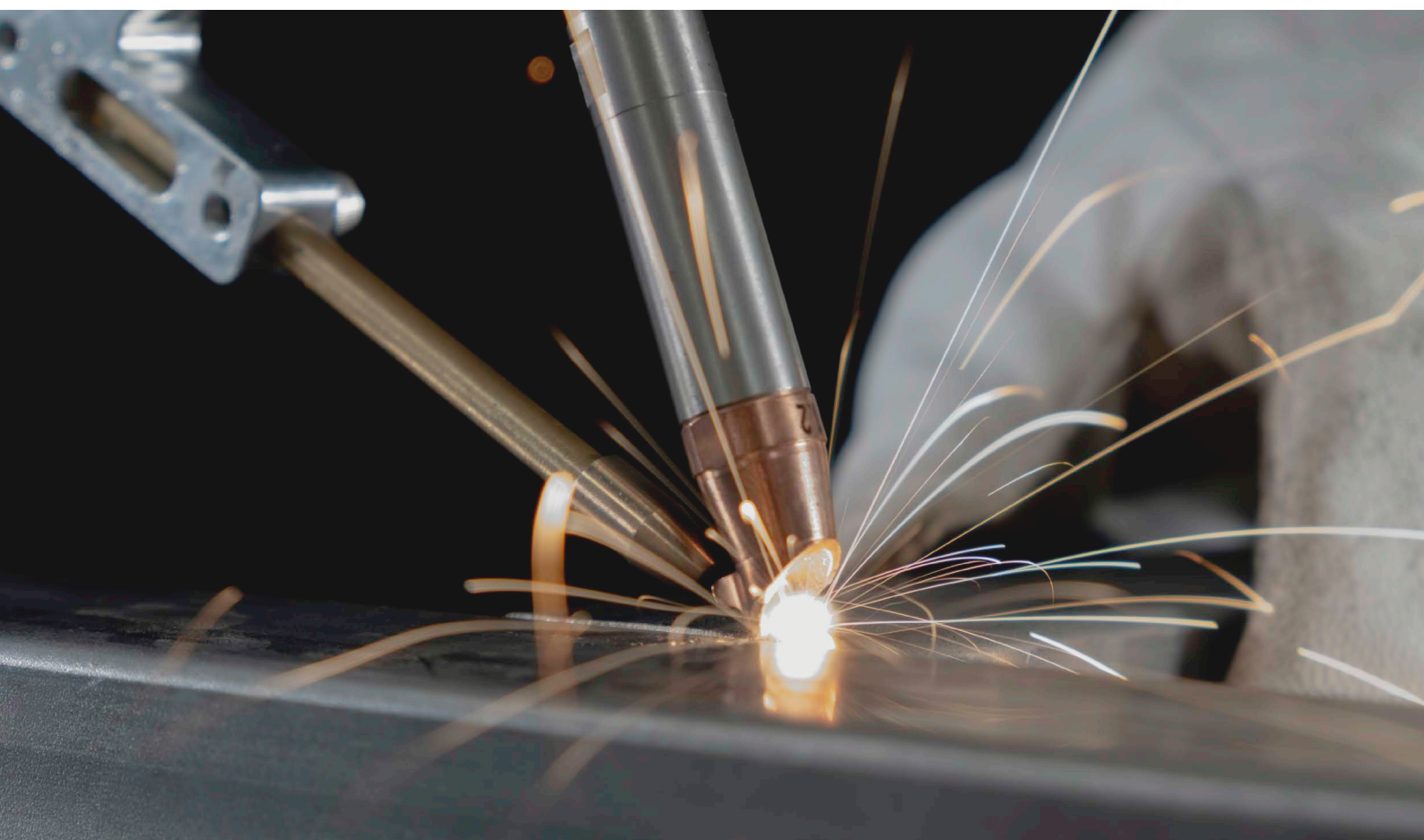

Laser welding



Company

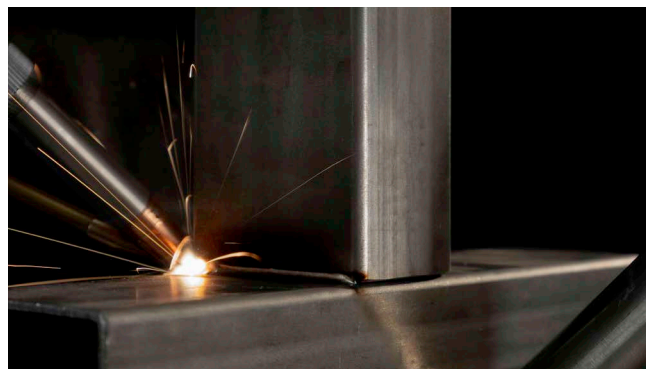
LC is a leader in laser technology, we develop all kinds of solutions for industries and businesses.

We have a qualified team with big experience in laser and eco-efficient technologies.

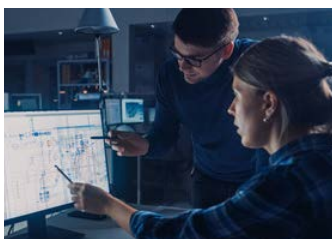
We are a company committed to industrial productivity, energy efficiency and taking care of the environment.

Our biggest goal is to make laser technology accessible worldwide, we want to share our knowledge and make the job as easy as possible.





Manufacturing Laser Technology



Analysis

Day by day we work to give our clients the best service. We want that every laser equipment is the most suitable for every case. LC is committed to offer the best option in the laser technology world, we will advise you so you can make the perfect decision. We offer 100% personalized solutions to each client.



Production

LC produces laser equipment in our facilities, to provide a faster, more efficient and higher quality service. Thanks to our production system we can ensure every detail is perfect and our machines are ready to work.



Quality

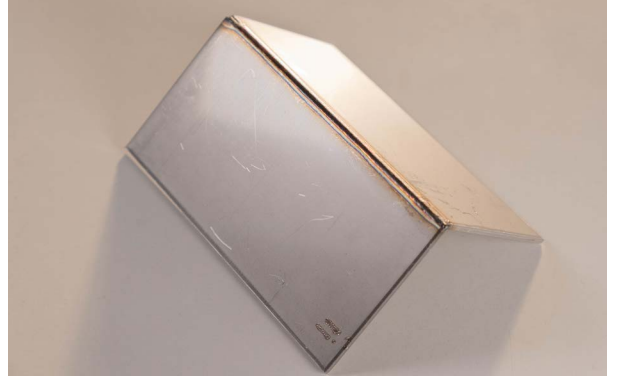
Our components are top from brands so that your laser equipment works 100% from the first moment. We work with a rigorous system to improve controls and ensure the best performance of the equipment.



After-sales service

We offer a comprehensive 2.0 after-sales service, with phone attention, mail and videocall assistance. We have qualified technicians who provide training online and face-to-face, in addition to offering a technical service thoroughfull and fast. We aim to offer the fastest and effective solution as possible aim.

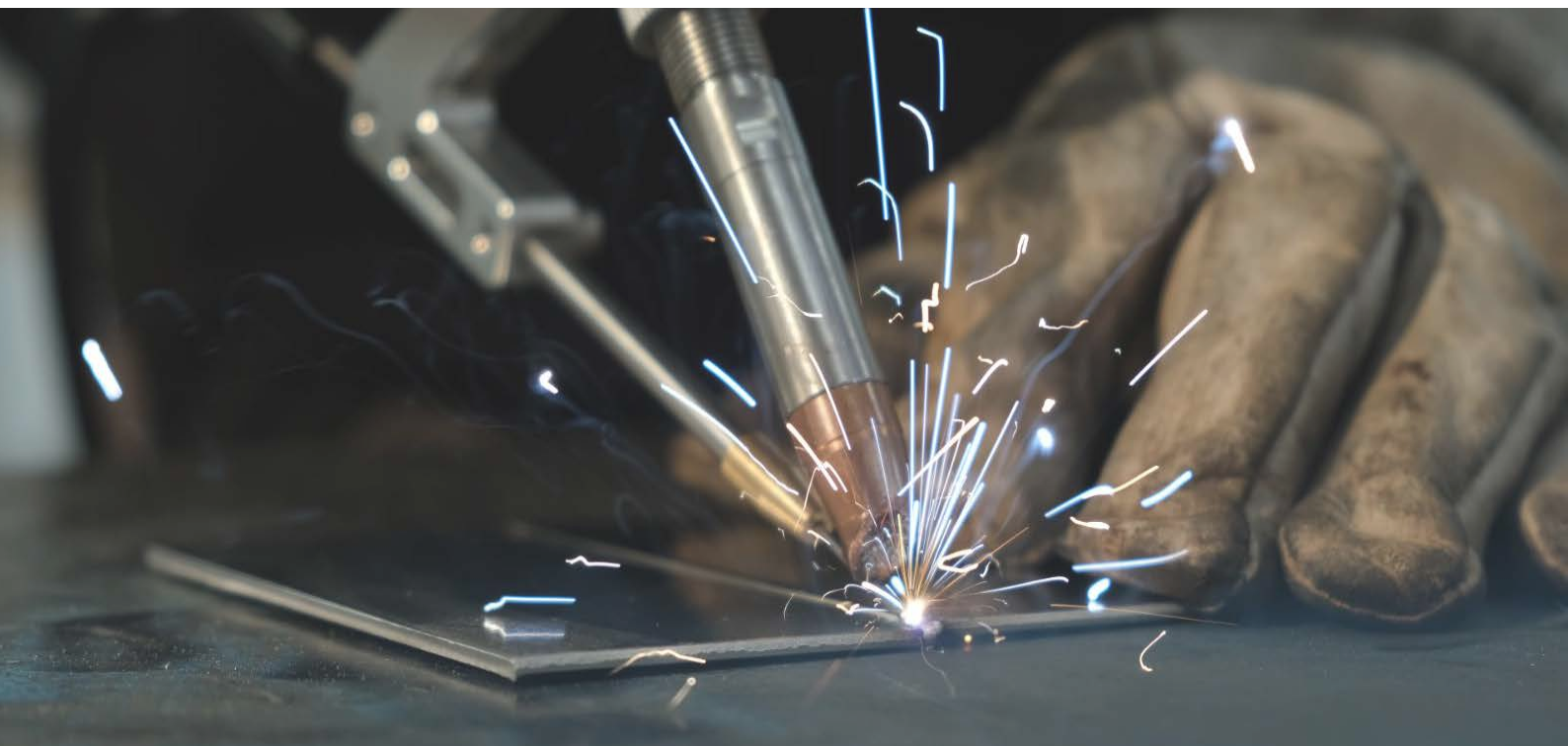




Is a highly versatile laser technology and can be applied in cutting and engraving, laser marking, and cleaning. [Laser welding](#) is increasingly used in different industries and with many metal surfaces, stainless steel or other welding processes. It can substitute traditional arc welding, electric welding on stainless steel plate, iron plate, aluminum plate, and other materials welding.

The laser welding machine has a fiber laser and is designed to be easy and comfortable to use, it has an interactive integrated control system that can vary the finish, depth and width of the weld, depending on the work to be done. depending on the surface.

Laser Type and Technology



1 Speed and precision

2 Minimal deformation

3 Simple use, not much experience required

Our laser welding equipment uses the latest generation of fiber lasers, equipped with a system for laser welding. This equipment is easy to use, with a fine, high-speed welding line and the possibility of not using consumables.

Fiber laser welding can be used on surfaces such as stainless steel plates, carbon steel or galvanized plates. This allows to replace the arc welding system. It has an interactive integrated control system that enables to vary the finish, depth and width of the weld, depending on the work to be done and

depending on the surface to be welded.

In addition, laser welding can reach high speeds, with very fast welds. The deformation in this type of welding is minimal and with the laser welding, making it extremely easy to use.

Also there is low smokes generation, the possibility of working very small and detailed seams, not using consumables, it eliminates the need to polish later, allows endings without discoloration and does not leave weld marks.



Laser welding machines

Our laser welding equipment is comfortable and easy to use and offers great versatility.



Integrated feeder

Automatic material supply system integrated inside the machine. Option of having the feeder not integrated (separate and mobile suitcase).

High security

Alarm system. Automatic lights for high security.

Touch screen

7 inch touch screen with quick and easy operation.

Laser Quality

High stability and durability laser (100,000h).

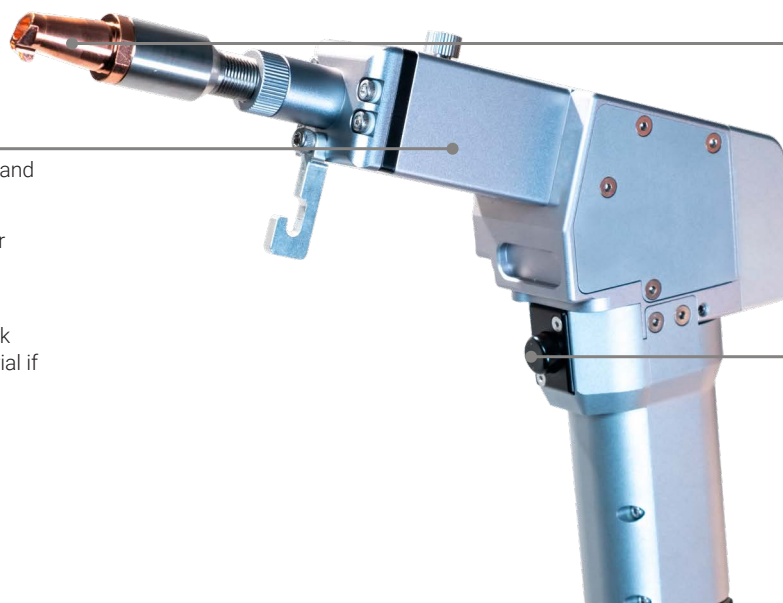
Wheels with brakes

Easy to move around.

Welding gun

Practical, easy to use and maneuverable

- Oscillating mirror gun for perfect welding.
- Possibility to work with filling material if necessary.



Interchangeable nozzle

Possibility of changing the laser nozzles to do different types of welds.

One-click operation

Easier to work with.

General characteristics

Control

Attractive design system with a wider range control system.

Automatic contribution

Option to work with contribution through an automated wire feeding system.

Comfort

Design of reduced weight, comfortable and easy to operate, to work easy and comfortable.

Great depth

The different LC models can reach up to 5mm of welding depth.

Saving

Savings in electricity consumption, working hours, gas and contribution material.

Clean welding

Fast welding, no consumables, clean and no discoloration.

Easy use

This laser machine requires less experience from the welder than classic welding equipment.

Speed

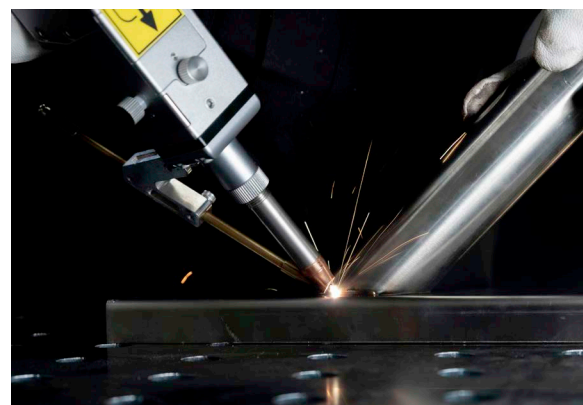
Welding speed from 0-120mm/s.

Precision

Laser welding allows working very small and detailed seams.

Great versatility

The same machine can be used in many types of jobs, since the range, angle and width of the weld can be varied.



Continuous wave laser

We use a continuous wave (CW) laser that gives better results, compared to other lasers such as quasi continuous (QCW):

- Higher speed
- Less deformation
- More depth
- Better finish



Models

LC-SL2000W	2000W Welding depth 0.5-5mm
LC-SL1500W	1500W Welding depth 0.5-4mm
LC-SL1000W	1000W Welding depth 0.5-3mm

Materials



Table of Materials

	WELD
Stainless steel	✓
Galvanized steel	✓
Aluminum	✓
Titanium	✓
Carbon steel	✓

1
Minimal
deformation

2
Elimination of the
grinding process

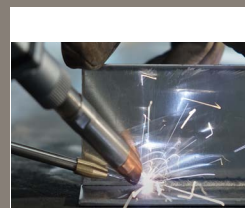
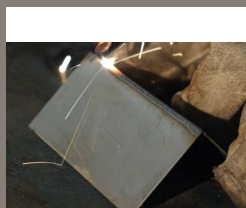
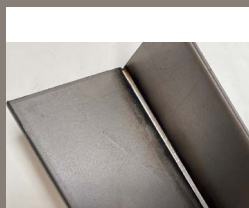
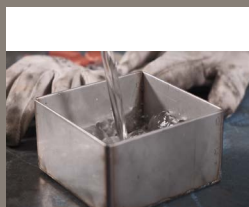
3
More penetration
range




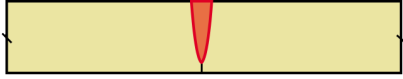
Applications and Industry

Laser welding has little thermal zone affected when working, being able to exercise different joining and welding techniques.

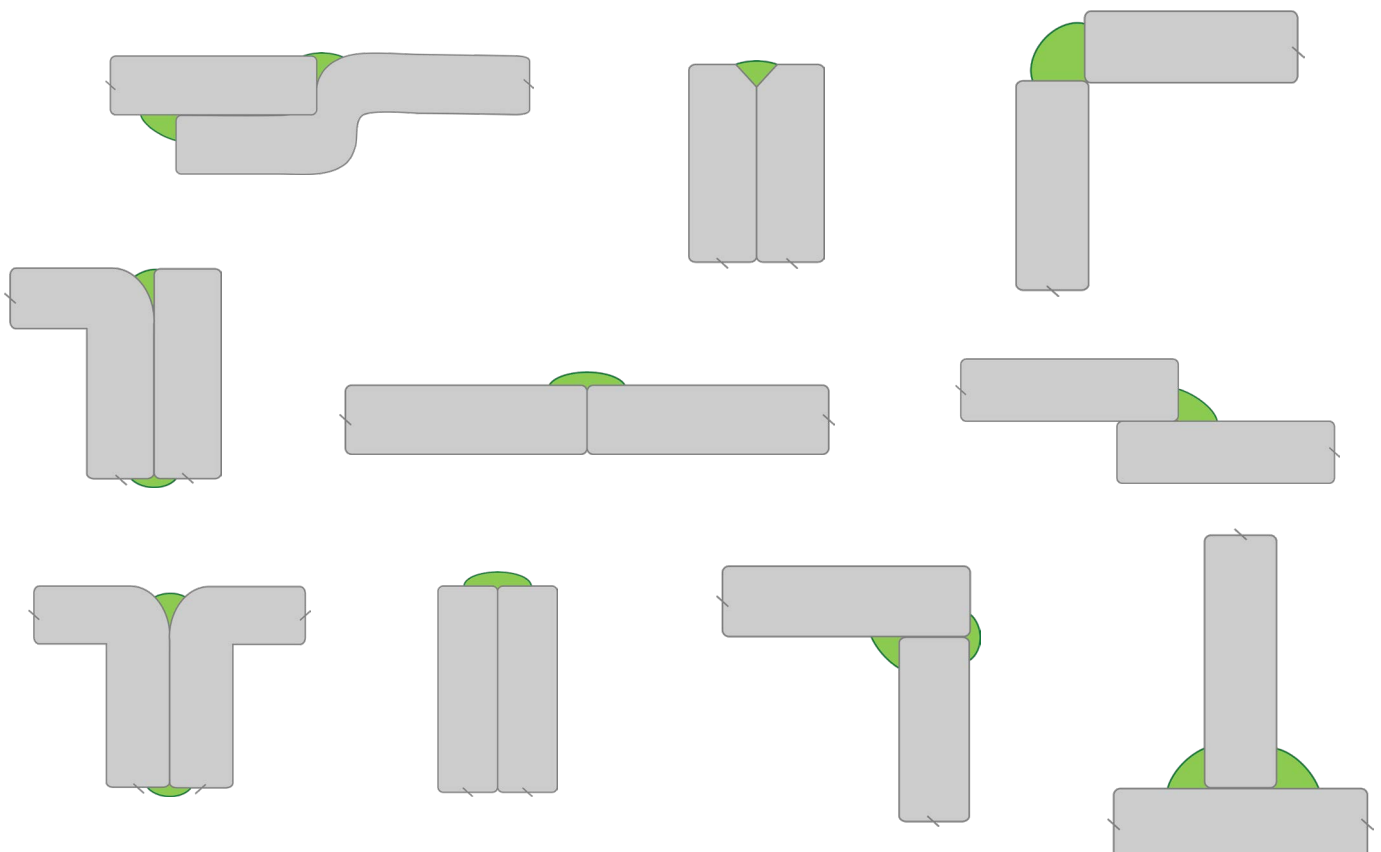
Laser welding machinery has great versatility, especially due to its wide penetration range and laser power. Applications of laser welding equipment: electronics, automotive parts, veneer, metal furniture, some parts of household appliances, tubes and pipes, metal tools, containers for different industries, food industry (machinery, packaging or blades cutting), titanium and aluminum parts, ...



Comparing processes

	TIG	LASER
		
PENETRATION	1.0-1.5mm	Up to 5mm
SPEED	Slow welds	Really fast welds
DISTORTION	Big deformations	Minimal deformation
REQUIREMENTS	Welder with high experience required	Great experience is not required

Joint configurations



Technical information

	LC-SL1500W
Laser power	1500W
Voltage	220v
Consumption	<8kW
Welding depth	0.5-4mm
Operating system	Continuous
Wavelength	1070nm
Laser frequency	50Hz-20KHz
Air humidity	10-90%
Power stability	2%
Refrigeration system	Double controlled water refrigeration
Temp. of cooling water	22-29°C
Welding speed	0-60mm/s
Fiber cable length	Until 15m
Size	1200x1100x700 Aprox
Weight	140kg





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