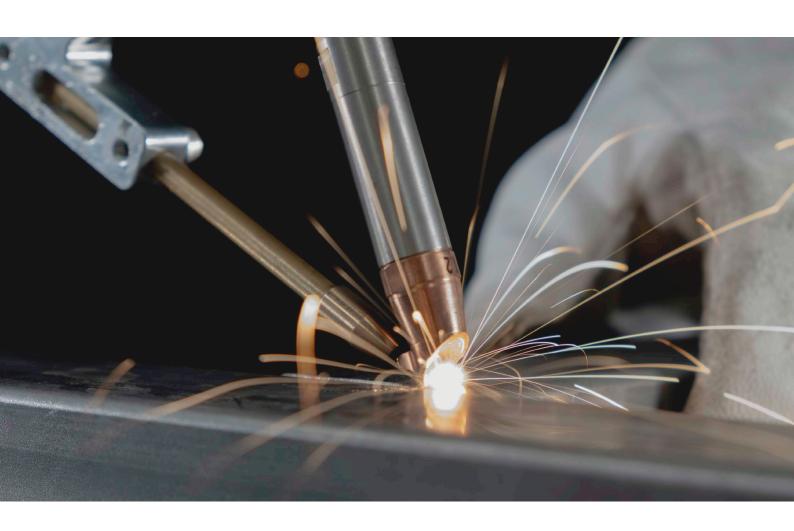
Laser welding





Company

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

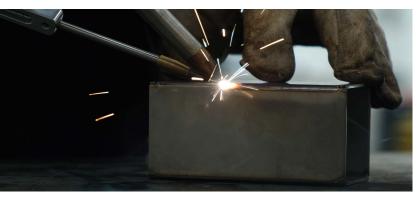
We have a qualified team with big experience in laser and eco-efficient technologies.

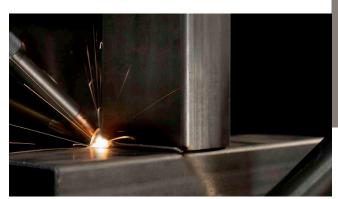
We are a company committed to industrial productivity, energy efficiency and taking care of the environment.

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 comitted 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

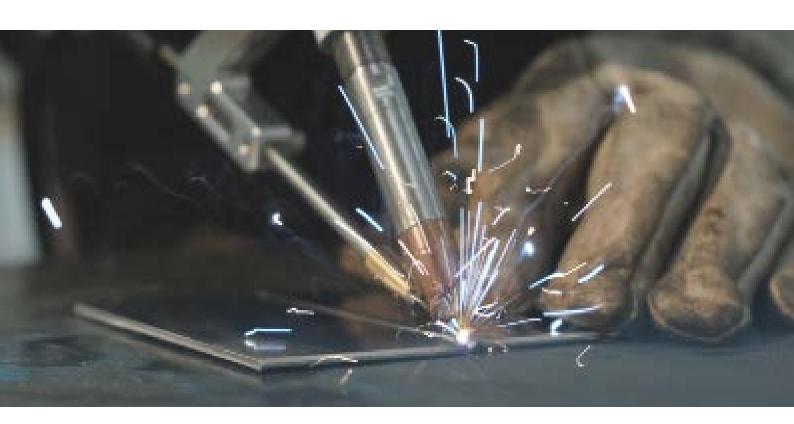
We offer a comprehensive 2.0 after-sales service, with phone attention, mail and videocall assistance. We have qualified technicians who provide training online and face-to-face, in addition to offering a technical service thoroughfull and fast. We aim to offer the fastest and effective solution as possible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

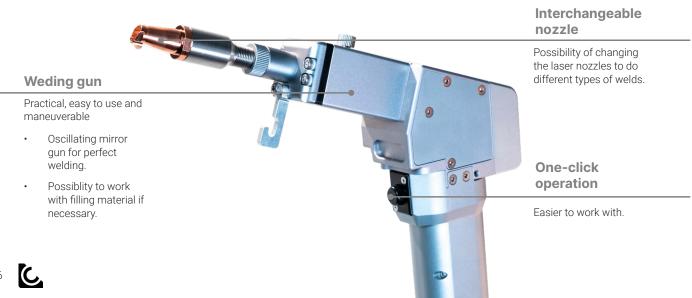
Also there is low smokes generation, the possibility of working very small and detailed seams, not using consumables, it eliminates the need to polish later, allows endings without discoloration and does not leave weld marks.



Laser welding machines

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





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.

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

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.





Models

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

Materials









Table of Materials

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Minimal deformation

Elimination of the grinding process

More penetration range







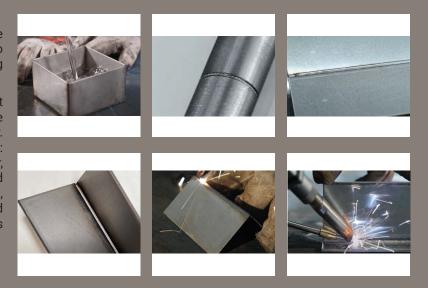




Applications and Industry

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

V

PENETRATION

1.0-1.5mm

Up to 5mm

SPEED

Slow welds

Really fast welds

DISTORTION

Big deformations

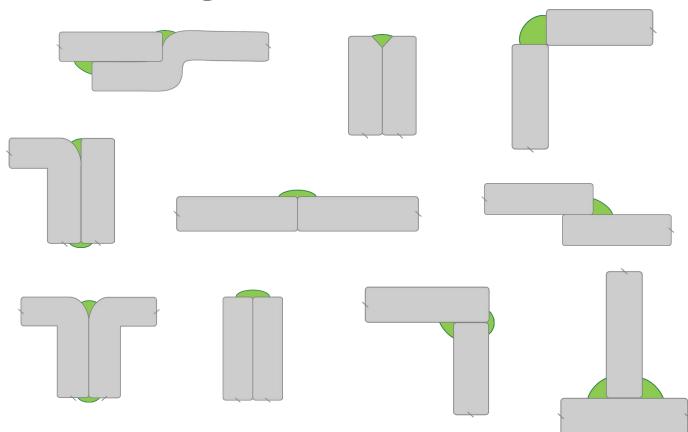
Minimal deformation

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	Continous	
Wavelength	1070nM	
Laser frequency	50Hz-20KHz	
Air humidity	10-90%	
Power stability	2%	
Refrigeration system	Double controled 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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