

# FIBERSTAR® LASER CLEANING SYSTEM

## 4102 Series



### ★ HIGHLIGHTS

- ✓ Robust, Compact, Industrial Design
- ✓ 200 Watt Air Cooled Fiber Laser System
- ✓ Dual Galvo Wand with LED Red Pointers & Lights
- ✓ Wireless Operator Interface Laser Control Tablet
- ✓ Easy To Use / Safe / Cost Effective Solution

Laser Cleaning is effective on a wide range of materials and industries:

- |                              |                                   |
|------------------------------|-----------------------------------|
| ➤ Metals                     | ➤ Automotive Industry             |
| ➤ Stone                      | ➤ Aerospace Industry              |
| ➤ Glass                      | ➤ Marine Industry                 |
| ➤ Plastics                   | ➤ Oil and Gas Industry            |
| ➤ Rubber                     | ➤ Plastic Injection Mold Industry |
| ➤ Wood                       | ➤ Electronics / PCB Industry      |
| ➤ Ceramics                   | ➤ Tool, Die & Metal Fabrication   |
| ➤ Carbon-Fiber Polymers      | ➤ Medical Device Industry         |
| ➤ Fiber Glass Polymers       | ➤ Pharmaceutical Industry         |
| ➤ Painted or Coated Surfaces | ➤ Food Processing Industry        |
| ➤ Organic Materials          | ➤ Nuclear Decontamination         |



Laser cleaning is a versatile and effective technique for removing contaminants, coatings, or oxides from various materials without causing damage to the underlying substrate and surfaces. It is used across a wide range of industries due to its precision, efficiency, minimal environmental impact, and ability to work on delicate or complex surfaces without causing damage.

✓ Rust, Corrosion, Paint and Coating Removal

✓ Surface Preparation for Welding or Bonding

✓ Plastic & Rubber Mold Cleaning

✓ Oil, Grease and Oxide Layer Removal

✓ Deburring and Surface Texturing & Finishing

✓ PCB Cleaning / Anilox Print Roll Cleaning

✓ Microbial Cleaning / Sterilization / Decontamination



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## LASERSTAR ACADEMY™

Our education courses are designed to provide you with a solid foundation of fundamental laser skill sets to immediately gain a revenue impact with your new laser device.

[LaserStarAcademy.com](http://LaserStarAcademy.com)

Technical Specifications at [www.LaserStar.net](http://www.LaserStar.net)

## Benefits of Laser Cleaning:

**Precision and Control:** Laser cleaning offers precise control over the cleaning process, allowing for the removal of specific layers of material without damaging the underlying surface.

**Non-Abrasive and Gentle:** Unlike traditional methods like sandblasting or chemical cleaning, laser cleaning is non-abrasive. This means it doesn't wear down or alter the surface of the material being cleaned.

**Environmentally Friendly:** Laser cleaning is a dry process that doesn't require the use of chemicals, solvents, or abrasive materials, reducing environmental impact and waste.

**Cost-Effective:** Over time, laser cleaning can be more cost-effective due to lower maintenance requirements, reduced need for consumables, and the ability to automate the process.

**Versatility:** It can be used on a wide range of materials, including metals, ceramics, plastics, and composites, making it suitable for various industries such as aerospace, automotive, and conservation.

**Safety and Cleanliness:** Laser cleaning reduces the risk of contamination and exposure to harmful chemicals, improving safety for operators and reducing the need for protective equipment.

**Reduced Downtime:** The precision and efficiency of laser cleaning can minimize downtime in industrial settings, allowing for faster turnaround times and increased productivity.

**Minimal Residue:** The process typically leaves minimal residue, which simplifies the post-cleaning process and ensures a cleaner work environment.

**Automation Compatibility:** Laser cleaning systems can be easily integrated into automated production lines, enhancing efficiency and consistency in cleaning tasks.

**Long-Term Savings:** The durability of laser cleaning equipment and the reduction in consumable costs can lead to significant long-term savings.

LASER TYPE	AVE. POWER	PULSE ENERGY	F-THETA LENS	SUPPLY CIRCUIT	FIBER LENGTH	WARRANTY
1064µm / Pulse	200 Watt	1.5mj	254 FS	120-230V, 1 Phase	3 meter	2 year

**Worldwide Safety Certification**  
FDA(CDRH), CE



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