

SPARTUS®



Pulsed laser
cleaning machines
**SPARTUS® Easy 203CL pulse
and Easy 303CL pulse**



PULSED LASER CLEANING MACHINES

SPARTUS®
Easy 203CL
pulse

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Easy 303CL
pulse



PRECISION CLEANING IN A MODERN FORM

FIBER PULSE-BASED LASER CLEANING

The SPARTUS® Easy 203CL Pulse and 303CL Pulse laser cleaners use a pulsed fiber laser source that emits a high-energy density beam in short, precisely controlled pulses. Each pulse acts on a microscopic area of the surface, causing the contaminants to evaporate or detach without affecting the structure of the base material. Unlike continuous-wave technology, pulsed cleaning allows full control over the beam energy and minimizes material heating, making the process safe even for delicate and precision components.

The use of a modern pulsed resonator enables achieving single-pulse energy up to 15 mJ and a repetition frequency of up to 4000 kHz, ensuring high efficiency while maintaining maximum precision.

The pulsed technology is ideal for cleaning:

- ✓ rust, paint, oils, and grease,
- ✓ oxides, weld discolorations, and surface deposits,
- ✓ resins, adhesives, and protective coatings,
- ✓ casting and injection molds, tools, and machine parts,
- ✓ metal, stone, ceramic, and historic surfaces requiring delicate treatment.

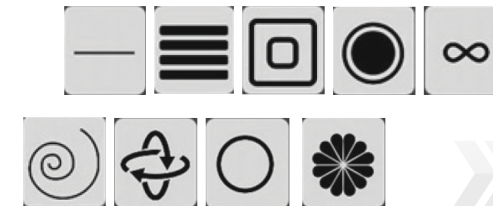
SPARTUS® laser cleaning is a non-contact, chemical-free, and non-destructive process that combines industrial efficiency with full environmental compliance.

NINE WORKING MODES – PRECISION IN EVERY TASK

SPARTUS® Easy 203CL Pulse and Easy 303CL Pulse offer as many as nine laser beam scanning modes, allowing the cleaning method to be precisely adjusted to the surface type and the nature of the contamination. The operator can choose from modes such as linear, rectangular, circular, spiral, sinusoidal, ring, rotary, and two rectangular modes with different fill directions.

The operator can:

- select one of nine laser scanning modes,
- adjust power, frequency, and pulse width,
- set scanning speed and area,
- save and recall custom cleaning profiles.



CLEANING HEADS

MODERN AND ERGONOMIC CLEANING HEAD

The laser head in the SPARTUS® 203CL has been designed for maximum comfort and precision. Its compact construction with a solid aluminum body ensures durability and excellent cooling during prolonged use. The high-quality optical system guarantees uniform beam distribution, enabling effective and safe cleaning of various metal surfaces. The ergonomic grip and well-balanced design provide comfortable handling, even during long working sessions.





MODERN CLEANING HEAD WITH DISTANCE SENSOR

The laser head in the SPARTUS® 303CL is equipped with a built-in control panel, allowing the operator to manage operating parameters directly on the head, without needing to reach the main unit. This solution significantly speeds up the workflow and increases safety when cleaning objects of various shapes and positions.

A key feature of the head is the TOF (Time of Flight) distance sensor, which continuously measures the distance between the lens and the surface being cleaned.



MOBILE DESIGN FOR EASY OPERATION

The SPARTUS® Easy 203CL Pulse and Easy 303CL Pulse pulsed laser cleaners are designed with mobility and user comfort in mind. A durable housing mounted on stable transport wheels makes it easy to move the device around the workspace, while the ergonomic handle ensures safe and convenient handling. The compact dimensions of the cleaners allow them to be positioned easily, even in limited workshop or production space.



NEXT-GENERATION CLEANING

SPARTUS® Easy 203CL Pulse and Easy 303CL Pulse combine modern laser technology, high precision, and a reliable design. Thanks to the pulsed fiber laser source, nine operating modes, and an intelligent control system, the device ensures efficient and safe removal of contaminants from a wide range of surfaces — without contact, without chemicals, and without the risk of damaging the material.

It is a compact, mobile, and environmentally friendly solution that works perfectly both in industrial applications and specialized workshops, setting a new standard for laser cleaning in its class.



TECHNICAL DETAILS

Input	~1× 230V ±10% 50 / 60 Hz
Output power	200W
Operating mode	impulse
Pulse Width	2 – 500 ns
Maximum single pulse energy	15 mJ

Power adjustment range	0 – 100%
Repetition frequency	0 – 4000 kHz
Cooling type	gas
Duty cycle	100%
Weight	52 kg
Dimensions	629 × 341 × 734 mm

The set includes:

- ✓ laser source
- ✓ handheld laser head (5m) with F210 focus lens
- ✓ additionally: 5 protective lenses and a sleeve for their replacement

Cleaning
head



Easy 303CL pulse



TECHNICAL DETAILS

Input	~1× 230V ±10% 50 / 60 Hz
Output power	300W
Operating mode	impulse
Pulse Width	2 – 500 ns
Maximum single pulse energy	15 mJ

Power adjustment range	0 – 100%
Repetition frequency	0 – 4000 kHz
Cooling type	gas
Duty cycle	100%
Weight	52 kg
Dimensions	629 × 341 × 734 mm

The set includes:

- ✓ laser source
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