

AUSTENCO

COMET

**COMET-RL-300D
Laser Cleaning Machine
Pulse 300 W**



2Product description

Laser cleaning is a new technology based on the interaction of laser and material, which can achieve the effect of removing surface pollution and attachment. Compared with traditional cleaning methods, laser cleaning has the advantages of non-contact, no damage to the substrate, accurate cleaning, "green" environmental protection and on-line, especially suitable for high-speed on-line cleaning in designated areas.

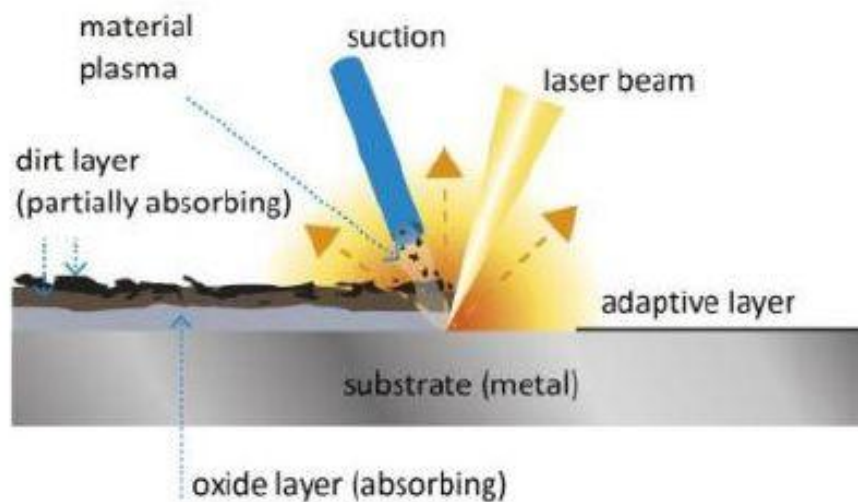


Figure 2.1 Laser cleaning schematic

The laser cleaning equipment produced by my company is a new generation of high-tech products for surface treatment, which is easy to install, control and realize automation. Simple operation, power supply, open equipment, can be no chemical reagent, no medium, no dust, no water cleaning, can fit surface cleaning, cleaning surface cleanliness is high, can remove object surface resin, paint, oil stains, dirt, rust, coating, coating and oxidation layer, and the industry is widely used, covering ships, auto repair, rubber mold, high-end machine tools, tracks and environmental protection.

2.1 Equipment characteristics and implementation standards

(1) Equipment characteristics

- ◎ non-contact cleaning without damaging the matrix of the parts;
- ◎ accurate cleaning, can achieve precise position, accurate size selective cleaning;
- ◎ do not need any chemical cleaning liquid, no consumables, safety and environmental protection;
- ◎ simple operation, hand-held or with the manipulator to achieve automatic cleaning;
- ◎ ergonomics design, operating labor intensity greatly reduced;
- ◎ trolley design, with its own moving wheel, easy to move;
- High ◎ cleaning efficiency, save time;
- ◎ laser cleaning system is stable with little maintenance;

(2) Product implementation standards

My company has passed the ISO 9001 international quality management system certification, the formation of medium and small power laser processing equipment design, production and service quality assurance system.

My company sets detailed standards for the working environment and working conditions, basic technical requirements, cooling requirements, laser radiation safety, electrical safety, test methods, inspection and acceptance, packaging and transportation, etc. The national standards cited in this standard are:

GB10320	Electrical safety of laser equipment and facilities
GB7247	Radiation Safety, Equipment Classification, Requirements and User Guide for Laser Products
GB2421	Basic Environmental Test Procedures for Electronic Products
GB/TB360	Specification for Laser Power Energy Testing Instruments
GB/T13740	Test Method of Laser Radiation Dispersion Angle
GB/T13741	Method for measuring laser beam diameter
GB/T13862-92	Laser Radiation Power Test Method
GB2828-2829-87	Batch-by-cycle inspection of counting sampling procedures and sampling tables

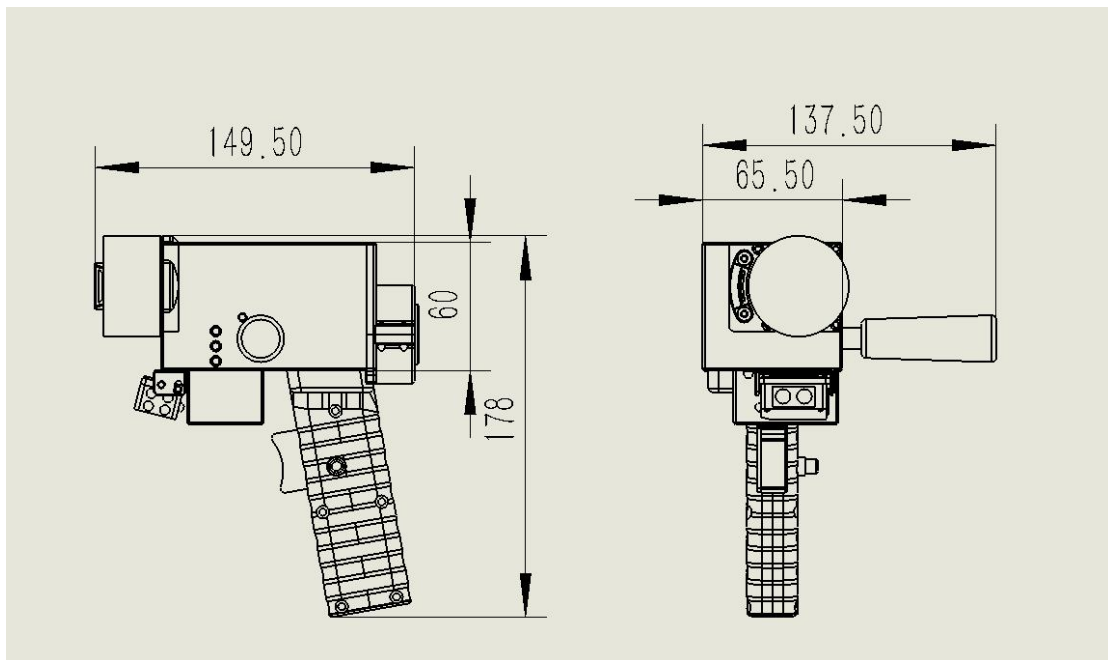
2.2 Operating environment and related parameters

Operating environment	
Content	RL-300D
Supply voltage	Single phase 220V±10%、50/60Hz AC
Power consumption	≤4000W
Working environment temperature	0°C~40°C
Working environment humidity	≤80%
Optical parameters	
Average laser power	≥300W
Power instability	<5%
Laser Working Mode	Pulse
Pulse width	10-500ns
Maximum monopulse energy	12mJ
BPP	<5
Power regulation range (%)	0-100(Gradient Adjustable)
Repeat frequency (kHz)	1-3000 (Gradient Adjustable)
Fiber length	10m
Cooling mode	Water cooling
Cleaning Head Parameters	
Scan range (length * width)	0mm~145 mm, continuously adjustable; supporting 8 scanning modes
Scanning frequency	The maximum is not less than 300Hz
Field mirror focal length (mm)	210mm (Optional 160mm/254mm/330mm/420mm)
Mechanical parameters	
Machine size (Length, width and height)	About 1055mm*623mm*1105mm
Size after packing (Length, width and height)	About 1230mm*750mm*1280mm
Machine Weight	About 180Kg

Weight after packing	About 205Kg
Cleaning head weight	<1.25Kg
Mode of operation	Handheld/automated

2.3 Product structure

(1) Structure of Cleaning Head



(2) Overall Dimension

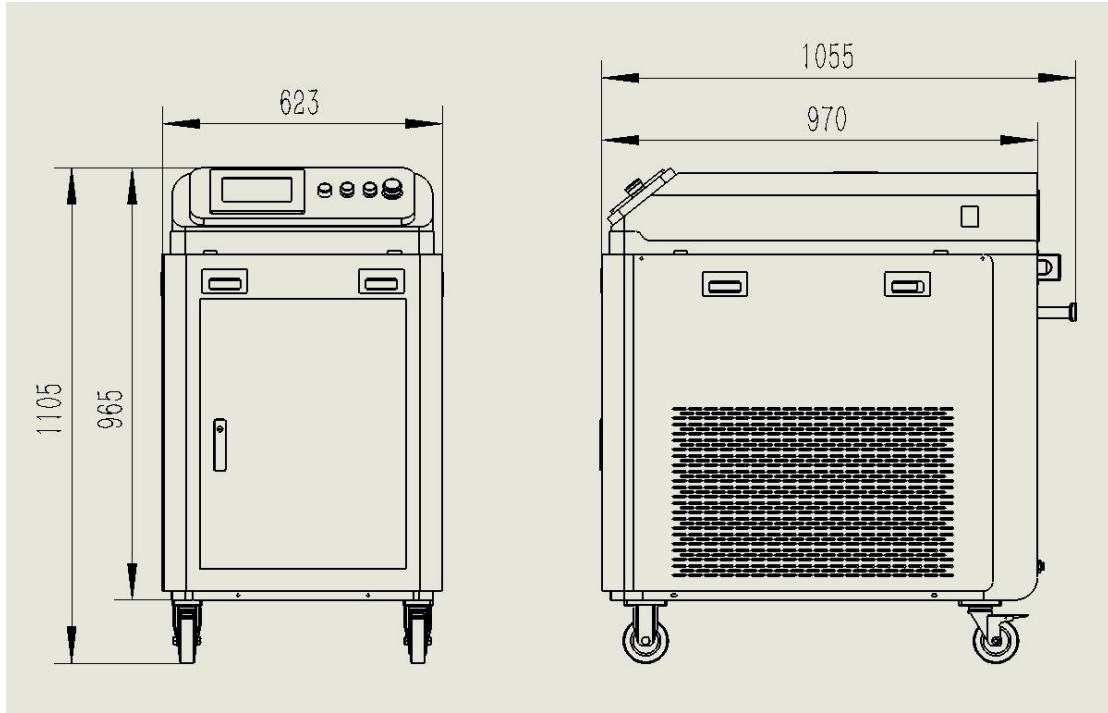


Figure2.3 Overall Dimension of RL-300D Laser Cleaning Machine

2.3 Configuration list

Table 2.1 RL-300D laser cleaning equipment configuration list

Name of name	Model specifications	Units	Quantity	Remarks
Laser cleaning mainframe	RL-300D	Table	1	
Laser cleaning head	RL-300D	Sets	1	
Process database	Built-in	Sets	1	
Laser protective glasses	SD-3	Payment	1	
protect the lens	43*2	Pcs	5	
Lens cleaning kit		Pcs	10	