

**AUSTENCO**

**COMET**

COMET RL-C Series  
1000W/1500W/2000W  
CW Continuous Wave  
Laser Cleaning Machines



**Introduction:**

Laser cleaning equipment is a new generation of industrial surface cleaning laser system. It adopts the advanced laser source, laser optical scanners and control system to meet the requirements of metal surface cleaning process. It can be customized according to customer requirements to develop a dedicated cleaning system. Widely used for the surface laser degreasing, laser paint removal, laser removal of zinc, laser film removal, laser cleaning, such as coating, etc

**Characteristic:**

1. Laser cleaning has no grinding, non-contact, no thermal effect and suitable for various materials, etc.
2. Rapid, clean and accurate cleaning, removal of surface coatings, coatings, oxide;
3. No damage to substrate;
4. High cleaning precision, strong control ability
5. Can be used for a long time, low operating costs;
6. The device can realize automatic operation and simple operation;
7. Environmentally friendly, no supplies, no two pollution

**Technical Data:**

Model	RL-C1000	RL-C1500	RL-C2000
Laser source	Fiber Laser	Fiber Laser	Fiber Laser
Laser Power	1000W	1500W	2000W
Fiber cable Length	10M	10M	10M
Wavelength	1080nm	1080nm	1080nm
Frequency	50-5000 Hz	50-5000 Hz	50-5000 Hz
Cleaning Head	Single Axis	Single Axis	Single Axis
Clean speed	≤40 M <sup>2</sup> /Hour	≤40 M <sup>2</sup> /Hour	≤40 M <sup>2</sup> /Hour
Cooling	Water cooling	Water cooling	Water cooling
Dimension	950*720*1080 mm	950*720*1080 mm	1050*720*1180 mm
Packing size	1020*670*1340 mm	1020*670*1340 mm	1070*750*1240 mm
Net Weight	150KGS	150KGS	150KGS
Gross Weight	200KGS	200KGS	200KGS
Beam width	10-170mm	10-170mm	10-170mm
Optional	Manual	Manual	Manual
Temperature	10-40 °C	10-40 °C	10-40 °C
Power	< 7KW	< 7KW	< 7KW
Voltage	Single Phase 220V, 50/60HZ	Single Phase 220V, 50/60HZ	380V ± 5V 50/60HZ

## Application Scope:

Metal workpiece laser derusting, degreasing, laser paint removal, laser removal of zinc and film, laser coating removal, widely used in aerospace, mold, microelectronics, construction, nuclear power plants, automobile manufacturing, medical, military etc.

## Sample:

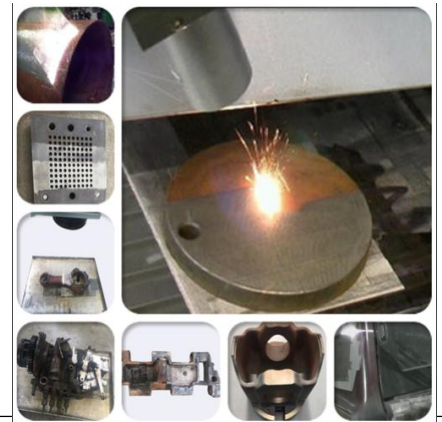


Comparison	Laser Cleaning	Chemical Cleaning	Mechanical Grinding	Dry ice cleaning
Method	non-contact cleaning	contact cleaning	Abrasive contact	non-contact cleaning
Harm	None	Yes	Yes	None
Efficiency	High	Low	Low	Mid.
Consumable	Power	Chemical Detergent	Abrasive paper, grinder	Dry Ice
Result	Very good, very clear	Medium, uneven	Medium, uneven	Good, uneven
Precision	Accuracy controllable. High precision	Uncontrollable, low precision.	Uncontrollable, medium precision.	Uncontrollable, poor precision.
Environment	No pollution	Chemical pollution	Dust pollution	No pollution
Operation	Easy to operate, portable or automation optional.	Complicated process, higher technical requirement; 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.

## Comparison with Traditional Clean Methods:

### Rust removal:

High energy pulsed laser focusing on the surface of object to simulate plasma, continuous irradiation of high-energy plasma instantaneous formation and expansion, resulting in a series of tiny explosions, format plasma blasting, finally achieve the relative smooth corrosive layer of object surface to physical blasting burst, and move through the high speed laser spot to form a plume that will clean the debris to complete the cleaning. Mainly used in metal rust.



### Paint removal:

For the paint and the surface of the chemical coating and special process, based on the surface and the base material has different absorption and damage threshold on laser, laser destruct the surface coating after focusing, after air contact, there are a series of complex photochemical reactions, oxidation, The final reaction product is in the form of gas discharge, the special mode of the laser below the master batch damage threshold, can peel off the coating, do not hurt the base material. Mainly used for paint removal and coating stripping.



## Cleaning Machine Main Parts:

