



Vacuum Glove Box With H₂O & O₂ Purification System

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: MRBEST
- Certification: CE
- Model Number: MR-Lab2000
- Minimum Order Quantity: 1 Set
- Price: Negotiable
- Packaging Details: Standard Export Wooden Packing
- Delivery Time: 7-30 working days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 500 sets per month



Product Specification

- Name: Vacuum Glove Box
- Power Supply: 110 - 220V AC, 50/60Hz, Single-phase
- Glovebox Box: 304 Stainless Steel, Thickness 3mm
- Environment Of Box Inside: H₂O <1 Ppm O₂ <1 Ppm
- Antechamber: Φ360mm (Dia.)x 600mm(length)
- Mini Chamber Size: Φ150 Mm(Dia.) X 300mm(L)
- Usage: For Lithium-on Battery Research
- Warranty: 1 YEAR



More Images



Product Description



Lab Single-Side(1200×750mm) Vacuum Glove Box With H₂O & O₂ Purification System



Model: MR-Lab2000-2400×7




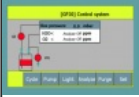

Glovebox is a device for providing anhydrous and anaerobic environment. Equipment consists of a display system. MRBEST offers the most advanced glove box for lithium-ion battery researching.









Features

- * Equipped with an enlarged organic solvent adsorption device, which can absorb HF and reduce the damage of electrolyte to the glove box components.
- * Closed Loop Gas Circulation - Inert gas in a closed loop. The gas is circulated by the blower and purifier, H₂O, O₂ can be removed continuously.
- * Auto Purging - The replacement of the atmosphere inside the glove box can be achieved automatically by the purging valves.
- * Automatic Regeneration - H₂O and O₂ removal material can be regenerated. The regeneration process can be program controlled.
- * Pressure Control in the Glove Box - The pressure in the glove box is controlled automatically by the Programmable Logic Controller (PLC). Working pressure can be set between +10mbar and -10mbar. If the pressure goes over +/- 12mbar, the system will be protected automatically.
- * Automatic Vacuum Pump Control - The vacuum pump will be activated automatically when necessary, and will turn off after a period of idle time.

Specifications:

Structure	Integrated structure (Purification System integrated under the box)	
Power Supply	110 - 220V AC, 50/60Hz, Single-phase	
Glove box Box	Box Material: 304 Stainless Steel (Type 304), thickness 3mm Box Size(excluded antechamber and support): 2400mm(L) x 750mm(W) x 900mm(H) 94.49" x 29.5" x 35.4" Box Support height: 900mm(35.43")	
Tray	Standard Layout 	Two layers in box.
	Option/Add: tool boxes or other 	Various tool boxes, can be placed according to user needs.
Tilt design operating window, removable safety toughened glass front window, 8mm thickness, Wear resistance, corrosion resistance, good light transmission, sealing ring using 3/8 inch thick OMEGA sealing ring.		

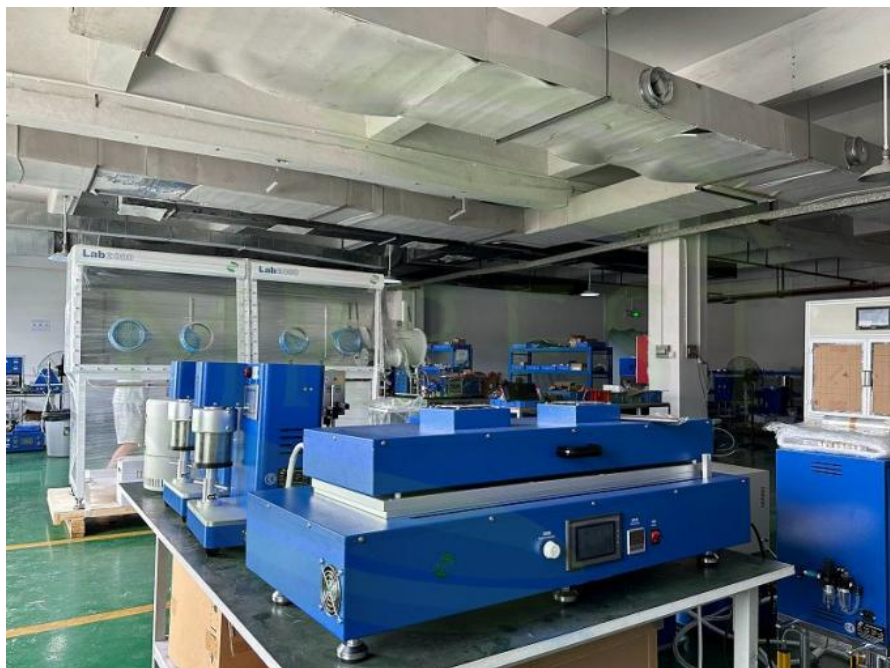
Front window	Option: Window Open 	The front window can be designed to open instead of fix, in order to put in a variety of instruments (custom function).
Environment of Box inside	H ₂ O <1 ppm (20°C/68 , 1 atm) O ₂ <1 ppm (20°C/68 , 1 atm)	
Antechamber	Control way: manual Design: two circular antechambers Main chamber size: Φ360mm (Dia.)x 600mm(length)(location: right-side of box) 14.17 "(Dia.) x 23.62" (L) Mini chamber size: Φ150 mm(Dia.) x 300mm(L)(location: right-side of box) 5.9 "(Dia.) x11.8" (L) Vacuum degree:≤ 0.1MPa(right side antechambers included main chamber and mini chamber, all of that are need vacuum and display. The vacuum pressure gauge brand is German WIKA. Option/add auto control way  Option/Add: heating mode 	It will automatically control the antechamber by time setting and the number of times for gas exhaust and filling. Max temperature:200 / 392 Control accuracy:±2 /±3.6 The main chamber and mini chamber are both can adding the heating function (compared with standard antechamber the size is a little different)
Working gas and regeneration gas	Working gas: 99.999% high pure N ₂ , Ar, He and other inert gas Control gas:99.999% high pure inert gas Regeneration gas: mixing gas of working gas and H ₂ ,hydrogen(H ₂)Volume accounted for 5-10% If the pure system only has moisture removal function, the regeneration gas is the same with working gas	
Gas purification system	Double Column Gas Purification System included: German BASF Oxygen removal material, US UOP high moisture absorb material. The regeneration process of purification system is auto control and automatic moisture and oxygen removal function. Gas purity can be sustained and keep long-term:H ₂ O<1ppm, O ₂ <1ppm. Why Choose Double Column? 1. The Pure column need to be regenerated after saturated by absorbing the oxygen and moisture. The regeneration time is 16 hours. If there is no reserved column, it may stop working. (we recommend double column purification system to factory or other unit which need glove box working Continuously); 2. The pure capacity of double pure columns is two times as much as single column	
Pressure control system	Box pressure can be auto controlled by PLC touch screen Control accuracy:±1Pa Can also be manually controlled by foot switch	
Filter system	The ends of inlet and outlet both are provided with filter The filter precision is: 0.3 μm	
Closed circulating fan	High speed frequency conversion fan, flow 0-100m ³ /h, microprocessor control, Stainless steel device for pressure testing. With water cooling device (can equipped with water cooler and external refrigeration equipment)	
Control system	SIEMENS colors touch screen (6 inches), PLC control system, Bilingual in Chinese and English can be switched Pressure sensor: -2500 2500Pa touch screen, accuracy±1Pa Pressure control: control the box pressure to one setting point (scope can be set) 	
measurements	Moisture analyzer: UK MICHELL brand, 0 1000ppm touch screen display, precision 0.1ppm Oxygen analyzer: US Avcray brand, 0 1000ppm touch screen display, precision 0.1ppm 	

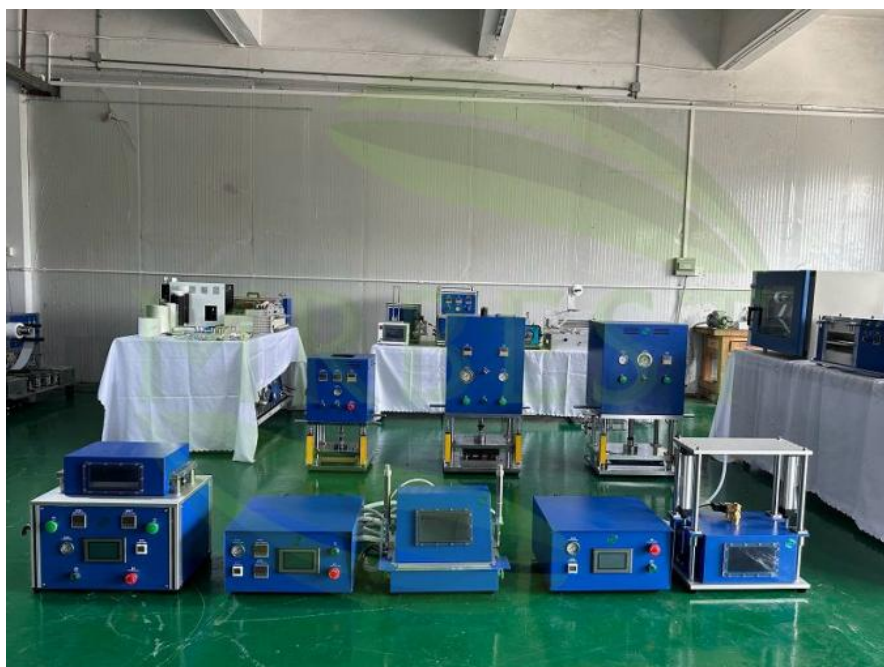
	Britain Brand EDWARDS, pumping speed 8.4-12m ³ /h, Model: RV12 Extreme pressure 2 x 10 ⁻³ mbar/1.5 x 10 ⁻³ Torr Inlet flange NW25 Outlet flange NW25 Noise level: 50 Hz 48 dBA
	Brand: US NORTH Material: Butyl Model for standard: 8B1532
Illumination system	Equipped with Fluorescent lamp. Brand: PHILIP
Solvent removal system	Efficient adsorption of activated carbon, can effectively remove trace organic solvents;
Spare KF40 standard joint	Special design to KF40 Joint, you can lead the water into the box 
Can be connected to other devices (low temperature refrigerator, film coating machine, microscope, solvent purification system, low temperature cold trap, heating furnace, etc.)	low temperature refrigerator 
	microscope 
	Solvent Purification System 
	Inside connection (one door of Coating machine is inside of glove box)  Outside connection 
Equipment size and room requirements	Overall size 3050mm(L) x 1000mm(W) x 1950mm(H) 120.08" x 39.37" x 76.77"
	Room size 2200mm(L) x 1500mm(W) x 2000mm(H) 133.86" x 59" x 78.74"
Wooden Package size and weight	3385mm(L) x 1145mm(W) x 2300mm(H) 133.27" x 45" x 91" (5.8M ³)
	1020 kg (2197 lbs)
Notice	When the gas is circulating, must ensure that the piping of the circulation system is clear and cannot be blocked (if the color of the filter is changed from white to black, the filter should be replaced timely). No corrosive gas in the glove box. It needs to regenerate the column when the moisture and oxygen indicators cannot meet the work requirements. If the corrosive gas is released from inside of glove box. (such as LiPF ₆ electrolyte), please do not use. you must put the bottle filled with liquid seal. Vacuum pump needs to be checked the oil level and maintain in regular time.

Picture Display

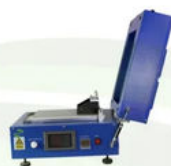




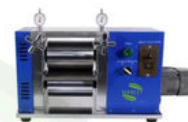




Planetary Vacuum Mixer



Automatic Film Coating Machine



Rolling Press Machine



Coin Cell Punching Machine

Coin Cell Lab Equipment



Vacuum Drying Oven



Glove Box



Coin Cell Crimper



Battery Testing Machine



Factory Show

COMPANY PROFILE

20 Years Lithium Battery Industry Experience



Shenzhen Meirui Zhida Technology Co., Ltd. is a Manufacturer specializing in a Complete Set of Lithium Ion Battery Research Equipment. MRBEST has been committed to providing customers with comprehensive Battery Research and Development Equipment to meet customers' new Lithium Battery Technology and New Needs in recent years, such as Sodium Batteries, Solid-state Battery and Semi-solid-state Battery Equipment, special process requirements such as dry process, 4680 large cylindrical battery equipment requirements etc. Create One-Stop Service for Battery Research Equipment for customers and provide Professional Technical Guidance and Support.

MRBEST related products include: Vacuum Mixers, Planetary Vacuum Mixers, Lab Transfer Coating Machine, Automatic Film Coating Machine, Electric Vertical Roller Machine, Pneumatic Die-cutting Machines, Electric Sealing Machines, Vacuum Pre-sealing machine, Secondary Vacuum Sealing Machine, Coin Cell battery Sealing Machine, Battery Winding Machine, Pouch Cell Sealing Machine, Ultrasonic Spot Welding Machine, Glove Box with Purification System etc. MRBEST products have been sold at home and abroad. Our main customer include: Universities, Research Institutes, Battery Positive and Negative Material Companies, Battery Cell Manufacturers, and New Energy EV Battery Manufacturers etc.



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