths.

Regardless of whether it's micro-component manufacturing with strict requirements for welding positions and depths or welding needs in other industry sectors, handheld laser welding machines can continuously work worry-free, providing reliable assurance for the stable operation of production lines. Compared to argon arc welding, laser welding requires less cooling gas, resulting in lower costs.

# Laser Welding Machine



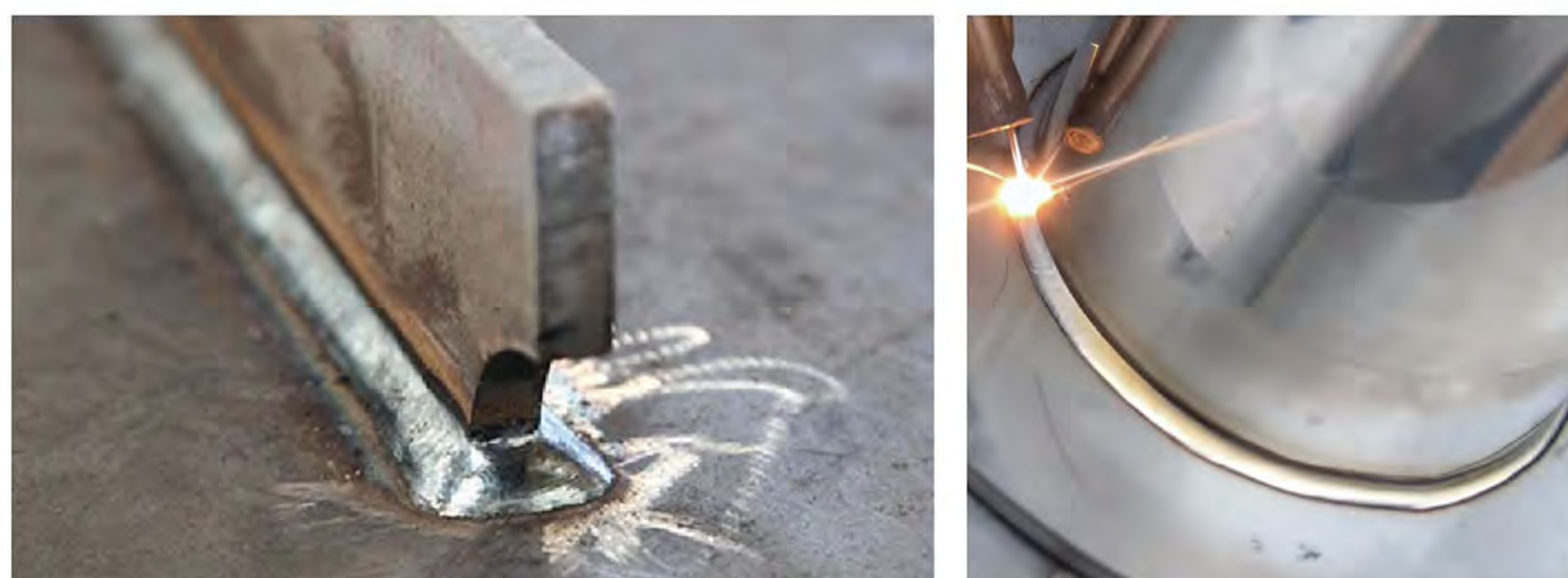
## True intelligence, actual penetration depth, true data / Laser Welding Machine

Building upon precise, effective, and practical preset welding processes within the welder, the wire feeder has truly achieved real-time interconnection with the main unit.

Quickly and intelligently select welding parameters with one button press, automatically matching wire feeding speed, eliminating the need for manual adjustment.

Even beginners can easily and efficiently weld high-quality seams, achieving the desired penetration depth.

### Weld joint



### Application scenarios



Hardware processing



Sheet metal processing



Furniture and appliances



Equipment maintenance



Construction and pipeline processing



Advertising, household appliances, and other applications

## DWK Laser welding machine L-series

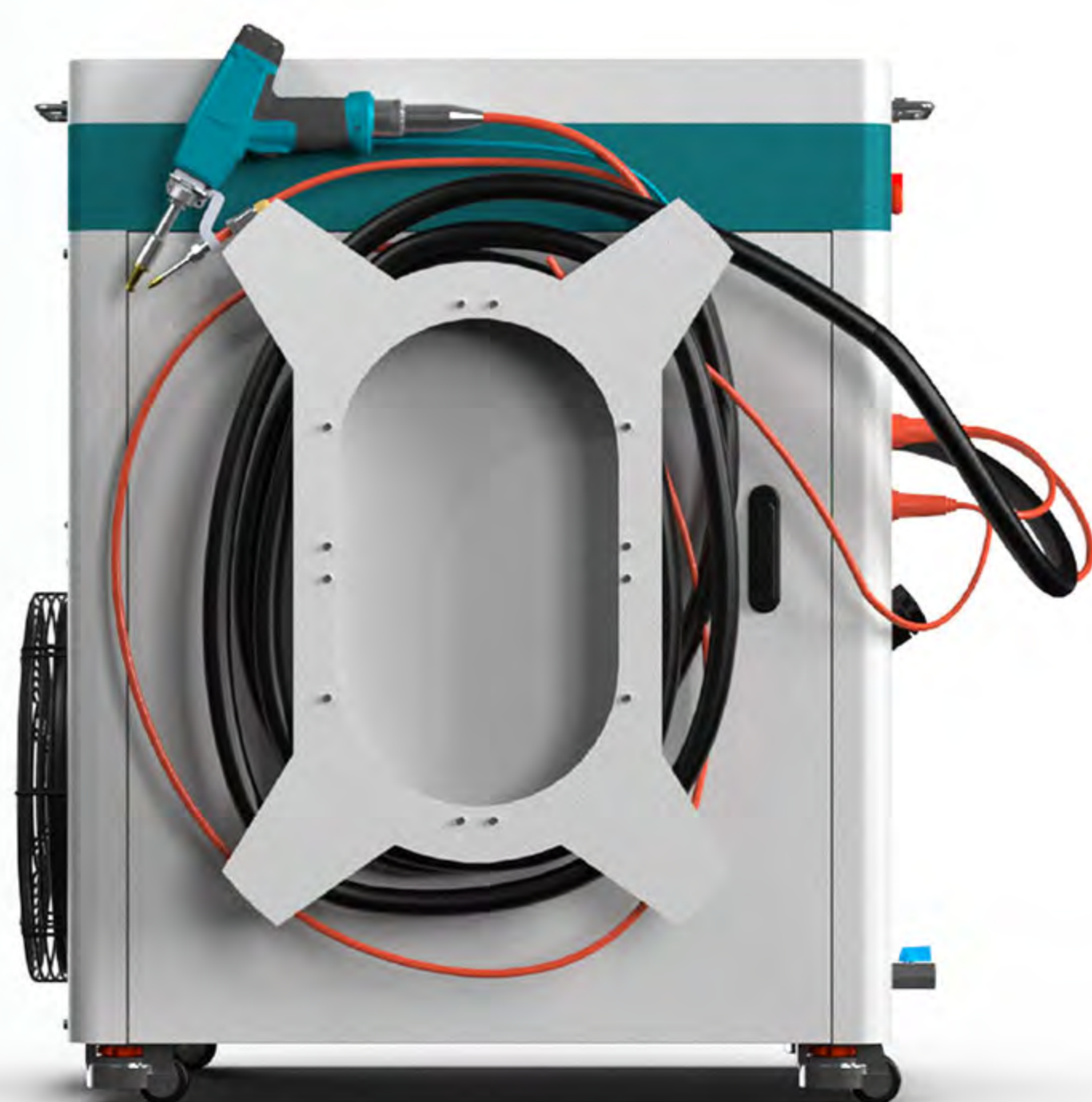
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Parameter configuration	L3-1200	L5-1500	L7-2000
Overall dimensions	900x395x840	900x395x840	900x395x840
Overall weight	≈75KG		≈85KG
Storage temperature	-10°C-60°C	-10°C-60°C	-10°C-60°C
Operating voltage	220V±10%	220V±10%	220V±10%
Operating frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Rated output power	1200W	1500W	2000W
Maximum output power	1230W	1530W	2030W
Maximum power	4.5KW	4.5KW	5.5KW
Supply voltage	220V	220V	220V
Operating mode	Continuous/modulated		
Center wavelength	1070	1070	1070
Power adjustment range	10~100	10~100	10~100
Output power fluctuation	2	2	2
Excellent beam quality	< 1.1	< 1.1	< 1.1
Power consumption	≤2200(DC48V 46A)	≤2200(DC48V 46A)	≤2200(DC48V 46A)
Cooling method	Air-cooled	Air-cooled	Air-cooled
Operating temperature	-10°C~40°C	-10°C~40°C	-10°C~40°C
Operating humidity	< 70%	< 70%	< 70%
Output interface	QBH or QCS	QBH or QCS	QBH or QCS
Cable bending radius	3~5(Customizable)	3~5(Customizable)	3~5(Customizable)
Output cable length	> 15	> 15	> 15
Output fiber core diameter	25	25	25
Light emission mode	Continuous or discontinuous		
Control method	Touch screen/buttons/knobs		
High power stability	< 2%	< 2%	< 2%
Continuous power adjustable fast switching response	10us	10us	10us
Electro-optical conversion efficiency	> 30%	> 30%	> 30%
Modulation frequency	50Khz	50Khz	50Khz
Fiber optic cable length	5M、8M、10M		
Required gas pressure	≤0.7	≤0.7	≤0.7

 Equipped with mild cleaning and cutting functions (three-in-one).

## DWK Laser welding machine T-series



Parameter configuration	T5-1500	T7-2000	T9-3000
Overall dimensions	900x395x840	900x395x840	1050x445x840
Overall weight	≈75KG	≈85KG	
Storage temperature	-10°C-60°C	-10°C-60°C	-10°C-60°C
Operating voltage	220V±10%	220V±10%	220V±10%
Operating frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Rated output power	1500W	2000W	3000W
Maximum output power	1530W	2030W	3030W
Maximum power	4.5KW	5.5KW	6.5KW
Supply voltage	220V	220V	220V
Operating mode	Continuous/modulated		
Center wavelength	1070	1070	1070
Power adjustment range	10~100	10~100	10~100
Output power fluctuation	2	2	2
Excellent beam quality	< 1.1	< 1.1	< 1.1
Power consumption	≤2200(DC48V 46A)	≤2200(DC48V 46A)	≤2200(DC48V 46A)
Cooling method	Water-cooled	Water-cooled	Water-cooled
Operating temperature	-10°C~40°C	-10°C~40°C	-10°C~40°C
Operating humidity	< 70%	< 70%	< 70%
Output interface	QBH or QCS	QBH or QCS	QBH or QCS
Cable bending radius	3~5(Customizable)	3~5(Customizable)	3~5(Customizable)
Output cable length	> 15	> 15	> 15
Output fiber core diameter	25	25	25
Light emission mode	Continuous or discontinuous		
Control method	Touch screen/buttons/knobs		
High power stability	< 2%	< 2%	< 2%
Continuous power adjustable fast switching response	10us	10us	10us
Electro-optical conversion efficiency	> 30%	> 30%	> 30%
Modulation frequency	50Khz	50Khz	50Khz
Fiber optic cable length	5M、8M、10M		
Required gas pressure	≤0.7	≤0.7	≤0.7

 Equipped with mild cleaning and cutting functions (three-in-one).

**L3-1200W Laser welding machine - Welding parameters [Air-cooled (MAX laser source)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	3mm	2mm	2mm	2mm
double side welding penetration	5.4mm	3.6mm	3.6mm	3.6mm

**L5-1500W Laser welding machine - Welding parameters [Air-cooled (MAX laser source)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	4mm	3mm	3mm	3mm
double side welding penetration	7.2mm	5.4mm	5.4mm	5.4mm

**L7-2000W Laser welding machine - Welding parameters [Air-cooled (MAX laser source)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	5mm	4mm	4mm	4mm
double side welding penetration	9mm	7.2mm	7.2mm	7.2mm

**T5-1500W Laser welding machine - Welding parameters [Water-cooled (S&A Chiller)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	4mm	3mm	3mm	3mm
double side welding penetration	7.2mm	5.4mm	5.4mm	5.4mm

**T7-2000W Laser welding machine - Welding parameters [Water-cooled (S&A Chiller)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	5mm	4mm	4mm	4mm
double side welding penetration	9mm	7.2mm	7.2mm	7.2mm

**T9-3000W Laser welding machine - Welding parameters [Water-cooled (S&A Chiller)]**

Welding material	Stainless steel	Carbon Steel	Galvanized Sheet	Aluminium
single side welding penetration	6mm	5mm	5mm	5mm
double side welding penetration	10.8mm	9mm	9mm	9mm



## Packing list

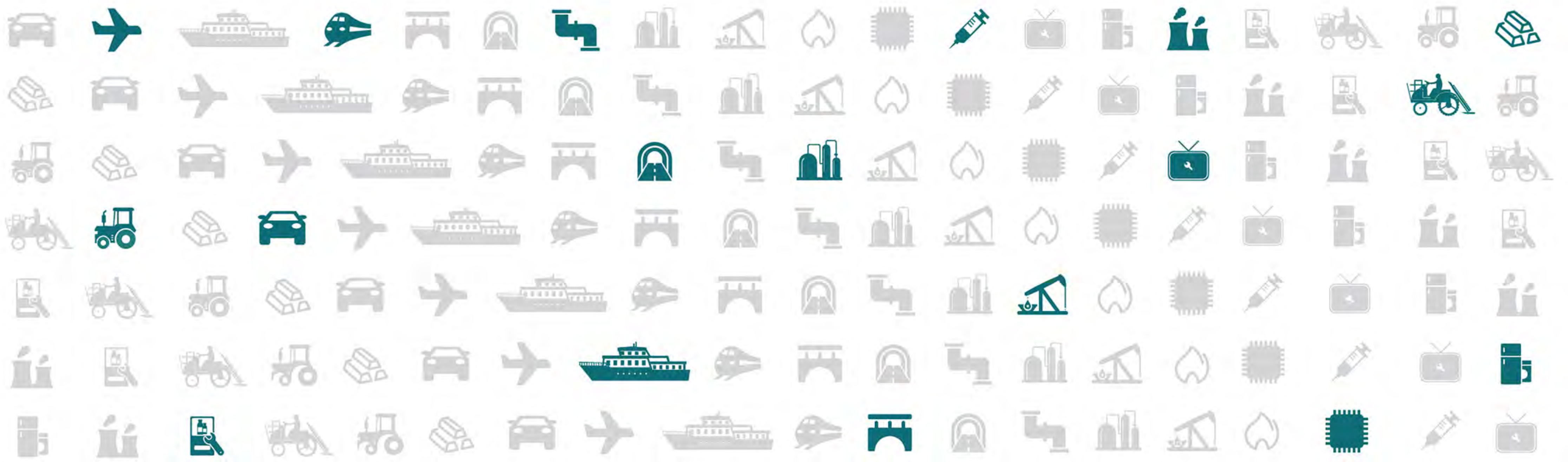
Item	Handheld laser welding machine	User manual	Power cable	Wire feeder	Safety holding line	Safety goggles	Protective gloves	Accessory box
Quantity	1PCS	1PCS	1PCS	1PCS	1PCS	1PCS	1PCS	1PCS

This manual is for reference only. Please refer to the actual configuration for specific details.

## Accessory products

Item	Nozzle accessory box	Protective lens	8M wire feeding hose	Lens cleaning kit	3M Goggles
Pictures					
Quantity	1PCS	1PCS	1PCS	1PCS	1PCS

Each equipment comes with a complete set of accessory products.



## **Biaozhi Machine Tool (Tianjin) Co.,Ltd.**

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