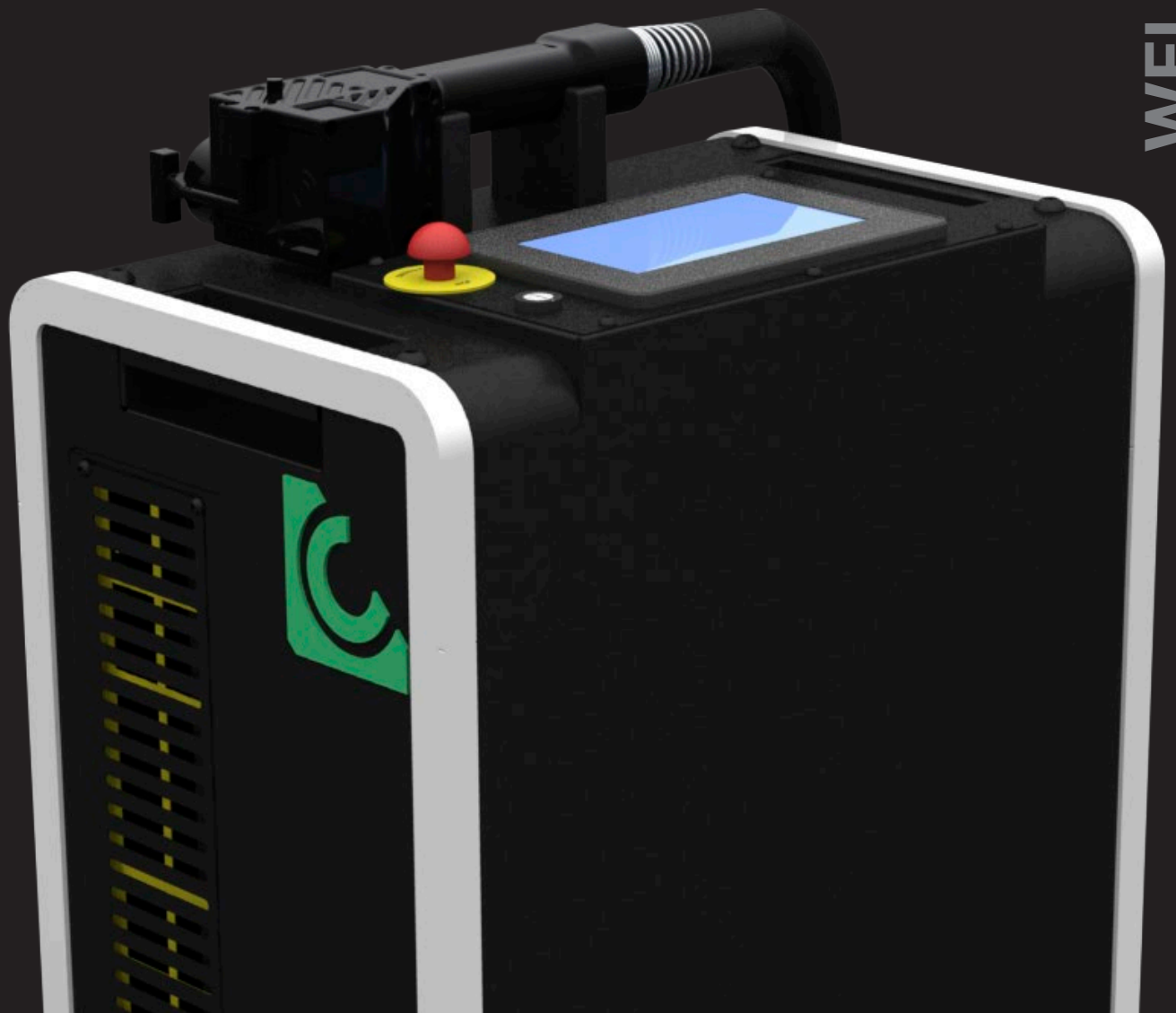




LC-CLEAN P
300W

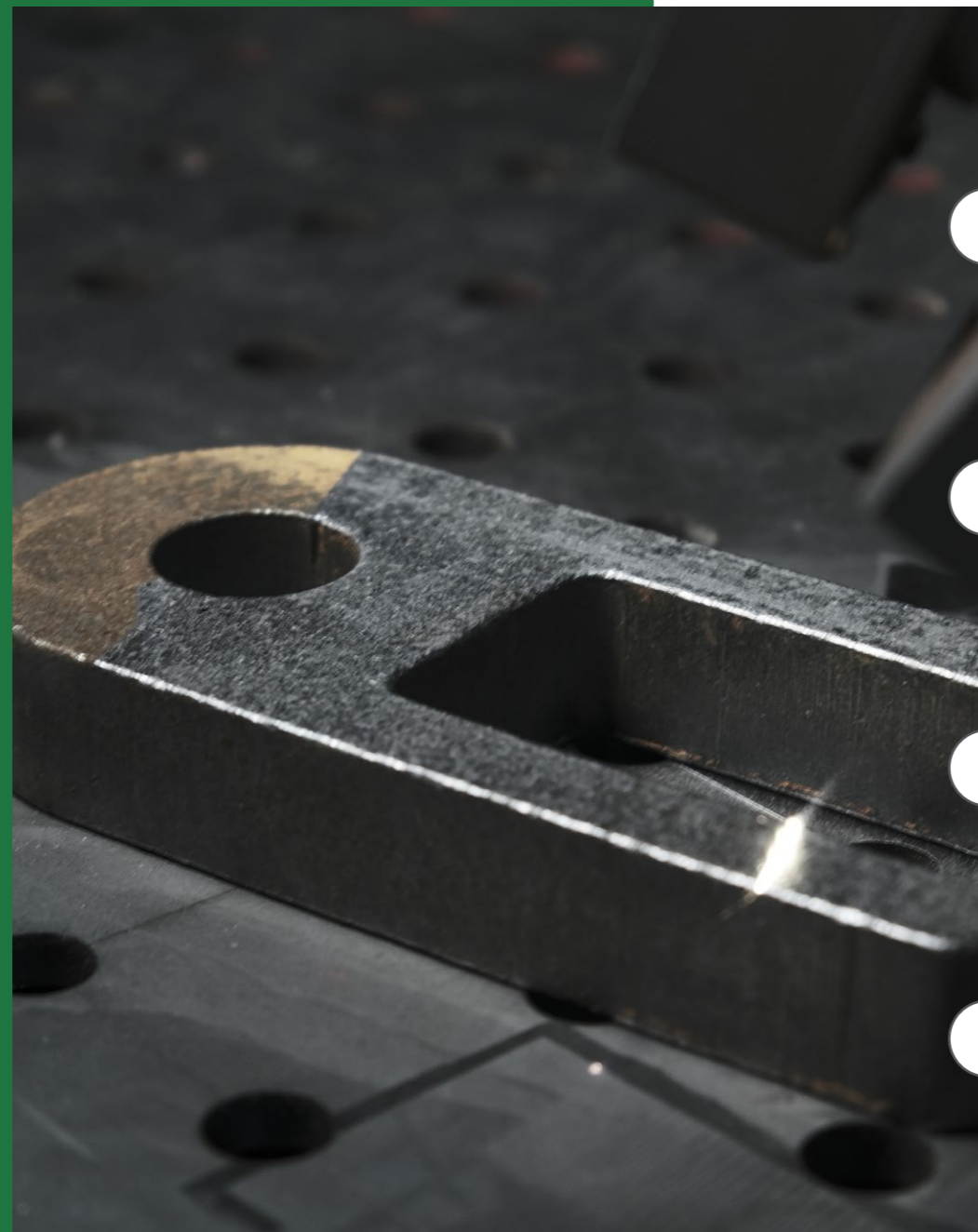


WELD. CLEAN. MARK.

Global presence

In-house manufacturing and original design

At LC we work to offer the best laser solutions in the world of welding, industrial cleaning and product marking and engraving.



Analysis

Every day we work to give maximum satisfaction to our customers. We want your laser equipment to be the most suitable for you. We want it to be the best option in the laser world and that is why we want to advise you so that you can make the perfect decision. We offer 100% customised solutions for each client.



Production

At LC we produce laser equipment in our own facilities, in order to provide a fast, efficient and high quality service. Thanks to our production system we can ensure every detail and finish of our machines.



Quality

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



After-sales service

We offer a comprehensive 2.0 after-sales service, with telephone and e-mail support and, if required, face-to-face assistance. We have qualified technicians who provide online and in-person training, as well as offering a rigorous and fast technical service. We seek to offer the fastest and most efficient solution possible.

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LC laser cleaning

1 Speed and precision

Laser technology has proven to be extremely versatile, being applied in a variety of areas such as cutting, engraving, marking and, increasingly, surface cleaning. Laser cleaning is gaining popularity in many industrial sectors due to its efficiency and precision. The process can be used to remove rust, paint, coatings, dirt and other contaminants from metallic and non-metallic surfaces and is an excellent alternative to traditional methods such as chemical cleaning, sandblasting or mechanical brushing.

2 Minimum deformation

Laser cleaning machines use high-powered fibre lasers, designed to provide precise and safe process control. With an interactive and easy-to-use system, these machines allow the power, speed and intensity of the laser to be adjusted according to the specific needs of the material to be cleaned, ensuring an optimal finish without damaging the original surface. In addition, laser cleaning is environmentally friendly, as it does not generate hazardous waste or require the use of chemicals, making it an innovative and sustainable solution for the industry.

3 Environmentally friendly

The revolution in industrial cleaning starts here

LC-CLEAN P 300W

Our laser cleaning equipment is convenient, easy to use and offer great versatility.

Really small, portable and adaptable system.



Air-cooled

Highly efficient air-cooled system.

Large castors

Wheels suitable for a wide variety of floors.

Touch screen

Integrated screen with intuitive and user-friendly

High quality laser

Pulsed laser up to 100kW peak power (Pp).

With a pulse energy reaching up to 15mJ.

HEAD



Small and handy

Compact and ergonomic design for ease of use and manoeuvrability.

Enables two-axis figure making

Increases versatility and applications with a variety of shapes to be made.

Easy lens and protector exchange

Intuitive design allows for quick and easy lens and protector change

Very low weight

Lightweight construction for agile and comfortable handling, minimising operator fatigue.

General Characteristics

High efficiency

Peak power up to 100kW (with energy of 15mJ).

Almost no deformation

Minimal heat input that does not deform the material.

Minimal maintenance

Simple and infrequent maintenance maximises uptime.

Minimal consumables

Laser cleaning uses few or no consumables, which lowers operating costs and simplifies the cleaning process.

Long lifespan

Lifespan of the laser of up to 100,000 hours.

Without damaging the surface

Laser cleaning effectively removes contaminants without affecting the integrity of the material, preserving the quality and finish of surfaces



Product designed and manufactured in Spain by LC Lasers

Eco-friendly system

Without the use of chemicals

Deep cleaning without the use of chemicals or abrasive contaminants.

Waste reduction

Waste generation is minimal compared to other methods.

Energy efficiency

The most energy-efficient industrial cleaning method.

Ahorro de agua

Without the use of water, it offers enormous water savings compared to other methods.

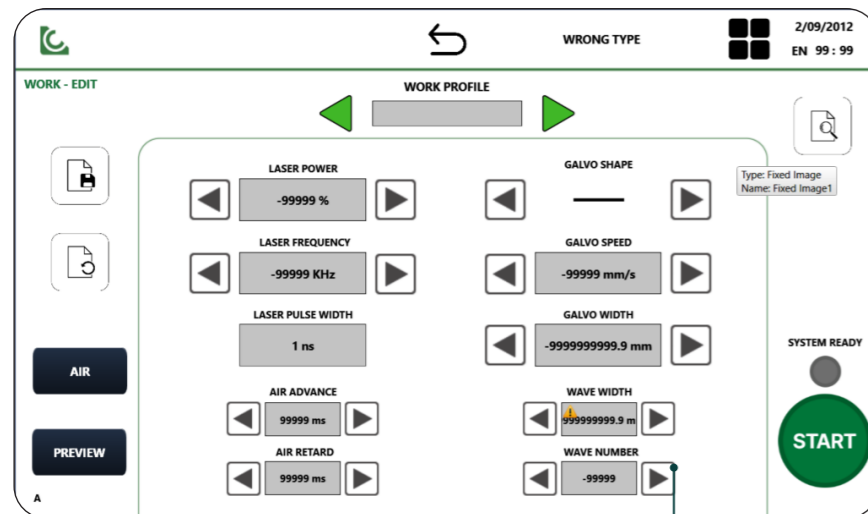


Software

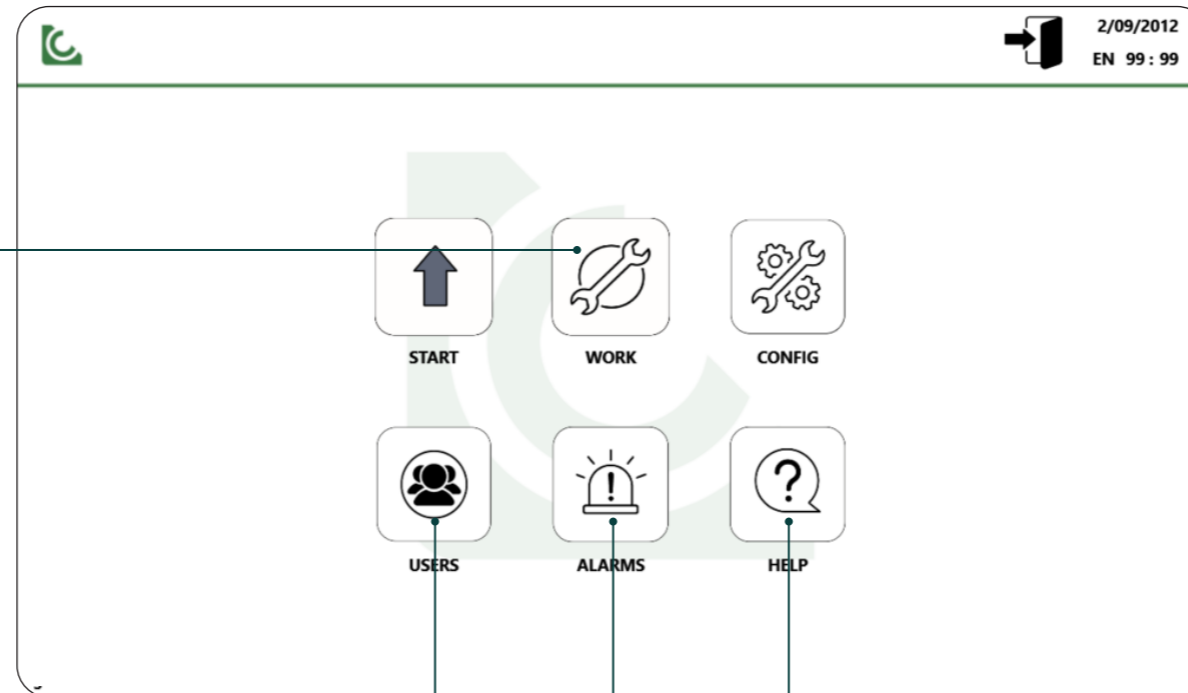
Integrated software designed and programmed by LC. Intuitive and easy to use, with different functionalities. Software that allows remote technical assistance, different working modes, access to documentation from the equipment...

JOB PROFILES

We can create different work profiles by configuring the appropriate parameters depending on the type of cleaning we want to carry out.

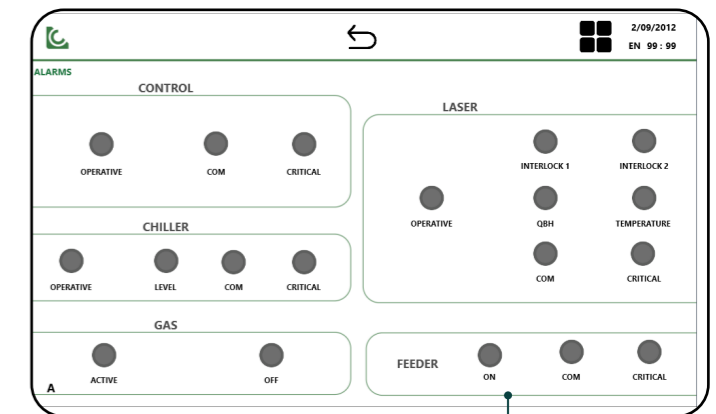


Parameters



User control

User access control. Creation of groups to assign jobs. Establish user levels for different permissions.

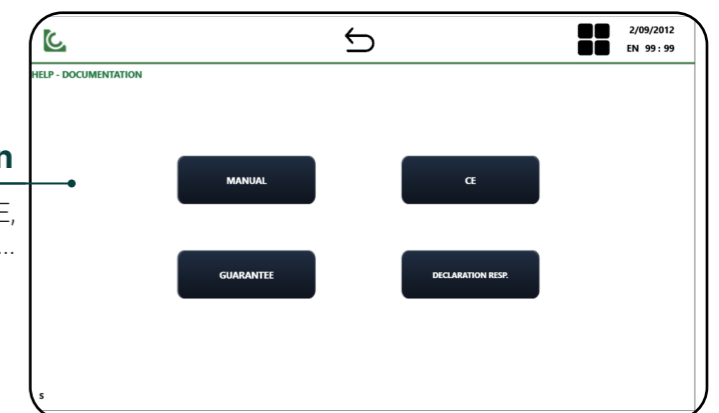


Alarm display

Alarm screen that warns us of possible errors in the equipment and where they are located.

Access to documentation

Direct access to the manual, CE, warranty, etc. on the same device...



Applications

- **RUST AND CORROSION REMOVAL.**
- **PAINT CLEANING.** Allows paint removal if required, layer by layer.
- **RESTORATION.** Removal of incrustation, parts damaged by the passage of time, restoration of objects.
- **CLEANING OF WELDS.** Preparing the material for weld processing or post-weld cleaning.
- **CLEANING OF PLATE HEAT EXCHANGERS.**
- **CLEANING OF AUTOMOTIVE PARTS.** Removing grease and oils is easy.
- **CLEANING OF COATINGS.** . Laser to complement the processes of preparing parts for applying new coatings.



Materials

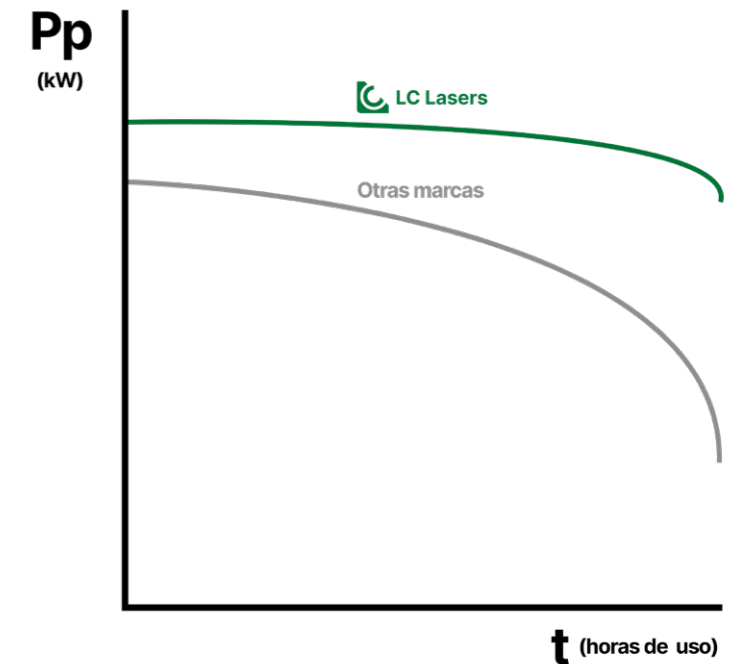
	CLEANING
Oxide	✓
Resin	✓
Stains	✓
Dirt	✓
Coatings	✓
Paint	✓
Grease and oils	✓

Why LC Lasers?

Opting for LC Lasers laser cleaning technology is a strategic decision for any company looking for efficiency, durability and quality service. Our equipment stands out for its long laser life, designed to maintain a **constant power over time**.

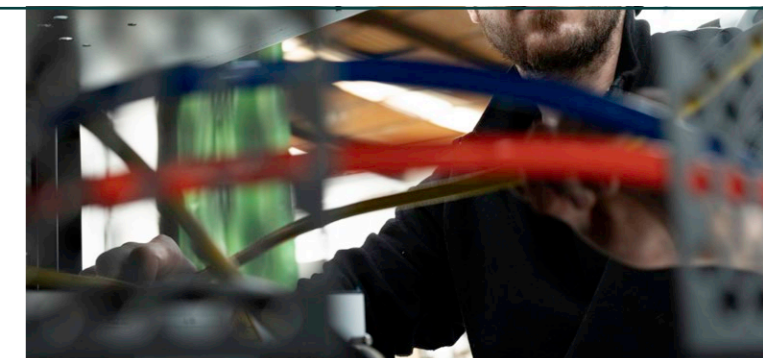
Unlike other brands, where laser performance decreases with prolonged use, LC Lasers devices are manufactured with high quality components that ensure optimal performance for years, maximising the return on investment.

In addition, at LC Lasers we not only offer advanced technology, but also a technical and after-sales service that our customers can fully rely on



For added peace of mind, all our laser cleaning systems come with a **2-year warranty**, which demonstrates our confidence in our products and their ability to meet the highest industrial demands. LC Lasers offers a comprehensive solution that combines state-of-the-art technology with customer-oriented service, ensuring that your company is always in good hands.

**2 years
of warranty
for the laser**



LC-CLEAN P 300W

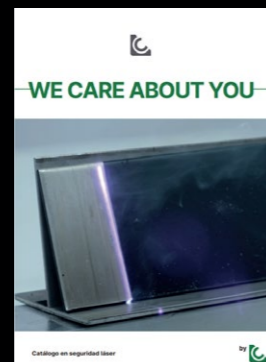
Laser safety

European security

We work with laser cleaning according to European standards to guarantee 0 accidents.



Safety goggles
(included)



Security documentation
(included)

Other elements

Other risks

In addition to the laser, laser cleaning also involves the risk of fumes and the risk of burns.

Fume extractor



Gloves



Gas and vapour mask



Process comparison

Laser cleaning can be a good alternative to other industrial cleaning methods.

	Laser Cleaning	Chemical cleaning	Mechanical Cleaning	Dry Ice	Ultrasonic Cleaning
Cleaning Method	Sin Contacto	Contacto Químico	Abrasión Mecánica	Sin Contacto	Con Contacto
Part damage	No damage	Damage	Damage	No damage	No damage
Efficiency	High	Low	Low	Median	Median
Consumables	Electricity	Chemical Agent	Abrasion	Dry ice	Special Cleaning Agent
Effectiveness	Excellent	Medium	Medium	Excellent	Excellent
Accuracy	High Control	Low Control	Low Control	Low Control	Medium Control
Environment	No Pollution	Pollution	Pollution	No Pollution	No Pollution
Operation	Easy	Complex	Complex	Easy	Easy

Laser cleaning is the process of removing unwanted material from a solid surface by irradiating it with a laser beam. By absorbing the energy of the laser beam, the target material heats up very quickly, so it evaporates or sublimates. It is important to note that if the surface below does not absorb energy, it remains intact.

By manipulating the laser flux, its wavelength and its pulse length, the amount of material that is removed by a single laser pulse can be controlled with extreme precision. Making laser cleaning equally suitable for fast, deep rust removal as it is for removing just a thin layer of paint, without damaging the base coat.

Technical information

Laser

Model	LC-CLEAN P 300W
Laser power	Pm 300W Pp <100kW
Electricity consumption	<2000 W
Voltage	230VAC
Wavelength	1064nm
Frequency range	1-3000kHz
Laser efficiency	38%
Laser Class	4 (IEC 60825-1)
Fibre length	5 m
Approx. dimensions	450×600×740 mm
Weight approx.	<50kg
Cooling system	Air cooling
Working temperature	5~40°C

Cabezal

Model	LC-CLEAN HEAD HEAD V3
Material	Aluminium
Peso	1060 g aprox.
Weight	250×75×130mm
Focal lens type (switchable)	F210 $\lambda=1060-1080\text{nm}$
Lens protector type	99.999% T $\lambda=1060-1080$
Connection	QCS
System	2-axis galvanometric motors
No. of lenses	1
No. of lens protectors	1
Voltage	24V
Communication	CANBUS



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