



HG Farley Laserlab Cutting & Welding System Engineering Co.,Ltd

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## LASER CLEANING SOLUTION

Energy-saving and environmental protection  
Restoring the original color  
One step in place  
Cost-effective



**Rust removal / Paint removal / Oil removal / Degumming**  
High degree of cleanliness and high precision, no damage to the substrate surface

# LASER CLEANING SOLUTION

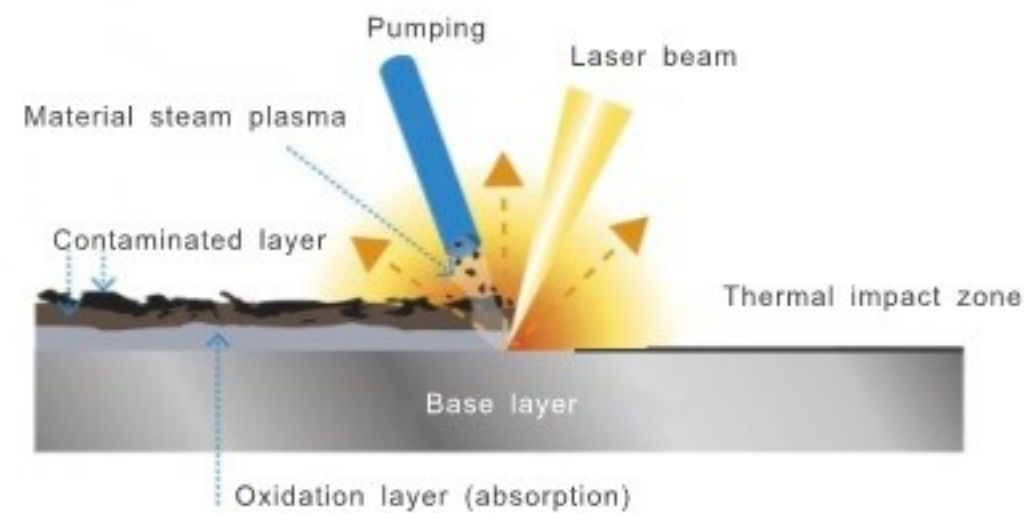
laser cleaning machine is a new generation of high-tech products for surface cleaning. it is easy to control, easy to integrate automatically, no need of chemical reagents, can fit surface cleaning, high cleaning cleanliness, high precision, high efficiency, environmental protection, safe and reliable, almost no damage to the surface of the substrate, It solves problems that traditional cleaning cannot solve.



## PRODUCT FEATURES

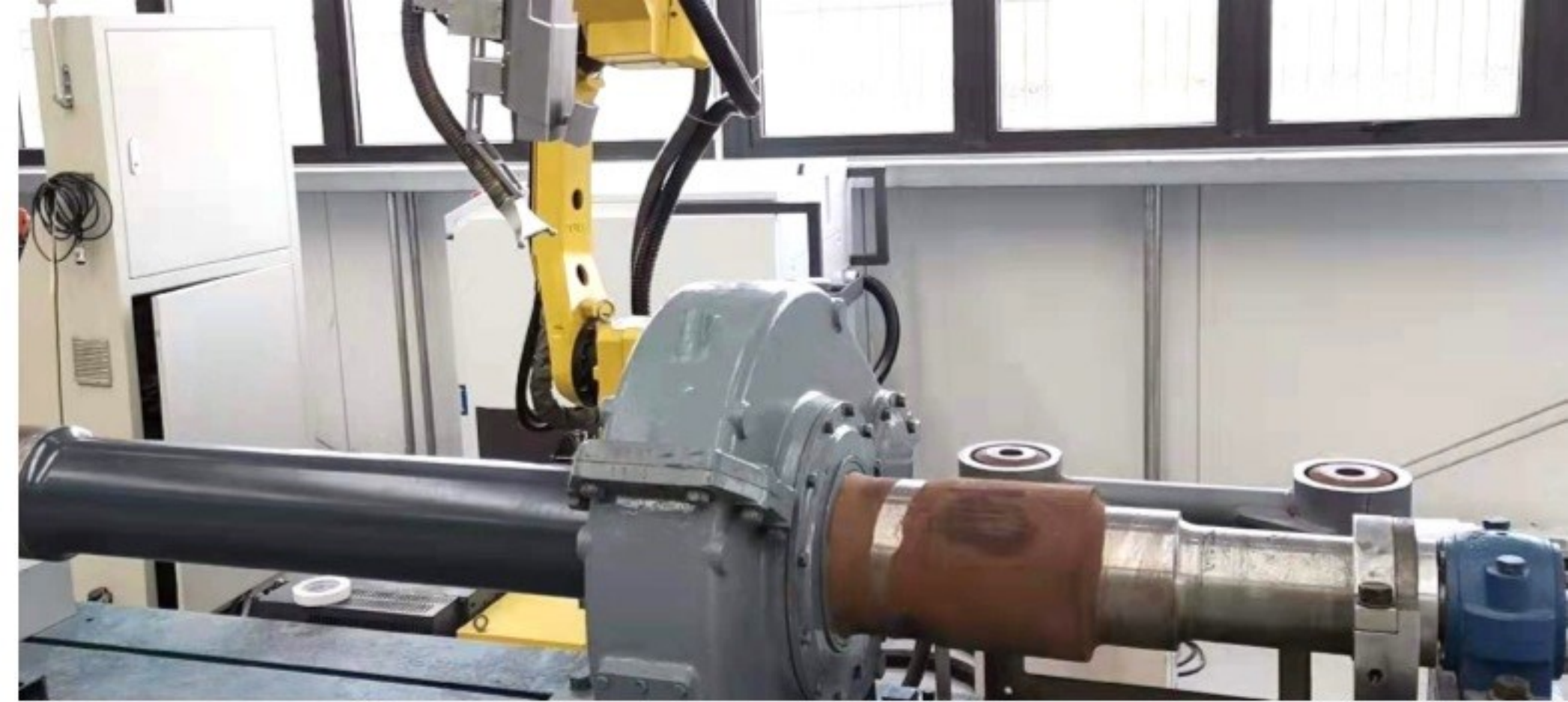
- \_\_\_\_\_ No grinding, non-contact cleaning to avoid secondary contamination;
- \_\_\_\_\_ High cleaning accuracy and controllability;
- \_\_\_\_\_ No consumables, strong environmental protection;
- \_\_\_\_\_ Easy to control, power-on, hand-held or fitted with manipulator;
- \_\_\_\_\_ Automatic cleaning;
- \_\_\_\_\_ High cleaning efficiency and save time;
- \_\_\_\_\_ System stability, long life;
- \_\_\_\_\_ One-time input, economical and efficient.

## LASER CLEANING PROCESS



- The beam energy emitted by the laser is absorbed by the contaminated layer on the surface to be treated;
- Absorption of large energy forms a rapidly expanding plasma(Highly ionized unstable gases),to generate shock waves;
- The shock wave causes the pollutant to evaporate or peel instantly.
- Using correct laser parameters and optimal wavelength, the base material will not be damaged or melted.

## EFFECT CONTRAST



## PRODUCT PARAMETERS

Model	BUZZ-0050	BUZZ-0070	BUZZ-0100	BUZZ-0200
Laser working medium	Mixed with Yb fiber laser			
Laser power	50W	70W	100W	200W
Laser wavelength	1064nm	1064nm	1064nm	1064nm
Pulse frequency	50-100KHZ	20-400KHZ	20-200KHZ	10-50KHZ
Cooling mode	Air-cool	Air-cool	Air-cool	Water-cool
Dimensions	760X780X790		1100X950X700	
Weight	55-60Kg		66Kg	178kg(with water tank)
Whole machine power	400-500W		<=1500W	<=2500W
Scan width	10-80mm			
Optional	Handheld/Auto/Custom			
Working environment temperature	5-40°C			

Model	BUZZ-0300	BUZZ-0500	BUZZ-1000	BUZZ-2000
Laser working medium	Mixed with Yb fiber laser			
Laser power	300W	500W	1000W	2000W
Laser wavelength	1064nm	1064nm	1064nm	1064nm
Pulse frequency	20-50KHZ	10-50KHZ	10-50KHZ	20-50KHZ
Cooling mode	Water-cool	Water-cool	Water-cool	Water-cool
Dimensions	1200X700X1200	830X1130X300	Customization	Customization
Weight	178Kg (with water tank)	240-260Kg(with water tank)	Customization	Customization
Whole machine power	<=3500W (including chillers)	<=4500W	<=7500W	<=20000W
Scan width	10-80mm	10-60mm	10-120mm	
Optional	Handheld/Auto/Custom			
Working environment temperature	5-40°C			

## PRODUCT ADVANTAGES

**Strong** – Core laser Source, Independent Property Rights

**Ultra-low price-high cost-performance, value for money**

**Famous Brand** - Industry Lead, Quality Assurance

**Flexible** - simple and easy to manipulate



## APPLICATION RANGE

- Metal surface rust removal
- Surface lacquer removal
- Surface oil stain dirt cleaning
- Surface coating and coating removal
- Weld/spray surface pretreatment
- Removal of dust and attachments from the stone surface
- Rubber mold residue cleaning

## APPLICATION INDUSTRIES

Automobile periphery, ship, rail transit, aerospace, rubber mold, environmental protection industry, etc.



## COMPARATIVE ADVANTAGES

Contrast project	Laser cleaning	Chemical cleaning	Mechanical polishing	Dry ice cleaning	Ultrasonic cleaning
Cleaning method	Laser, contactless	Chemical cleaner, contact	Sandpaper, contact	Dry ice, contactless	Cleaning agent, contact
Workpiece damage	No	Yes	Yes	No	No
Cleaning efficiency	High	Low	Low	Medium	Medium
Consumptive material	Power	Chemical cleaning agent	Sandpaper, grinding wheel	Dry ice	Cleaning agent
Cleaning effect	High cleanness	General, uneven	General, uneven	Good, uneven	Hood, small range
Safety and environmental protection	No pollution	Pollution	Pollution	No pollution	No Pollution
Manual operation	Easy to operate, handheld or automated	Complex process flow, high requirements for operators	Cost manpower and material resources, need to do protective measures	Easy to operate, handheld or automated	Easy to operate, Manual addition of consumables
Cost	First high, no consumables, low maintenance cost	First low, high cost of consumables	First high, low labour costs for consumables	First medium, high cost of consumables	First low, medium cost of consumables

## TYPICAL APPLICATIONS

