DP LASER

Handheld Laser Cleaning Machine Series

Time-Saving

Modular Control

Easy Operation

Experienced Manufacturer, Quality Assurance

Why choose us

R&D Capability

Shenzhen Dapeng Laser Technology Co., LTD., founded in 2011, is a national high-tech laser equipment enterprise integrating research and development, manufacturing, sales and service. The four main product lines include more than 150 equipment and solutions including laser marking, laser cutting, laser welding, and laser cleaning machines widely used in auto manufacturing, printing and packaging, electronic components, hardware industry, jewelry hclothing leather, medical equipment, craft gifts and more industries.

Quality Control

In accordance with the ISO 9001 quality control system, we rigorously monitors eachstage including materials, manufacturing processes, assembly, and shipping.

Efficient and Effective Support

We have developed a comprehensive system for production, sales, and after-sales service.

We havea laser industry park in Nantong, Jiangsu, andproduction bases in Shenzhen, Wenzhou, and Suzhou. Additionally, we have a large laser cutting machine production base in Dongguan.

We havealso set up over 20 branch offices in key industrialcities and regions across the country.

Diverse Products

Laser Cutting Machine

Capable of cutting various metal sheets and tubes (additional tube cutting device required), primarily suitable for rapid cutting of materials such as stainless steel, carbon steel, galvanized sheet, electrolytic plate, brass sheet, aluminum sheet, manganese steel, various alloy sheets, and rare metals.

Laser Marking Machine

Widely used for marking graphics and text in various fields including integrated circuit chips, computer components, industrial bearings, watches, electronics and communication products, aerospace components, household appliances, hardware tools, molds, wires and cables, food packaging, jewelry, tobacco, and military applications.

Laser Welding Machine

Suitable for a wide range of industries including aviation, aerospace, automotive, power batteries, machinery manufacturing, shipbuilding, chemical industry, and consumergoods.

Laser Coding Machine

This product is primarily designed for real-time coding of products. It can adapt to various manufacturers, including liquor bottling lines, wine bottling lines, beverage filling lines, pharmaceutical packaging lines, tobacco sorting lines, and more.

Precision Micro-additive Equipment

With a diverse range of products, we offer customized configurations of precision laser marking machines, laser welding machines, and laser cutting machines based on customer requirements.

Non-standard Automation

With a diverse range of products, we specialize in customizing precision laser marking machines for our customers.

We provide a complete set of laser processing solutions and related facilities. Our main product lines include a variety of industrial laser equipment and their associated products, totaling over 200 types. These include laser marking machine series, laser welding machine series, laser cutting machine series, green laser demonstration series, PCB vlaser drilling machine series, linear motor series, and more.

Our products find extensive applications in industries such as electronics, integrated circuits, instruments, printed circuits, computer manufacturing, mobile communications, automotive components, precision instruments, building materials, clothing and accessories, urban lighting, jewelry, handicrafts, printing and plate-making, among others.

Handheld Laser Rust Removal Series

Portable（1000W/1500W）

Net Weight 150kg

Gross Weight 180kg

Standard（2000W）

Net Weight 180kg

Gross Weight 225kg

High-Power（3000W）

Net Weight 200kg

Gross Weight 295kg

Handheld Laser Cleaning Series

Portable（1000W/1500W）

Net Weight 150kg

Gross Weight 180kg

Standard（2000W）

Net Weight 180kg

Gross Weight 225kg

High-Power（3000W）

Net Weight 200kg

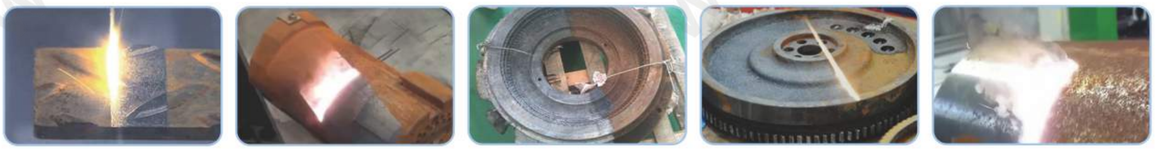
Gross Weight 295kg

Structure of the Machine

Front View

- Laser cleaning is employed to eliminate surface contaminants from objects, primarily used for tasks like rust removal from the surface of sheet metal cabinets.
- The advantages of laser cleaning lie in its environmental-friendliness, low labor intensity, non-destructive nature, and precision.
- The vibration effect involves high-frequency laser impacts on the target's surface. The laser beam's rotational motion converts into sound waves that return from the lower layer surface, leading to interference with the incident waves and generating resonance. This results in the fragmentation of contaminants.

Samples

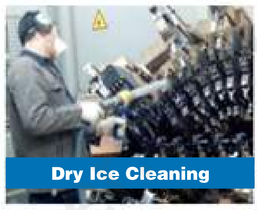


- Laser cleaning features characteristics such as non-abrasiveness, non-contact, absence of thermal effects, and applicability to objects of various materials. It is considered the most reliable and effective solution.

Applications

Applied in mold cleaning, weapon equipment cleaning, removal of old paint from aircraft, cleaning of building exteriors, electronic industry cleaning,

Comparison between Laser Rust Removal and Traditional Rust Removal Methods



Comparison of conventional descaling and laser descaling

Model Disadvantages of Traditional Rust Removal	Advantages of Laser Rust Removal
Surface Damage (Corrosion) to Workpieces	Environmental Friendly
Drying Issues After Cleaning Workpieces	Non-contact
Inability to Clean Micro-Nanometer-Level Impurities	High Cleanliness
Waste of Water Resources, Sand, Grinding Heads, etc	No Consumables
Contaminated Cleaning Solvents, Not Environmentally Friendly	Low Operating Costs
Secondary Treatment of Cleaning Solutions After Use	Remote Operation Capabilities
Inability to Achieve Online Cleaning	Online Cleaning Feasibility

Machine Parameters

Model	DP-CL1000	DP-CL1500	DP-CL2000	DP-CL3000
Laser Power (W)	1000	1500	2000	3000
Operating Mode	Continuous/ Modulated	Continuous/ Modulated	Continuous/ Modulated	Continuous/ Modulated
Modulation Frequency (Hz)	1-5000	1-5000	1-5000	1-5000
Wavelength (nm)	1070-1090	1070-1090	1070-1090	1070-1090
Fiber Length (m)	10 (Exposed 8)	10 (Exposed 8)	10 (Exposed 8)	10 (Exposed 8)
Scanning Width (mm)	Dual Swing 0-50, Single Swing 0-150	Dual Swing 0-50, Single Swing 0-150	Dual Swing 0-50, Single Swing 0-150	Dual Swing 0-50, Single Swing 0-150
BPP(M2)	1.5	1.5	1.5	1.5
Power Requirement (V)	220	220	220&380	380v
Weight (kg) ±20kg	180	180	200	250
Total Power Consumption (KW)	6	8	10	10
Weight (kg)	Net Weight 150, (with Wooden Frame) 195 with wire feeder	Net Weight 150, (with Wooden Frame) 195 with wire feeder	Net Weight 180, (with Wooden Frame) 225 with wire feeder	Net Weight 200, (with Wooden Frame) 295 with wire feeder
Dimensions (cm)	L 95 * W 75 * H 80	L 95 * W 75 * H 80	L 95*W 75*H 103	L 126 * W 75 * H 126

- Laser cleaning is employed to eliminate surface contaminants from objects, primarily used for tasks like rust removal from the surface of sheet metal cabinets.
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- Laser cleaning features characteristics such as non-abrasiveness, non-contact, absence of thermal effects, and applicability to objects of various materials. It is considered the most reliable and effective solution.

Applications

Applied in mold cleaning, weapon equipment cleaning, removal of old paint from aircraft, cleaning of building exteriors, electronic industry cleaning.

Comparison between Traditional Cleaning and Laser Cleaning

Cleaning Metho	Efficiency	Effectiveness	Operation	Environmental Pollution	Consumable Cost
Sandblasting	High	Good, relatively versatile, uncontrollable process, material damage	Offline	Serious pollution	High
Chemical	Moderate	Moderate, poor versatility, uncontrollable process, material damage	Offline	Serious pollution	High
Mechanical Friction	Moderate	Low, uneven, uncontrollable process, material damage	Online	Dust	Moderate
Dry Ice	Relatively High	Good, poor versatility, uncontrollable process	Online	Serious pollution	High
Jet Stream	Relatively High	Good, poor versatility, uncontrollable process, leading to secondary pollution	Offline	Environmental pollution	Moderate
Laser	Relatively High	Good effect, good versatility, controllable process, non-destructive.	Remote	Environmentally friendly	Low

Equipment Configuration

Components/ Power	H80	H80	H100	H120
Cabinet	Dapeng Customization (Red/White)			
Laser Source	MAX photonics MSFC-1000X /Raycus1000W/Bwt 1000W	MAX photonics MSFC-1500X /Raycus1500W/Bwt 1500W	MAX photonics MSFC-2000X /Raycus2000W/Bwt 2000W	MAX photonics MSFC-3000X /Raycus3000W/Bwt 3000W
Handheld Laser Head	SUP			
Laser Control System	Qi Lin、SUP、WSX			
Wire Feeder (Standard)	Dapeng Customization (Red/White)	Dapeng Customization (Red/White)	Dapeng Customization (Red/White)	Dapeng Customization(Red)
Chiller	Han Li SCH-1000 /QUANG-1000	Han Li SCH-1500 /QUANG-1500	Han Li SCH-2000 /QUANG-2000	Han Li-3000 /QUANG-3000

Note: (1) The welding head + control system + wire feeder are included in the standard configuration.
(2) The standard configuration includes 6 copper nozzles, 5 protective lenses, a pair of safety goggles, 1 data cable, and a 3-meter gas hose.

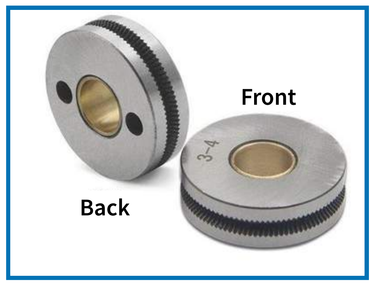
Accessories List

Number	Name	Specifications	Quantity (PCS)	Price (Consumables)	Recommended Usage	Remarks
1	Nozzle	Right Angle, Inside Angle, Outside Angle	6	40 yuan per piece	3 pieces	Each type, 3 pieces
2	Lens	D18nm*2nm/ D20nm*2nm	5	30 yuan per piece	1 piece	SUP is D18, Others are D20
3	Wire Feeder Wheel	Model1:(0.8、1.0) Model2:(1.2、1.6)	4	/	/	2 pieces for each model
4	Safety Goggles	/	1	/	/	/
5	Data Cable	3m	1	/	/	/
6	Hexagonal Wrench	/	1	/	/	Opening of the cabinet side rear door
7	Storage Box	/	1	/	/	Installing lenses and nozzles
8	Gas Hose	Diameter10*6.5	1	/	/	3m
9	Fiber Optic Protective Sleeve	/	1	/	/	Protecting the laser fiber head

Image

Nozzle

Lens



Wire Feeder Wheel

Safety Goggles

Data Cable

Hexagonal Wrench

Storage Box

Gas Hose

Optic Protective Sleeve

Core Component – Laser

Image

Accessories List

- High-precision automatic mounter
- Component and COS automatic wire bonding equipment
- Automated component brightness testing system
- FAC, automatic coupling system for reflective mirrors
- Component and COS automatic wire bonding equipment
- High-reliability equipment with independent intellectual property rights

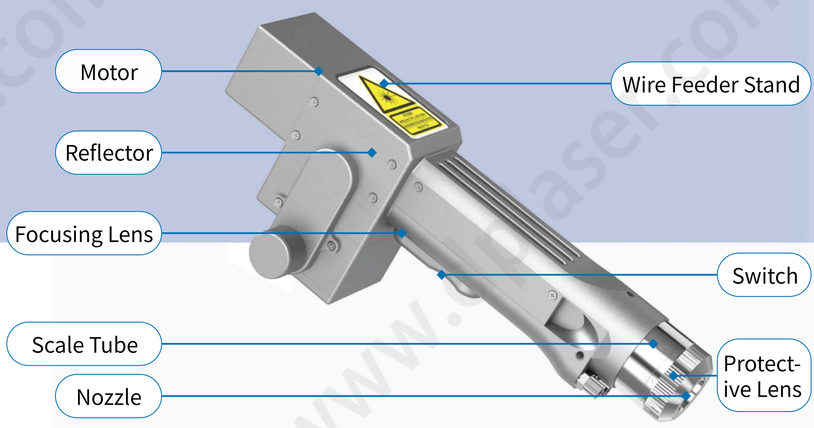
Product Technology

- Strict control of cladding and core alignment for both active and passive optical fibers to prevent optical leakage.
- Optimize the coupling efficiency between pump lasers and beam combiners, and control the internal temperature of the beam combiners
- High power durability of QBH end faces and meticulous design and production
- Multi-stage residual pump light filtering technology to prevent fiber and fiber bench heating.
- Effective thermal dissipation of active optical fibers and temperature control of the overall structure.
- Strict control of the output beam spot to ensure consistent product performance

Parameters

Model	BFL-CW1000	BFL-CW1500	BFL-CW2000	BFL-CW3000
Laser Power (W)	1000	1500	2000	3000
Fiber Core Diameter	14、20、25、50um	14、20、25、50um	14、20、25、34、50um	20、25、34、50um
Output Connector	QBH	QBH	QBH	QBH
Modulation Frequency	0-50KHZ	0-50KHZ	0-50KHZ	0-50KHZ
Voltage(V)	220±20V, AC,PE,50/60HZ	220±20V, AC,PE,50/60HZ	220±20V, AC,PE,50/60HZ	380±20V, AC,PE,50/60HZ
Setting Temperature	25°C（Laser Module） 30°C（QBH）	25°C（Laser Module） 30°C（QBH）	25°C（Laser Module） 30°C（QBH）	25°C（Laser Module） 30°C（QBH）
Dimensions (mm)	80*402*296	80*402*346	80*402*346	80*482*521

Core Component–Laser Gun

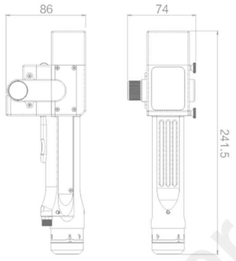


Parameters

Power Range	≤3000W
Collimation Focal Length	D16 F60mm
Focusing Focal Length	D20 F800mm
Maximum Air Pressure	15Bar
Spot Adjustment Range	Line0-300mm
Applicable Wavelength	1070nm
Weight	0.8kg

LIGHTWEIGHT, AS LIGHT AS 0.8KG

Dimensions



Safe

Our self-developed safety detection system ensures your protection. The gun head safety lock prevents contamination of the lens when not in use. It features a safety lock and trigger dual-control enablement,

Easy Maintenance

The electrical interfaces perform self-diagnostics, and the focusing lens can be replaced.

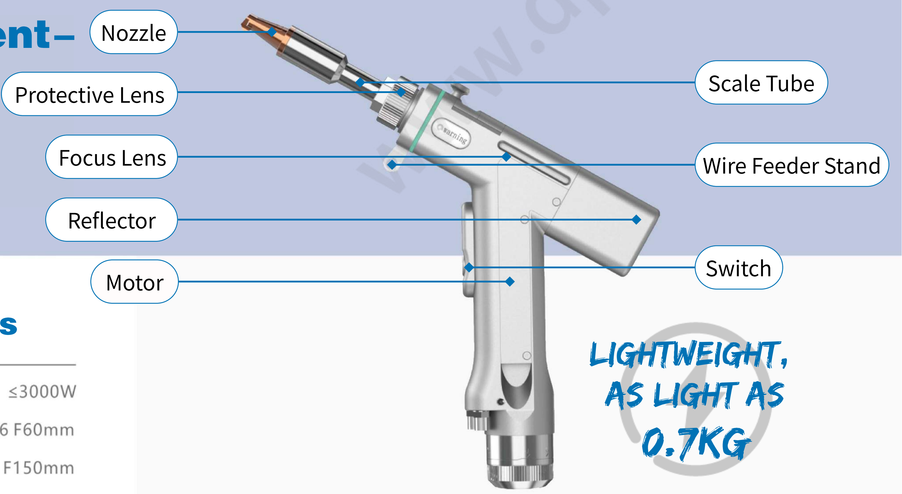
Clean and Efficient

With system upgrades supporting F400, F600, and F800, along with various focusing lenses, you can achieve large-area cleaning or high-energy density cleaning as needed.

Cost Reduction and Efficiency Enhancement

With high speed and maximum cleaning efficiency, our system minimizes cost while providing outstanding results. No consumables are needed, making it energy-efficient and environmentally friendly.

Core Component–Laser Gun

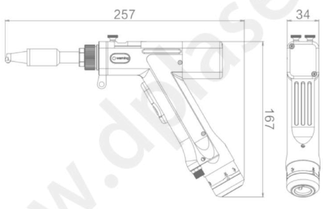


Parameters

Power Range	≤3000W
Collimation Focal Length	D16 F60mm
Focusing Focal Length	D20 F150mm
Maximum Air Pressure	15Bar
Vertical Focusing Range	±10mm
Spot Adjustment Range	Line0-8mm
Applicable Wavelength	1070nm
Weight	0.7kg

LIGHTWEIGHT, AS LIGHT AS 0.7KG

Dimensions



Safe

Independently developed safety detection system, with real-time temperature monitoring built-in.

Easy Maintenance

The replacement of focusing lens and protective lens is made drawer-style, while the collimating lens is integrated with QBH.

Portability

Compared to the previous generation, the weight has been further reduced, making it more agile to operate, easier to handle, and providing a more comfortable grip.

Stable Performance

The optical structure has been optimized to achieve high welding strength, minimal deformation, and deep penetration.

Versatile Features

Supports handheld continuous welding, cleaning, and cutting. It's adaptable for various scenarios, with password authorization and real-time monitoring of all interfaces for easy maintenance.

Core Component –
Built–in Cabinet Laser Welding Water Cooler

Product Features

- Optional use of environmentally friendly refrigerants
- Temperature control accuracy up to ±0.5°C
- Laser chiller's intelligent temperature controller features two temperature control modes, suitable for different usage scenarios
- Dual-temperature dual-control mode, catering to different cooling needs of fiber laser and laser head
- Optional heater and water purification configurations
- Durable and easy to operate

Wooden Crate Shipping Packaging Dimensions

Type	H80Cabinet (1000W/1500W)	H100Cabinet(2000W)	H120Cabinet(W)
Net Weight (Cabinet)	150kg	180kg	200kg
Dimensions (Cabinet)	L 95cm * W 75cm * 80cm	L 95cm * W 75cm * H 103cm	L 126cm * W 75cm * H 126cm
Gross Weight (Including Wire Feeder and Wooden Crate)	195kg	240kg	310kg
Dimensions (Including Wire Feeder and Wooden Crate)	L 115cm * W 105cm * H 106cm	L 135cm * W 85cm * H 120cm	L 130cm * W 100cm * H 137cm

Note: The H120 (3000W) cabinet comes with dual wire feeders as standard, and the weight of a single wire feeder is 15kg

H80

H100

H120