Sintec Optronics

Laser Cleaning Machines



Our laser cleaning machines are mainly used for cleaning various metal surfaces with localized rust, paint, coatings, oil stains, oxide films, and other pollutants. It can also be used for cleaning surfaces of non-metallic substrates such as ceramics, glass and composite materials. Typical applications include cleaning natural oxide film on aluminium alloy before welding, cleaning black and gray oxide on battery trays after welding, cleaning welds on train bogies before non-destructive testing, cleaning automotive sheet metal parts before refurbishment, and cleaning steel components such as small holes and grooves that cannot be reached by wire brushes.

Product Advantages:



1. Hand-held Pulsed Laser Cleaning Machines



Product Specifications:

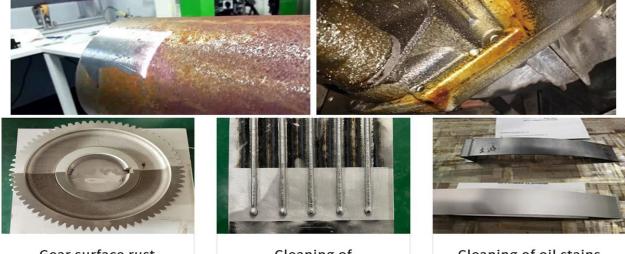




Part number	CL-P-100W	CL-P-200W/300W	CL-P-500W/1500W
Laser power	100W	200W/300W	500W/1000W
Laser wavelength	1064nm	1064nm	1064nm
Pulse energy	Max. 1.5mJ	Max. 1.5mJ (single	
		mode), 5mJ	
Scanning width	5-150mm adjustable	5-100mm adjustable	5-150mm adjustable
Machine weight	22kg	60kg	180kg
Cleaning head weight	1.3kg	1.3kg	4.5kg (single mode) 2kg
			(multiple mode)
Fiber length	5m	5m	10m
External dimensions	603*258*481mm	783*300*784mm	913*573*881mm
Cooling method;	Air cooling	Air cooling	Water cooling
Power consumption	<500W	<1000W/<1500W	<4000W/<6000W
@25°C			
Supply gas pressure	0.4MPa clean air	0.4MPa clean air	0.4MPa clean air



Cleaned Samples:



Gear surface rust

Cleaning of aluminum alloy after welding Cleaning of oil stains on the surface of titanium steel

2. Hand-held CW Laser Cleaning Machines



The high-power continuous wave (CW) laser cleaning machines are mainly used in rust removal of steel structures, steel plates, ship components; paint removal of steel structures, ships components; oil removal, etc. It is suitable for the refurbishment of marine vessel components, rail transit components, steel structure rust removal, steel structure refurbishment, etc.

Part number	CL-CW-1500W	CL-CW-3000W
	CL-CW-2000W	
Laser power	1500/200W +/- 2%	3000W +/- 2%
Laser wavelength	1064nm	1064nm
Working mode	Continuous or modulated	Continuous or modulated
Beam quality	M^2 < 1.2 for 1500W	M^2 < 1.5
	M^2 < 1.5 for 2000W	
Machine weight	170kg	220kg
Fiber length	10m	10m
External dimensions	980*420*712mm	1264*779*1287mm
Cooling method	Water cooling	Water cooling
Scanning width	5-150mm adjustable	5-150mm adjustable