

## Product

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## Oxidation Cleaning And Rust Removal Laser Machine

The 500W laser cleaner for rust removing, is the latest high-tech product. It's is Easy to install, operate, easy to achieving automation.. Plug in power, turn on and start cleaning - without chemicals, media, dust, water.

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### Product Details

The 500W laser cleaner for rust removing, is the latest high-tech product. It's is Easy to install, operate, easy to achieving automation.. Plug in power, turn on and start cleaning - without chemicals, media, dust, water.

Cleaning with no detergent, no media, no dust, no water. Auto focus, can clean curved surface, gentle cleaning surface. Cleaning resin, oil stain, rust, coating materials, paints on workpiece surface.

The temperature will increase when the laser reflect on the surface of the oxide coating, the high temperature make the coating burned and gasified immediately.

There are two methods of laser glue removal: one is the high temperature from laser will burn and gasify the glue coating immediately; the second is the rubber particals on aluminum plate surface will splash after the rubber deeper layer getting thermal vibration and thermal shock of laser pulse.

#### 2. Specifications

Model	ML-MF500I-LC	Maximum Power	5100W
Laser Power	500W	Weight	275KG
Cooling Way	Water Cooling	Working Temperature	5-40°C
Laser Wavelength	1064 nm	Laser frequency	1-50k HZ
Power Supply	1 Phase / AC220V	Laser source type	Fiber laser source
Dimension	600X1000X1000(mm)	Options	Portable/ Automation

### 3. Features

Benefits of laser cleaning machine for cultural relics:

Reduce overall cost Reduce labor costs, one person can operate, Avoid damaging the material base, No water needed, No need for chemicals, Reduce toxic pollution by 90%, Reduce the risk of injury to personnel and objects, No need for sample preparation, can be used directly.

### 4. Comparison with traditional clean methods

Comparison	Laser Cleaning	Chemical Cleaning	Mechanical Grinding	Dry ice cleaning
Washing Method	non-contact cleaning	contact cleaning	Abrasive contact cleaning	non-contact cleaning
Harm to base material	None	Yes	Yes	None
Washing Efficiency	High	Low	Low	Mid.
Consumable	Power	Chemical Detergent	Abrasive paper, grinder, abrasive stone	Dry Ice
Washing result	Very good, very clear	Medium, uneven	Medium, uneven	Good, uneven
Precision Washing	Accuracy controllable. High precision	Uncontrollable, low precision.	Uncontrollable, medium precision.	Uncontrollable, poor precision.
Safety/Environment	No pollution	Chemical pollution	Dust pollution	No pollution
Operation	Easy to operate, portable or automation optional.	Complicated process, higher technical requirement of the operator. Pollution prevention measures required.	Need more time & manpower. Pollution prevention measures required.	Easy to operate, portable or automatic.
Investment	High investment on machine. But no consumable, low maintenance cost	Low investment on machine. But expensive consumables	Medium investment on machine. High man-power cost.	Medium investment on machine. High consumable cost.

### 5. Applications

Cultural relics laser cleaning machine application, Building restoration: stone, metal and wood cleaning, Sculpture cleaning, Antique cars, antique ships, antique machinery cleaning, Graffiti cleaning, Lead-based paint removal, Art protection, Painting protection, Paper protection, wood protection, Leather cleaning

Cultural relics protection, Archaeological cleaning, Dam, bridge concrete surface cleaning, Industrial cleaning (mould cleaning), Welding surface cleaning, Insert molding clean, Rust removal and oxidation cleaning, Surface smoothing treatment, Paint and varnish removal, Nuclear reactor pollution cleaning, Printing machine anilox roller cleaning,

### 6. Laser cleaning machines for stone materials/stone cleaning



### 7. Traditional rust removal methods:

Acid pickling, High frequency ultrasonic, abrasive blasting, sandpaper manual grinding, Polishing grinding (abrasant), dry ice blast cleaning, Mechanical friction clean, Chemical cleaning, Strong impact cleaning by Liquid & solid.

The widely applied shot blasting, Metal balls or quartz sand is fast, but with much noise and dust

1. Manual rust removal Use scraper, hammer, steel brush, grinding wheel and other tools to knock, shovel, grind, scrape to remove rust.

2. Mechanical rust removal Use Portable electric grinding wheel, Electric brush, Air brush and de-scaling gun to remove rust. Spray and shot blasting are widely applied

3. Chemical rust removal Use chemical reaction between acid and rust Rust will be dissolved and removed

4. Ultrasonic rust removal Use high-frequency vibration to remove rust Traditional surface pretreatment such as abrasive blasting, solvent or chemical cleaning will leave harmful impurities and residue on the surface, reduce the adhesion of new coating and produce secondary pollutants

8. Pictures of Hero Laser



Hot Tags: oxidation cleaning and rust removal laser machine, China, suppliers, manufacturers, factory, customized, price, cheap, for sale, paint removing laser, lead paint stripping, mold cleaning, Stone Surface Dust Laser Cleaning Machine, Fiber Laser Marking Machine, weld laser cleaning machine

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Please include details like size, weight, destination port and etc., so that we can quote the best price.

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