



## Four Workstation Glove Box For Lithium Battery

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Auto Purging - The replacement of the atmosphere inside the glove box can be achieved automatically by the purging valves.

Automatic Regeneration - H<sub>2</sub>O and O<sub>2</sub> removal material can be regenerated. The regeneration process controlled by program.

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 +10mba and -10mba. If the pressure goes over+/- 12mbar, the system will be protected automatically.

- Brand:TOB NEW ENERGY
- Item No.:TOB-GB-4880-S
- Order(Moq):1
- Payment:L/C,T/T,Western Union
- Product Origin:China
- Shipping Port:XIAMEN
- Lead Time:7

# Product Detail

## Double-position standard glove box

### **SPECIFICATIONS**

#### **1. Function**

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**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.

#### **2. Basic Configuration**

4 304 stainless steel box, acid resistant, thickness is 3 mm

2 Large Antechamber made from Stainless Steel ,360mm(14.2") diameter x 600mm(23.6") long, one at right and one at left

2 Mini Antechamber , 150mm(5.9") diameter x 300mm(11.8.") long,one at right and one at left

4 front windows with 2 glove ports

4 Pairs of Butyl rubber Gloves

4 set Lighting Systems

2 power cables inside the box

16 KF40 backup interfaces

1 high-performance circulating fan 145m<sup>3</sup>/h

1 vacuum pump, RV12

1 set of water analyzer

1 set of oxygen analyzer

1 set of organic solvent adsorber

Bracket wheel

Foot switch

Item	Parameter
Glove Box	<p>Dimensions:4880mm wide x 750mm deep x 900mm high,.</p> <p>Innersurface: stainless steel</p> <p>Outer surface: spray paint, white</p> <p>Material for Box:3mm thick. 304 stainless steel, acid resistant</p> <p>Windows -Slanted window, transparent tempered safety glass, thickness 8 mm, protective film.</p> <p>Glove Ports –Material is hard aluminum alloy, O-ring seal.</p> <p>Gloves - Butyl - 8” cuff diameter -0.4” Thick - 32” Length</p> <p>Dust Filter - 0.3 µm - 1 gas inlet and 1 gas outlet filter</p> <p>Shelves - Stainless -adjustable height.</p> <p>External Fluorescent Lights -LED lights, mounted in front of each glass window</p> <p>Interface: 16 spare interfaces, DN 40 KF.</p>
Main Antechamber	<p>Large Antechamber - 304 Stainless Steel</p> <p>360mm(14.2”)Diam. - 600mm(23.6”) Long (R or L)</p> <p>Surface: the inner surface is polished and the outer surface is painted (white)</p> <p>Sliding Tray on Stainless304</p> <p>Door: double door, anodized aluminum material, thickness 10mm, vertical operation, with lifting mechanism</p> <p>Pressure gauge: analog display</p> <p>Control:Solenoid valve touch screen automatic operation</p>
Mini Antechamber	<p>One - Mini Antechamber - 304 Stainless Steel</p> <p>150mm(5.9”) Diam. - 300mm(11.8”) Long (R or L)</p> <p>Surface: the inner surface is brushed and the outer surface is painted (white)</p> <p>Door: double door with moving sliding plate, press-button opening method</p> <p>Pressure gauge: analog display</p> <p>Manual Operation via Hand Valve</p>

Gas Purification	<p>Function:Removal of H<sub>2</sub>O and O<sub>2</sub>.</p> <p>Container material: 304 stainless steel.</p> <p>Purification material: copper catalyst: 9 kg; molecular sieve: 9kg</p> <p>Purification capacity: oxygen removal: 100L; water removal: 4Kg</p> <p>Water oxygen index: less than 1ppm</p>
Circulatory system	<p>Working gas: nitrogen, argon, helium</p> <p>Cycle capacity: integrated fan flow 145m<sup>3</sup> / h</p>
Regeneration	<p>Operation: PLC automatically controls the regeneration process.</p> <p>Regeneration gas: mixed gas of working gas and hydrogen, (hydrogen 5-10%)</p>
Valve	<p>Main valve: DN 40 KF, electric dynamic angle valve</p> <p>Control valve: electromagnetic integrated valve</p>
Control System	<p>Function: including self-diagnosis, power-off self-starting feature, pressure control and adaptive function; automatic control, cycle control, password protection; unit control adopts Siemens PLC touch screen.</p> <p>Pressure control: The pressure working pressure of the control box and transition chamber can be set freely within +/- 10 mbar, and the automatic protection is beyond +/- 12 mbar.</p> <p>Pedal: Controls the pressure of the cabinet for easy operation and step-down.</p> <p>PLC (Programmable Logic Controller).</p>
Vacuum Pump	<p>Specification: 12m<sup>3</sup> / h, rotary vane pump, with oil mist filter, gas vibration control.</p>
Display system	<p>Using Siemens PLC touch screen smart 700, display operating status, cabinet pressure, system records, etc.</p>
Vacuum system control situation	<p>British EDWARDS vacuum pump, can be started manually or through PLC, flow rate 12m<sup>3</sup> / h, can vacuum the transition chamber, and maintain the tank pressure balance, vacuum pump limit vacuum<math>\leq 2 \times 10^{-1}</math>pa</p>
Oxygen analyzer	<p>Measuring range: 0 ~ 1000ppm</p> <p>The ZrO<sub>2</sub> sensor avoids the problem that the fuel cell has a short life and cannot be exposed to the air</p>

<b>Water analyzer</b>	<p>Measuring range: 0~500ppm platinum electrode structure (P2O5 structure, which can be cleaned to the factory level by simple cleaning). Wide range of applications, especially for lithium battery manufacturing and metal organic users, can restore the initial state through the cleaning regeneration program.</p> <p>Avoid the problem of scrapping once a pollution.</p>
<b>Increase the organic solvent adsorber</b>	<p>Dimensions: diameter 238mm, height 407mm, material 3mm thick 304 stainless steel. Installed on the circulation line.</p>

PRODUCT DISPLAY

