LASER CLEAN SOLUTION

RUST REMOVAL / PAINT REMOVAL / OIL REMOVAL
GLUE REMOVAL / COATING REMOVAL, ETC.

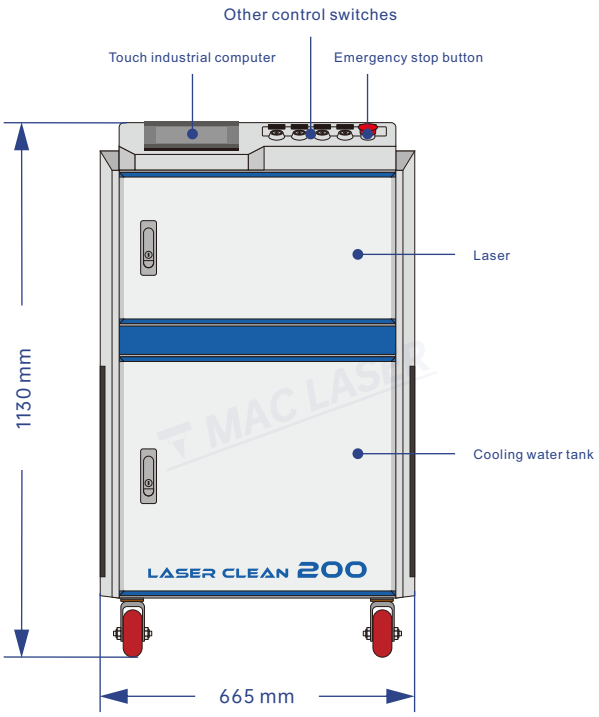
High cleaning cleanliness and precision,
almost no damage to the surface of the substrate

Cost-effective

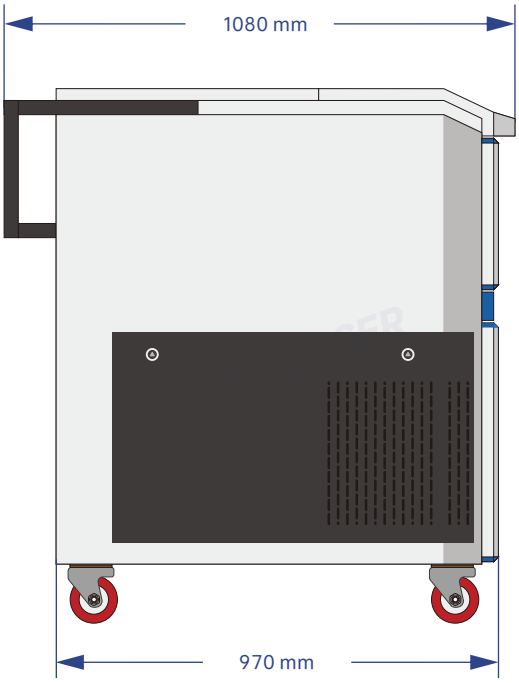
Energy saving and
environmental protection

Laser cleaning machine is a new generation of high-tech products for surface cleaning. It has the advantages of easy control, easy automation and integration, no chemical reagents, surface cleaning, high cleaning cleanliness, high precision, high efficiency, environmental protection, safety and reliability, and almost no damage to the base. The surface of the material can solve many problems that cannot be solved by traditional cleaning. It can be used not only to clean organic pollutants, but also inorganic substances, including metal corrosion, metal particles, dust, etc. The application effects include: rust removal, paint removal, oil removal, cultural relics restoration, glue removal, and coating Layer and de-plating.

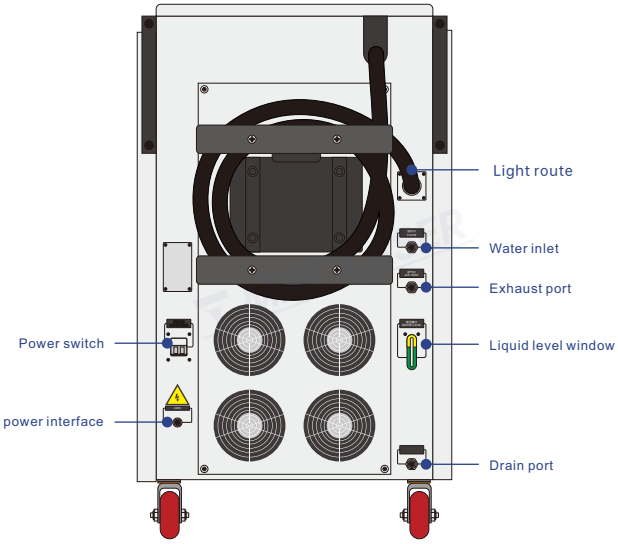
Model size



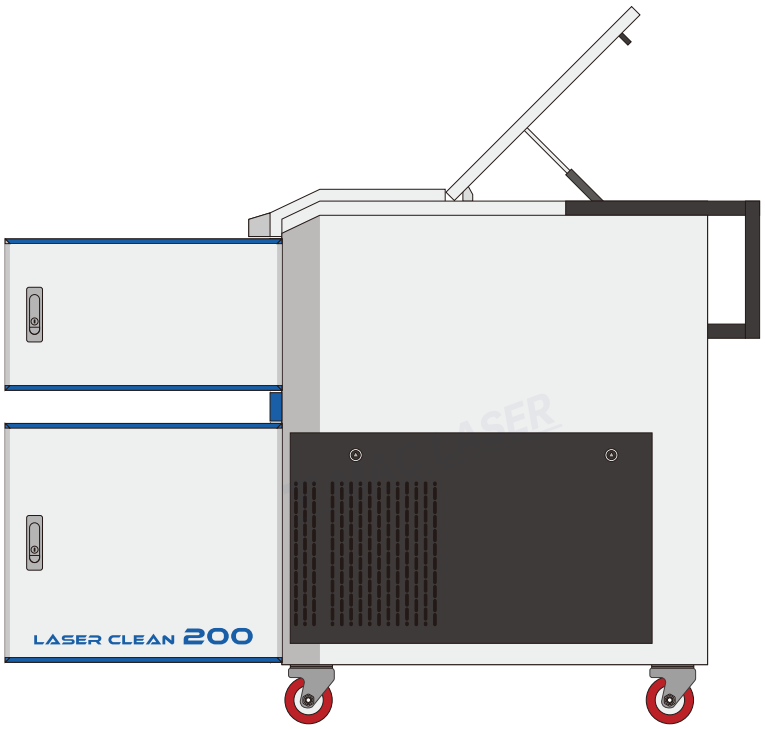
FRONT OF THE DEVICE



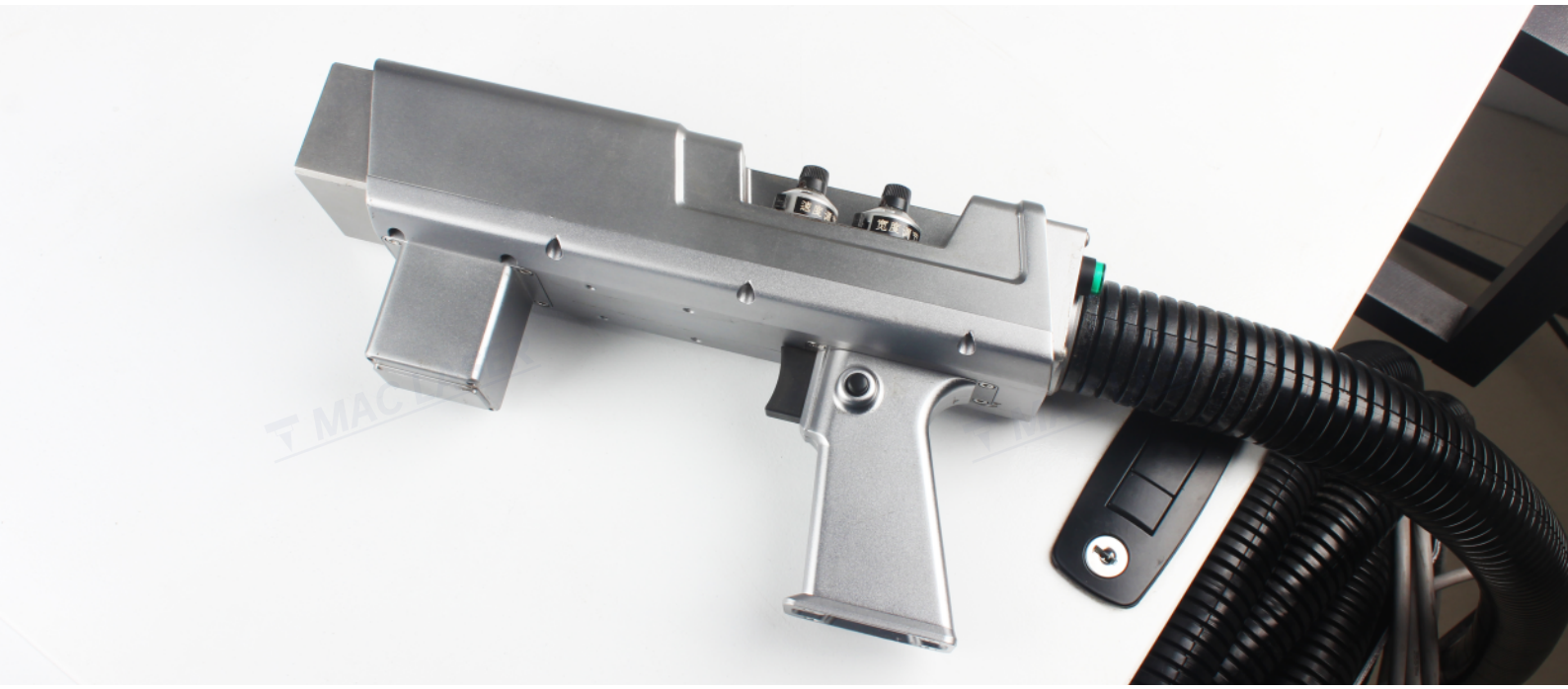
RIGHT SIDE OF THE DEVICE



THE BACK OF THE DEVICE



EXPAND THE DEMO



PRODUCT PARAMETER

Model series	MQX Laser Cleaning Series			
Model	MQX-200	MQX-300	MQX-500	MQX-1000
Laser source model	RFL-P200	RFL-P300	RFL-P500	RFL-P1000
Output power	200W	300W	500W	1000W
Laser wavelength	1064±5nm			
Repetition frequency range	10-50 kHz			
Output power stability	< 5%			
Pulse width range	120-160 ns			
Output core diameter	100 μm			
Output fiber length	5 m (customizable)			
Cooling way	Water cooling			
Operation mode	Automatic/manual (optional)			
Input power	220，50/60 Hz			
Operating temperature	10 - 40 ℃			
Dimension	1080X665X1130 MM			
Total Weight	180 KG			

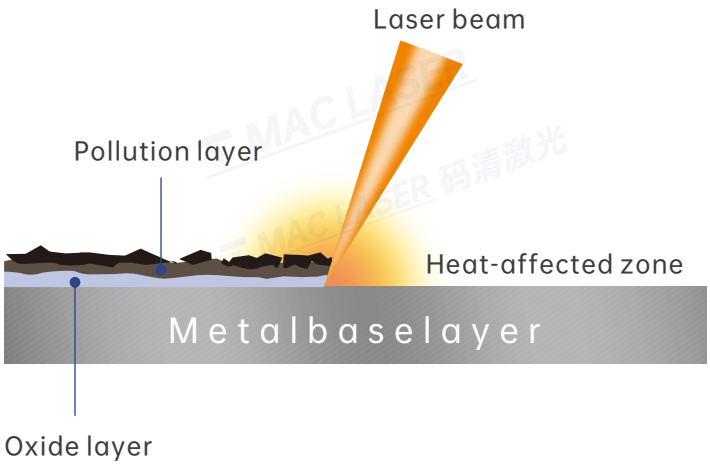
PRODUCT FEATURES

LASER CLEAN SOLUTION

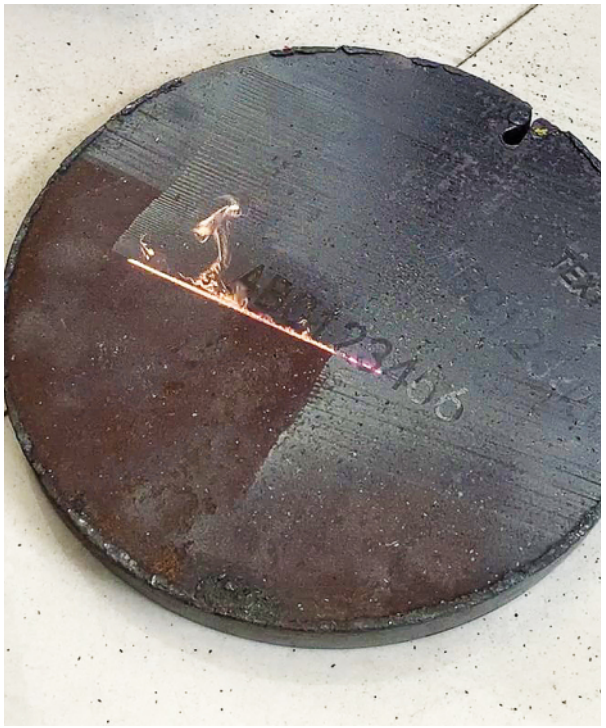
- Non-grinding, non-contact cleaning to avoid secondary pollution.
- High cleaning precision, strong controllability, no consumables,strong environmental protection.
- Easy to control, just power on, and it can be hand-held or cooperated with a manipulator to realize automatic cleaning.
- High cleaning efficiency, saving time.
- The system is stable, long life, one-time investment, economical and efficient.

Principle of laser cleaning

The beam energy emitted by the laser is absorbed by the pollution layer on the surface to be treated, and the shock wave causes the pollution to evaporate or peel off instantly; using the correct laser parameters and the optimal wavelength, the base material will not be damaged or melted.



EFFECT CONTRAST



COMPARISON OF CLEANING SOLUTIONS

Comparison items	Chemical cleaning	Mechanical polishing	Dry ice cleaning	Ultrasonic cleaning	Laser cleaning
Cleaning method	Chemical cleaning agent	Mechanical	Sandpaper, contact type	Cleaning agent, contact type	Laser, non-contact
Workpiece damage	Damaged	Damaged	No Damage	No Damage	No Damage
Cleaning efficiency	Low	Low	Medium	Medium	High
Cleaning effect	General, uneven	Normal, uneven	Excellent, uneven	Excellent, clean range is small	Very good, high cleanliness
Cleaning precision	Uncontrollable, poor precision	Uncontrollable, general precision	Uncontrollable, poor precision	Not specified range cleaning	Precise and controllable, high precision
Safety/environmental protection	Serious chemical pollution	Environmental pollution	No pollution	No pollution	No pollution
Manual operation	Complex procedures require high requirements for operators	Strong physical strength and safety protection measures	Simple operation, hand-held or automated	Simple operation, but manual addition of consumables	Simple operation, hand-held or integrated automation
Consumables	Chemical cleaning agent	Sandpaper, grinding wheel, whetstone, etc.	Dry ice	Special cleaning fluid	Only power supply
Cost investment	Low initial investment, high cost of consumables	High initial investment, high labor cost of consumables	Medium initial investment, high cost of consumables	Low initial investment, medium cost of consumables	High initial investment, no consumables, low maintenance cost

Application field

Aerospace industry

Ship maintenance industry

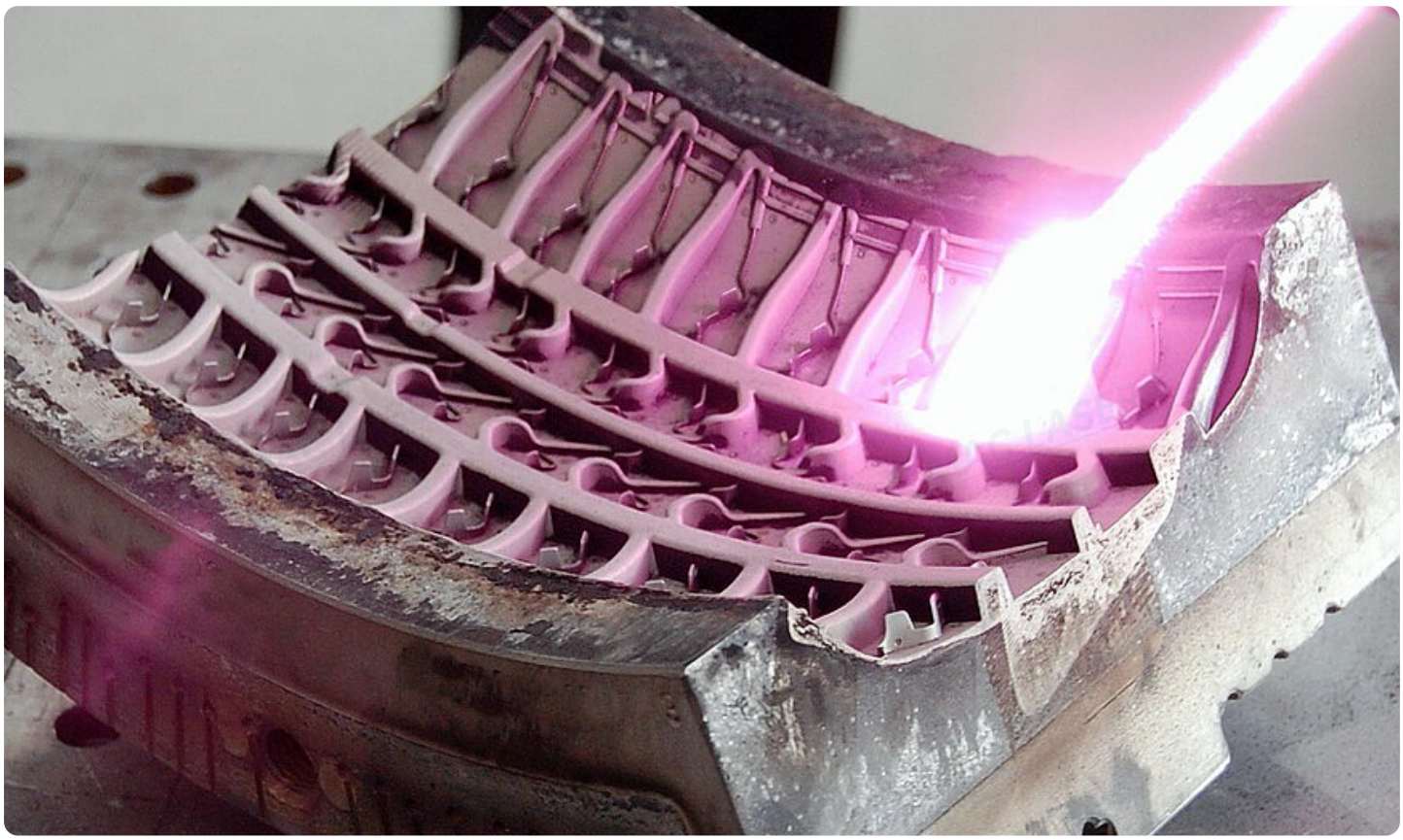
Train track

Automobile peripheral industry

Machinery factory, chemical plant

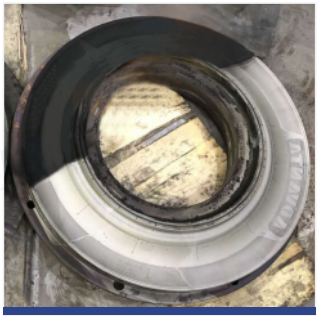
Mold processing industry

TYPICAL APPLICATIONS



● Remove oil from metal part

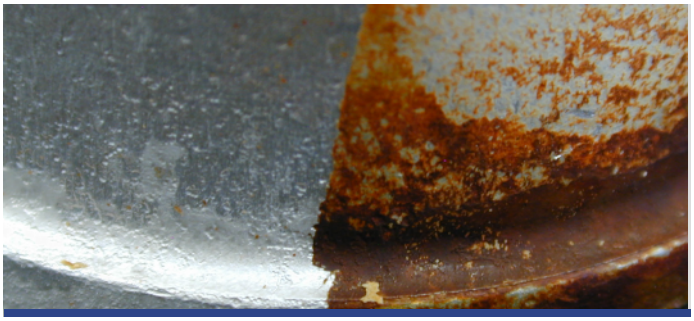
● Remove rubber from tire mold



● Remove coating on flange surface

● Derusting of auto parts

● Deoxidation of mechanical surface



● Derusting of mechanical bottom plate