

Biosafety Equipment

Biocontainment



Safe, Ergonomic, and Affordable.

The SEA-Glovebox provides a practical approach to integrating Class III level protection into an existing containment lab. The SEA series BSC is the most cost-effective off the shelf unit available while providing a state-of-the-art system for containment laboratories (BSL-2, BSL-3 and BSL-4). Designed with the operator in mind, ergonomic considerations promote natural arm position and enhance operator reach, all while reducing fatigue. This unit makes efficient use of space and is easily cleaned and gas or vapor decontaminated as needed. When bench space is at a premium, the SEA-Glovebox from Germfree is a sensible, cost effective solution for providing the highest level of operator, environmental and sample protection.

The Safe, Ergonomic and Affordable SEA-Glovebox is a self-contained unit designed for operator protection from biological hazards. This glovebox is a Class III Biological Safety Cabinet (BSC) as defined by the CDC/NIH publication, "Biosafety in Microbiological and Biomedical Laboratories" 6th Ed. (BMBL). The completed system complies with standard EN 12469-2000 and will also bear the CE/UL marking, a truly 'Expert Environment'.





Equipment pictured may include custom or optional features

Application

Class III BSC's are increasingly specified as laboratories confront a range of new and increasingly hazardous challenges. These may include new applications, new agents and enhanced safety protocols.

The SEA-III BSC was designed specifically to solve the primary obstacles faced when adding Class III containment BSCs to the existing lab: space constraints and cost. Germfree engineers designed this highly ergonomic Class III BSC to work within the constraints of your lab without compromising on features, functionality and user comfort. The SEA-III is the ultimate BSC design across all factors.

- Unknown/higher risk materials
- Surge capacity/preparedness planning
- Intermittent use
- Emergency preparedness



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 on-site is recommended prior to operation.
- An operation and maintenance manual is included
- Germfree Standard equipment carries a 2 year parts warranty. Consult a Germfree Expert for more information.

Specifications

Standard features

■ Robust construction

All welded 10-16ga. type 304 and 316L (2.46 mm thick ISO 3406 Type A4) stainless steel (SS). Interior coved corners and radius bends for easy cleanup and spill containment. All SS surfaces are polished to a pharmaceutical grade (#4) finish for easy cleaning and decon. Included leveling all welded SS 36" (915mm) stand.

■ Ergonomic viewing window

3/8" (9.5mm) thick clear polycarbonate window with chemical resistant coating. Window is sealed to the glovebox with single-piece, water-jet cut silicone gasket. Viewing window is sloped at a nominal 5°-7° angle for ergonomics and comfort.

■ Stainless steel gloveports

Ergonomic oval gloveports sealed into the window at "V" angle. Double groove gloveports allow glove changes without breaking containment. Fitted with initial set.

■ Single inlet and double exhaust HEPA filters

Rated at 99.99% efficacy for particles to 0.3µ in diameter. Filters are sealed to the SEA with gasketed stainless frames designed for in-situ testing. Sanitary shut-off valves on both inlet and exhaust for a leak-tight interior.

■ Static, double-door airlock

Doors are interlocked, preventing both doors from being opened.

Electrical

- Requires two (2) 110V 60 Hz. 15 Amp wall outlets (230V, 50Hz setup available)
- Work area illuminated by externally-mounted light
- Two (2) drop down, "pig-tail" style electrical receptacles are provided in the top of the work area (Four (4) for SEA-4/6 model)

	Interior Workspace			Exterior (Inc. 36" Stand)		
Model	L	D	Н	L	D	Н
SEA-3 (2 Glove)	42"	21.75"	29.25"	60.25"	24.75"	76.375"
	1067mm	553mm	743mm	1531mm	629mm	1940mm
SEA-4 (3 Glove)	54"	22"	29.25"	72.25"	24.75"	76.375"
	1372mm	559mm	743mm	1836mm	629mm	1940mm
SEA-6 (4 Glove)	78.125"	22"	29.25"	95.125"	24.75"	76.375"
	1985mm	559mm	743mm	2417mm	629mm	1940mm

Equipment checklist

CONFIGURATIONS

GLOVEBOX

- End panel

☐ Plain

■ Locking door* ■ Dunk tank*

☐ VHP decon ports*

AIRLOCK

- Location ☐ Left side □ Right side Exterior door

Side

☐ Front

- Purae □ No purge ☐ Active HEPA purge*

GLOVES (Check size)

☐ Hypalon □ 8.5" □ 9.75" □ 10.5" Butvl 8.5" Q 9.75" Q 10.5"

☐ Adjustable feet ☐ Casters*

FXHAUST

- Blower location

On stand

□ Not mounted ☐ Underneath airlock □ Carbon filter* (non-TEDA)

Asterisk (*) denotes optional

ELECTRICAL

-Voltage

□ 120v □ 240v □ 230v

Frequency

□ 50Hz □ 60Hz - Plug type:

- Cord length: □ 10' ☐ Custom*:





Additional options

- ☐ SEA-III, three foot (3' / 1070mm) Class III BSC Glovebox, 2-glove model with stand, exhaust blower and flexible duct*
- ☐ Replacement Hypalon® gloves, pair*
- ☐ Replacement HEPA filters 8" x 8" x 3" (203 x 203 x 76mm, The SEA unit requires Qty. 3 filters for operation. Pricing provided is per
- ☐ Casters for stand with locking swivels and wheel brakes
- ☐ Dunk tank, small, side wall mounted and coated in polymer, bleach resistant coating
- ☐ Activated HEPA purge for 2-door airlock, including supply and exhaust HEPA filters and PLC controlled motor/blower with timed
- ☐ Addition of VHP ports at SEA supply and exhaust HEPA filters for connection of gas/vapor decon system. Includes two (2) sanitary butterfly valves
- ☐ Sealed and potted USB connector to be installed in rear or top of SEA-3
- ☐ Sealed and potted RJ-45 (Ethernet) connection

Technical drawings

NOTES:

CONSTRUCTION:

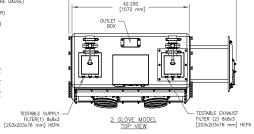
- 12-16 GA MATERIAL PRODUCT WETTED PARTS: TYPE 316L SS, #4 POLISHED NON-PRODUCT WETTED PARTS: TYPE 304 SS, #4 POLISHED RADIUS CORNERS 3/4" [10 mm] AT SS COMPARTMENTS VIEW SCREEN: 3/8" [10 mm] LEXAN

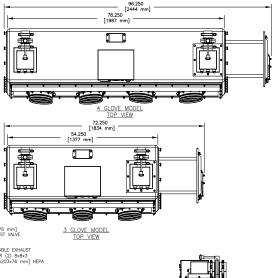
CONTROL PANEL:

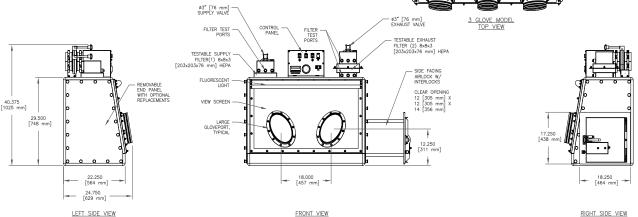
- 1x DIGHELIC (DIGITAL PRIMARY PRESSURE GAUGE)
 1x MINHELIC (MECHANICAL SECONDARY PRESSURE GAUGE)
 1x MAIN POWER SWITCH (10 AMP BREAKER)
 1x OUTLET SWITCH WITH GFCI (10 AMP BREAKER)
 1x LIGHT SWITCH ALLARM (VISUAL AND AUDIBLE)
 1x AIR PRESSURE ALLARM (VISUAL AND AUDIBLE)
 1x SILENCE OVERRIDE BUTTON

- GLOVEROX

 QVERALI INTERIOR DIMENSIONS ARE
 2 GLOVE MODEL H29.25" x W42.00" x D21.75"
 [743mm x 1067mm x 552mm]
 3 GLOVE MODEL H29.25" x W44.00" x D21.75"
 [743mm x 1372mm x 552mm]
 4 GLOVE MODEL H29.25" x W78.00" x D21.75"
 [743mm x 1981mm x 552mm]









Technical drawings (cont.)

