



Right-sized glovebox solutions, delivered.

Germfree is internationally recognized as a leading manufacturer of Class III Biological Safety Cabinets. Our Class III Gloveboxes provide containment for diverse research applications in the most advanced ABSL-3, BSL-3 and BSL-4 laboratories. Our Class III BSCs are engineered to exceedingly rigorous standards for work that involves dangerous pathogens or unknown agents. We specialize in the seamless integration of all laboratory components, analytical instruments and process equipment.

Gloveboxes serve the needs of a diverse range of industries including biotechnology, biomedical, nuclear, defense, pharmaceutical, semiconductor and chemical applications. When these enclosures are used for microbiological research or to handle pathogens, they are referred to as Class III Biological Safety Cabinets. These units provide containment for work with high-risk biological agents and must be constructed in compliance with the Biosafety in Microbiological and Biomedical Laboratories (BMBL) specifications.

Explore key options and specifications below, and get in touch to build your perfect glovebox.



Equipment pictured may include custom or optional features

Application

Germfree's Class III BSCs are engineered with the optimal direct connections to any laboratory equipment, including autoclaves, incubators, and gas decontamination systems. Germfree designs systems that may be configured to keep analytical equipment controls outside of the containment zone. Designed for ergonomics, all products are engineered with the user in mind.



Testing, warranty, and support information

- Equipment and HEPA filters are Factory Acceptance Tested (FAT) prior to shipment, meeting AGS and EN guidelines and an airflow test prior to shipping
- Independent 3rd party certification onsite is recommended prior to operation
- Germfree will include an operation and maintenance manual
- Germfree custom equipment carries a 1 year warranty

Specifications

Standard features

■ **Robust construction**

All-welded stainless steel.

■ **Ergonomic glove position and viewing window**

0.375" (9.5 mm) thick clear polycarbonate.

■ **Stainless steel gloveports**

Stainless steel 7" x 11" (180 mm x 280 mm) oval gloveports.

■ **Single inlet and double exhaust HEPA filters**

Rated at 99.995% efficient at a 0.3 µm particle size.

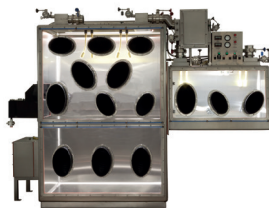
■ **Active or static airlocks**

Doors are interlocked

■ **Control panel**

Mechanical pressure gauge. Optional digital gauge. Low pressure alarm. GFCI.

Sample Custom Class III Gloveboxes



Equipment pictured may include custom or optional features



Optional features

- PASS-THROUGH/AIRLOCKS**
Pass-throughs and airlocks can be virtually any size and can be equipped with the following: Windows, Sliding Trays, Gloveports, Interlocks, HEPA Purge, Maximum of 4 doors, Piping for decon, and chain of custody port.
- THROUGH-WALL EMBEDS**
Through-wall embeds are equipped with seamless bioseals and gaskets to prevent the ingress and egress of contaminants into or out of the containment zone. Examples: RTP, Autoclaves, Airlocks, Dunk Tanks
- STAINLESS STEEL TRANSPORT CONTAINERS**
Consult a Germfree Expert for more information
- CHEMICAL DUNK TANKS**
Available in a variety of configurations: Side Mount w/ Drain, Bottom Mount, Sliding Bottom
- BIOSECURITY OPTIONS**
Options include: Cameras, Security Bars
- EXHAUST FILTRATION SYSTEMS**
Consult a Germfree Expert for more information

Integrations

RAPID TRANSFER PORT



Rapid Transfer Ports provide a fast method for safely moving specimens, materials, supplies and waste into and out of the Class III BSC without breaking containment.

ENVIRONMENTAL TEST CHAMBERS



Germfree's Class III Biosafety Cabinets can be provided with programmable temperature & humidity control systems in order to match environmental conditions. The bulk of the mechanical equipment may be located outside of the containment zone for ease of service and maintenance.

INTEGRATED AUTOCLAVE, STERILIZER



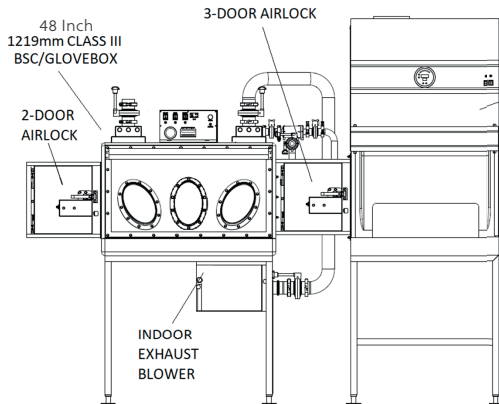
Germfree offers seamless integration of our Class III BSC-glovebox to double door autoclaves to provide the highest level of hazardous waste decontamination and removal. Units are Factory Acceptance Tested (FAT) at our facility prior to shipment.

GAS DECONTAMINATION

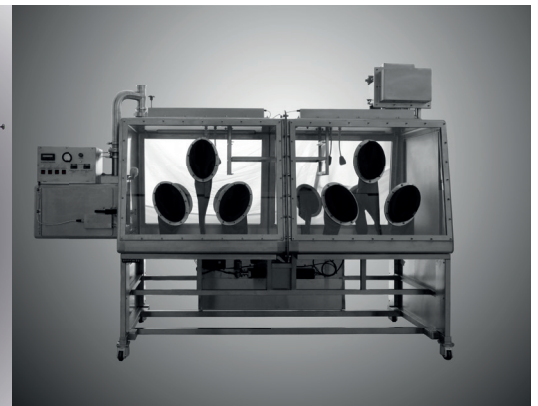
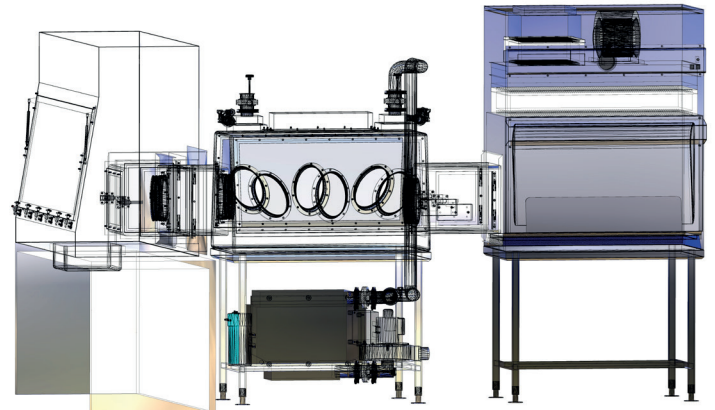


Germfree Class III Biological Safety Cabinets are equipped for gas decontamination with Vaporized Hydrogen Peroxide or Chlorine Dioxide. Ports allow for independent gas decontamination of the main chamber, double door airlocks and filter housings.

Sample integrations



36 Inch 914mm CLASS TYPE A2 BSC



Technical questionnaire

1. In which type of environment will the Class III BSC be installed?

BSL-2 ISO 7 Grade A

BSL-3 ISO 8 Grade B Grade C

2. Will the room/lab be kept under a controlled positive or negative pressure?

POSITIVE NEGATIVE

3. How will the exhaust be handled?

Hard ducted to outdoors

Request Germfree-supplied exhaust blower

Exhausted back to lab

4. Do you plan to work with any amounts of chemicals or solvents which would require Carbon filtration in addition to the standard double HEPA exhaust of the Class III BSC?

YES NO

5. How will the unit be decontaminated?

GAS MANUAL OTHER _____

8. What are the dimensions of the largest materials and/or samples that are to be passed into the Class III BSC through the HEPA-filtered or non-filtered airlock?

9. What utilities or equipment will be used within the Class III BSC environment?

Power _____ Voltage _____

Gas Air Other _____

10. Will any devices be placed inside the cabinet? If so, please identify below.

Device #1 _____ Dimensions _____

Device #2 _____ Dimensions _____

Device #3 _____ Dimensions _____

11. The standard internal dimensions of Germfree's 3ft Class III BSC are 36"w x 23"d x 27"h. Is this suitable?

YES NO

(Glovebox can always be augmented larger or smaller -or- be upgraded to double-sided.)

12. Please list doorway dimensions from the exterior of the laboratory to where the equipment will be installed:

13. Other services required?

Installation

IQ/OQ

Certification

Approval Signature:

Customer

Date

