LASER TECH

SYSTEMS AND SOLUTIONS

SERVICE BEFORE SALES

QuickClean Series

Continuous Wave Laser Cleaning Machine

COMPANY PROFILE:

Laser Tech Systems and Solutions was founded by Mr. Rajiv Kumar with a group of Technocrats in 2021, with the idea of creating a large umbrella organization to assist and serve the growing Indian Laser Industry and to help the market with its years of experience in the field of Lasers and its applications.

We represent many global manufactures, covering a wide range of solutions Laser Marking, Laser Welding, 2D Laser Cutting, 3D Laser Cutting, Laser Cladding, Laser Hardening. Our Laser Solutions can process a wide range of materials like Metal, Paper, Acrylic, Wood, Textile, Leather, Plastic and many more.

Our main aim is to serve our customers with cost effective and innovative solutions with our utmost know how of Applications and help them to fulfill their objectives.

Our aim is to provide the best solutions to all our customers with best systems and economical prices. We believe in **SERVICE BEFORE SALES**...We provide industrial solutions for Laser for Metals, non-metal laser cutting/engraving machines, Galvo based solutions, Laser Marking, Laser welding, 2D laser cutting, 3D laser cutting, Laser cladding etc.

LTSS Service and Support:

Laser Tech Systems and Solutions supports installation, commissioning, and training for its customers. Dedicated Laser Systems available for in-house demonstration, applications and software training. Specialized engineers are available to provide online and telephonic support.

LASER TECH SYSTEMS AND SOLUTIONS™
Service Before Sales

QuickClean

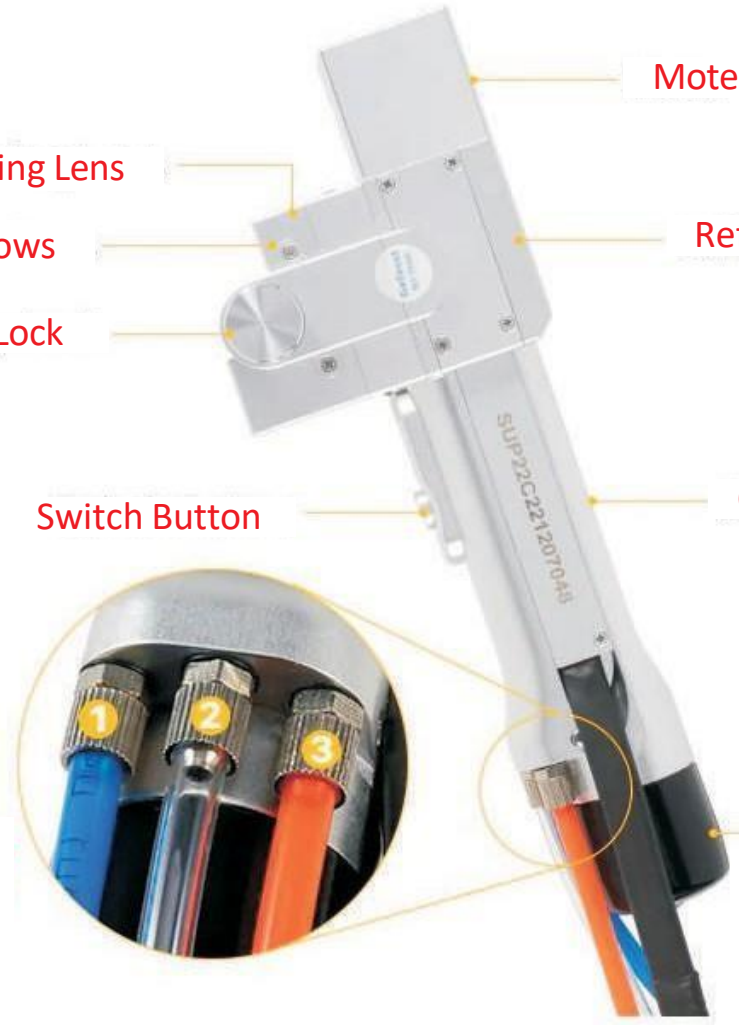
We proudly say that because of our team's dedicated efforts and our motto " SERVICE BEFORE SALES" we have a chain of happy customers related to various industries using our Laser machines in India.

Laser Cleaning Machine

MACHINE DESCRIPTION:

The Laser Cleaning machine is an advanced industrial tool designed for the precise and efficient removal of contaminants, rust, coatings, paint, and unwanted materials from surfaces. This technology utilizes the power of laser beams to ablate or vaporize undesired substances without the need for abrasive materials, chemicals, or manual cleaning processes. The laser cleaning process is non-contact, making it suitable for delicate or sensitive surfaces, and it leaves the underlying material intact. Laser cleaning machines find applications across various industries, including manufacturing, automotive, aerospace, and conservation, providing a clean, environmentally friendly, and highly controlled method for surface preparation and restoration. The versatility and precision of laser cleaning make it an increasingly popular choice for industries seeking efficient and sustainable solutions for surface cleaning and preparation. These machines offer several advantages across various industries due to their precision, efficiency, and environmental friendliness. Laser cleaning can be performed on-site and in-place, reducing downtime associated with disassembly and transportation of components to cleaning facilities. The automation capabilities of laser cleaning reduce the need for manual handling and intervention. This contributes to labor efficiency and may lead to overall cost savings in terms of manpower.

Laser Cleaning Head



1. Self-developed control system, multiple safaty alarm, active safety power-off, and laser-off settings;
2. Smaller size, flexible operation, and easy to use;
3. Compatible with various ty pes of fiber lasers;
4. Optimized optics and water cooling design.

1 Product Introduction

Laser cleaning is the latest and most cutting-rdge surface precision cleaning technology on market. the high energy efficiency and instant high temperature of the laser are used to produce an explosion-like effect on the surface of the product, and the impurities and materials that need to be removed from the surface are stripped and evaporated to obtain a satisfactory high-quality surface treatment effect. Compared with traditional industrial cleaning methods, laser cleaning has the characteristics of environmental protection, high efficiency, small footprint, high flexibility, and easy operation, and is accepted by more and more customers,

2 Features

1. New and green clreaning way which no harmful to operator and environment;
2. Non-contact cleaning, no internal stress and deformation;
3. Precision cleaning which can meet higher surface quality requirement;
4. No need chemical detergent, no consumable;
5. Easy to operate and maintenance, easy to automate;
6. No damage to the base material;
7. Flexible working and movable, small in size;
8. Higher manufacture standard, more stable and safety.

3 Applicable materials and industries

1. Precision mold surface cleaning
2. Cleaning of semiconductor materials, such as graphite, etc.
3. surface cleaning of precision mechanical parts
4. Product cleaning with high surface roughness and effect requirements
5. Auto tire mold cleaning

Specifications

Model	QC-1500W
Laser Power	1500W
Cooling Way	Water Cooled
Laser Wavelength	1064 nm
Pulse frequncy	1000KHz
Power Supply	1PH/220V± 10%/50-60HZ
Working Temperature	5-45℃
Working Humidity	<70%
Length of fiber cable	10 m
Laser source type	Fiber Laser Source

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 and Manpower. Pollution prevention measures required.	Easy to operate, portable or automatic

Control System

1. Visible parameters, real-time Monitoring of the status of the whole machine, to avoid problems in advance, and more convenience to troubleshoot and solve problems of welding head.
2. Visible process parameters, perfect cleaning quality, small deformation and high penetration.

Advantages of CW Laser Cleaning Machine

High-Quality Surface Preparation

Laser cleaning provides excellent surface preparation for subsequent processes such as welding, coating, or bonding. It ensures a clean and pristine surface, enhancing the quality and integrity of downstream operations.

Precision and Accuracy

Laser cleaning provides high precision and accuracy, allowing for selective removal of contaminants or unwanted layers without affecting the underlying material. This is crucial for applications where fine control is necessary.

Reduced Downtime

Laser cleaning can be performed on-site and in-place, reducing downtime associated with disassembly and transportation of components to cleaning facilities. This is particularly beneficial in industries where continuous operation is critical.

Cost Effective

Laser cleaning eliminates the need for abrasive materials, chemicals, or solvents commonly used in traditional cleaning methods.
This reduces the cost of consumables, eliminates chemical waste, and minimizes the environmental impact associated with cleaning processes. This reduces overall labor costs and increasing the machine's cost-effectiveness.

Improves Product Value

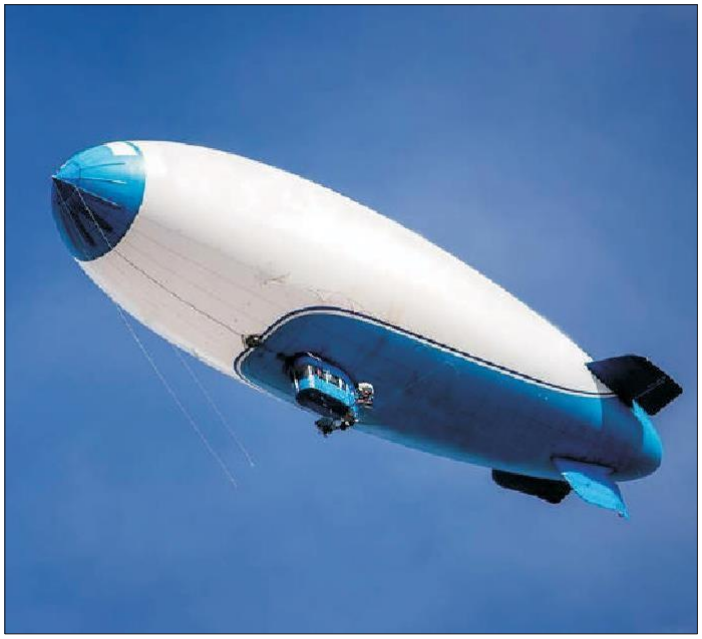
This Laser Cleaning Machine can be used to effectively remove unwanted layers like rust/paint etc. from the products lying in the warehouse for a long time. Thus making them easily usable/sellable in the market.

APPLICABLE INDUSTRY

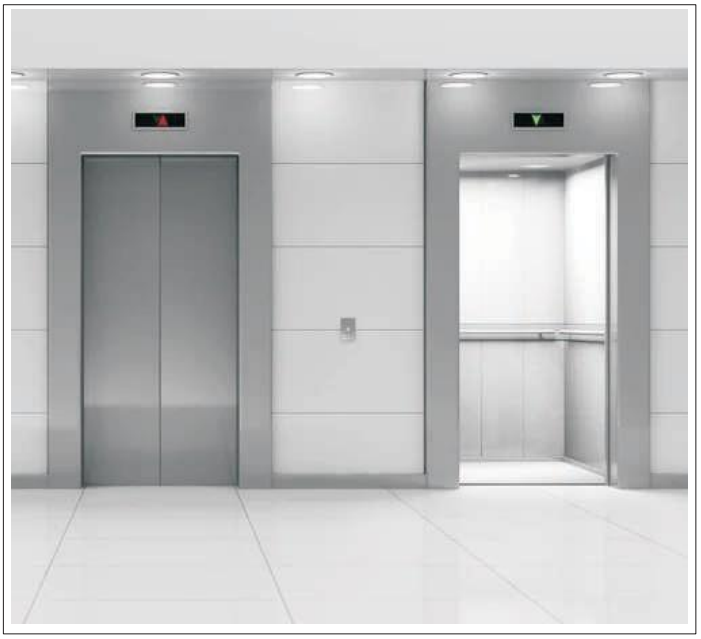
Applicable industry, railings of stairs and elevator, shelves oven stainless steel guardrail distribution box, stainless steel home supplies etc.

AUTO PARTS

HOUSEHOLD APPLIANCES



AIRSHIP



ELEVATOR MANUFACTURING

CONTAINER MANUFACTURING

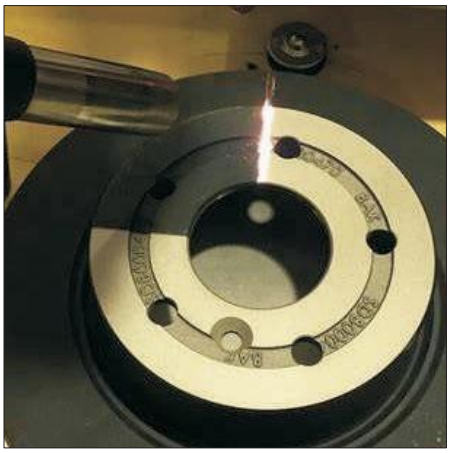
METAL FABRICATION

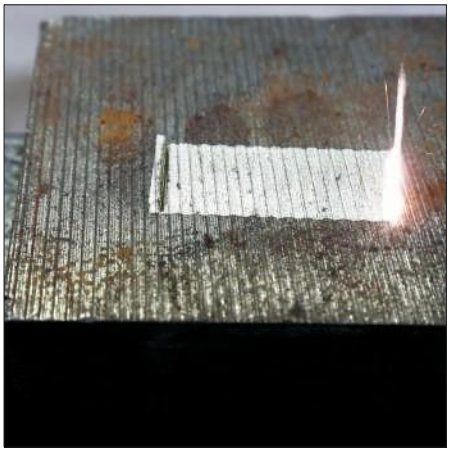
MARINE

MACHINE MANUFACTURING

CW Laser Cleaning Samples









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