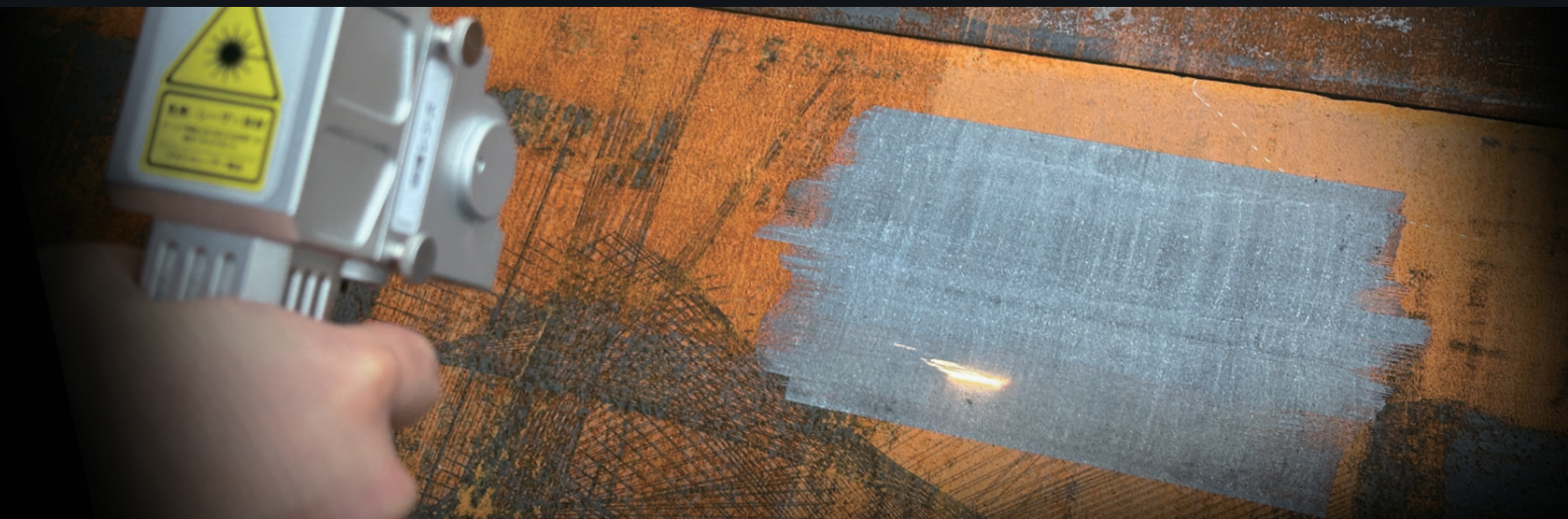


Fiber Laser Cleaning Machine — dedicated to rust & coating removal

SUNMAX-FL-CLC

Easy. Fast. Clean.



What can it remove?

Rust

Paint

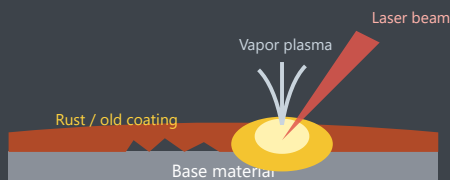
Mill
scale

Stains

Removes red rust, white rust, paint coatings, mill scale, stains on concrete and stone, oil, moisture and more — on a wide range of materials. Output power is adjustable in 1 W steps, so the heat input to the base material can be finely controlled. Increase the laser power to roughen surfaces for better adhesion (keying) as well.



How laser cleaning (rust removal / surface preparation) works



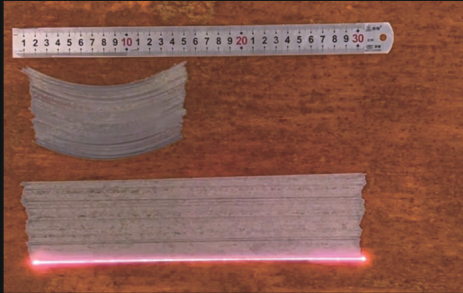
Where the laser strikes the surface layer, heat and vapor plasma are generated. The shock and expansion pressure of the plasma detach the deposits from the base material. Surface preparation is performed without contact with the base material, and even complex shapes can be cleaned — wherever the laser beam reaches, removal is possible.



Heavily layered, flaking rust? Use the heat of the laser!

For rust that has built up in layers, the heat of the laser beam is used to bring the surface to a high temperature. The heated surface layer expands, and applying a physical impact with a hammer or similar makes it peel off easily. Repeating this process treats even severely corroded surfaces.

* To minimize heat input, lower the output power and increase the number of passes.



Specialized for rust removal and stripping!

Compared with the LCW 3-in-1 laser welding machine, the CLC — a dedicated rust-removal machine — has a wider maximum irradiation width of 300 mm. Because the beam profile is horizontal, rust removal is highly efficient and laser marks are less likely to remain on the base material.

The emission port is equipped with a **safety shutter** (physically blocks the emission port) and an **air-injection switching dial** (switchable according to air quality).

Equipment required in addition to the machine

Power supply (200 V)

1500 W model: single-phase 200 V, 30 A
3000 W model: 3-phase 200 V, 60 A (380 V step-up transformer included)
* Supply 220 V when using a generator

Oil-free air compressor

1 HP or more, tank capacity 30 L or more, capable of supplying 0.6–0.8 MPa

Air dryer (use as needed)

The machine has no built-in air filter. Depending on humidity, an air dryer may be required (recommended at 70% humidity or higher).

Product specifications

Model	RSD-SUNMAX-FL-CLC
Laser type	Fiber laser
Laser class	Class 4
Wavelength	1080 nm ±10
Laser output	1500 / 3000 W
Irradiation width	1–300 mm
Torch cable length	9 m (extendable to 20 m)
Rated voltage	200 V / 380 V (3000 W: with transformer)
Rated current	30 A (1500 W) / 60 A (3000 W)
Dimensions (W×D×H)	600×1050×775 / 730×1120×855 mm
Weight	130 kg (1500 W) / 160 kg (3000 W)

See the product page on our website for details of the included accessories.

Options



Laser safety glasses

Always wear laser safety glasses matched to the laser wavelength during operation. * Two pairs included as initial accessories.



Laser protection curtain

For work involving laser emission, define a dedicated area using laser-blocking materials.