

## transparent glove box to protect internal gas environment

B series transparent glove box is a kind of professional experimental device used to create a partially enclosed experimental environment, which is suitable for experiments that need to isolate the external air, avoid contamination or need specific atmosphere conditions.

### B Series Transparent Glove Box

The B Series Transparent Glove Box enables contactless sample manipulation via built-in gloves and supports sample transfer windows for effective isolation and experimental convenience. Widely adopted in chemistry, biology, materials science, electronics, and pharmaceutical research and production, this glove box offers superior sealing, visibility, and flexible environmental control.

### Features

1. **High transparency plexiglass:** Premium, UV-resistant, and chemically resistant plexiglass provides clear real-time observation and long-term durability.
2. **Efficient sealing design:** Three-pronged sealing buckle structure delivers outstanding airtightness, protecting the internal atmosphere from external air, moisture, and contaminants.



3. **Stainless steel handle:** Sturdy, reliable, and ergonomic for safe, comfortable, long-term operation.
4. **Natural latex gloves:** Thick, elastic, and wear-resistant gloves effectively isolate samples and resist chemical erosion, ensuring operator safety.
5. **High sealing and vacuum capability:** Achieves up to -0.1 MPa vacuum via transition box, supporting oxygen-free and controlled atmosphere experiments.
6. **Sample transfer window:** Facilitates material transfer while protecting the internal environment from external damage.

### Working Principle

The glove box's sealed environment and glove holes allow operators to manipulate samples inside without exposure to external conditions. Internal atmosphere—such as inert gas, humidity, or temperature—can be precisely managed. The vacuum function enables low-pressure, oxygen-free conditions for sensitive operations, while the sample transfer window maintains isolation during material exchange.

### Advantages

1. **Strong sealing:** Excellent isolation for experiments needing strict atmosphere control (e.g., inert gas replacement, non-oxidizing reactions).
2. **Highly transparent and easy to observe:** Clear plexiglass lets users monitor experiments without disrupting conditions.

3. **Flexible environmental control:** Adjustable internal atmosphere and vacuum function meet various precision experimental needs.
4. **Durability and safety:** Robust gloves, handle, and sealing design support long-term, safe operations.

### Application Areas

1. **Chemical reaction experiments:** Oxygen-free or controlled atmosphere reactions, toxic gas synthesis, precision gas replacement.
2. **Biological experiments:** Cell culture, aseptic operations, virus research, sterile environments.
3. **Electronics manufacturing:** Dust- and moisture-free environments for high-precision assembly and testing.
4. **Pharmaceutical industry:** Aseptic drug handling, chemical synthesis, reactant transfer, contamination prevention.
5. **Material science & high-precision experiments:** Surface treatments, film deposition, material testing under controlled atmosphere.

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Model	Operation box dimension	Acrylic thickness	Transition box	Vacuum is pumped		Material	Left round door	Gloves
				Operation box vacuum	Transition box vacuum			
AG012-B	700x450x500mmm	10mm	Yes	No	Yes	PMMA	300mm	2
AG011-B	800x550x600mmm	10mm	Yes	No	Yes	PMMA	350mm	2
AG010-B	1000x500x500mmm	10mm	Yes	No	Yes	PMMA	300mm	2
AG009-B	1000x700x500mmm	10mm	Yes	No	Yes	PMMA	300mm	2
AG008-B	900x600x700mmm	10mm	Yes	No	Yes	PMMA	300mm	2
AG007-B	1000x600x700mmm	10mm	Yes	No	Yes	PMMA	300mm	2
AG006-B	1000x750x700mmm	10mm	Yes	No	Yes	PMMA	300mm	2

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Model	Operation box dimension	Acrylic thickness	Transition box	Vacuum is pumped		Material	Left round door	Gloves
				Operation box vacuum	Transition box vacuum			
AG005-B	1200x600x600mmm	10mm	Yes	No	Yes	PMMA	300mm	3
AG004-B	1200x600x700mmm	10mm	Yes	No	Yes	PMMA	300mm	3
AG003-B	1200x800x600mmm	10mm	Yes	No	Yes	PMMA	300mm	3
AG002-B	1200x800x700mmm	10mm	Yes	No	Yes	PMMA	300mm	3
AG001-B	1094x640x645mmm	10mm	Yes	No	Yes	PMMA	400mm	4