

**SPECIFICATION
DATA**
SURE-LINE™
SERIES BIO
SPD-SLBIO-03A
JANUARY 2003

HIGH
EFFICIENCY
FILTRATION
EQUIPMENT

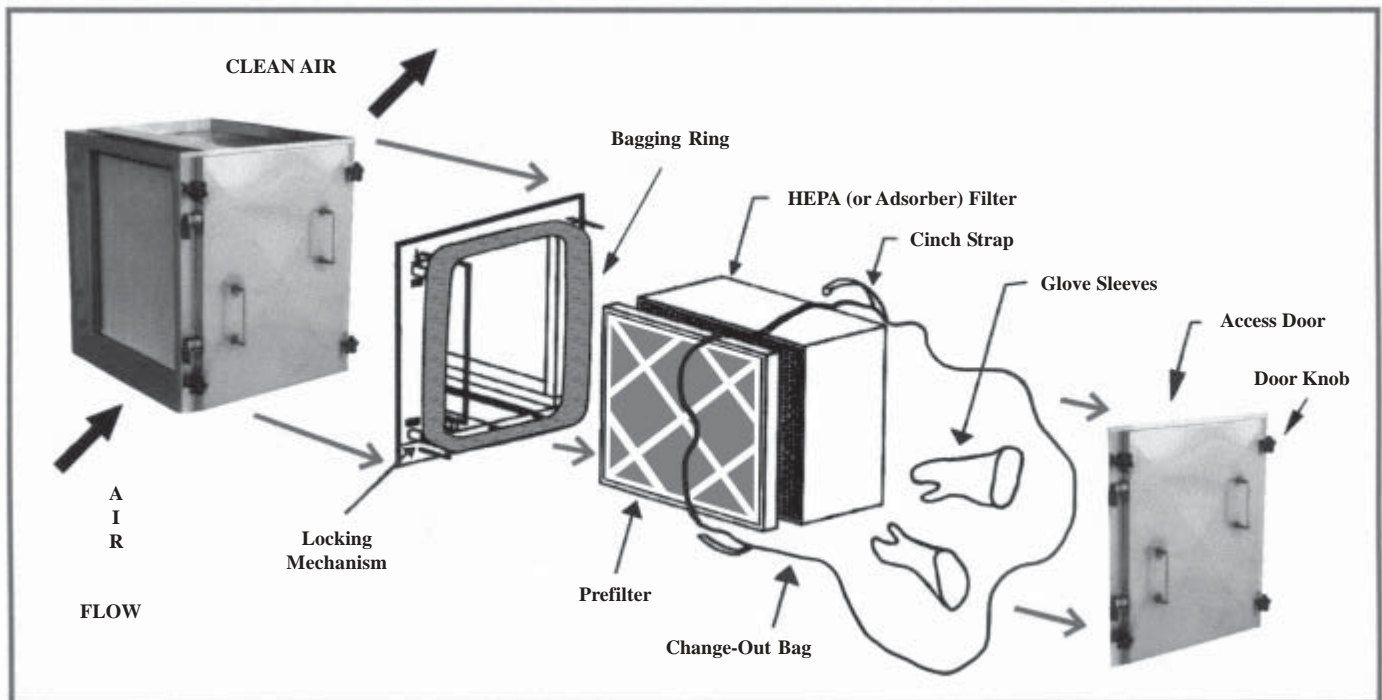
SURE-LINE™ BIO CONTAINMENT

BAG-IN/BAG-OUT HOUSING

SPECIFICATIONS:

- Completely Factory Assembled
- 304 Stainless Steel Construction
- Single Access Door
- 2" Prefilter, 12" HEPA Filter
- Bag-In/Bag-Out BIO Containment System
- Compression or Knife-Edge Filter Seal
- Fully Gasketed Access Door
- Bagging Ring for the Plastic Bag

AN EXPLODED VIEW — THROUGH THE DOOR



OPTIONS:

- 4" or 6" Prefilter
- 316 Stainless Steel Construction
- Dual Access Doors Providing a Separate Prefilter Access for 2", 4" or 6" Prefilter
- Inlet and/or Outlet Transition(s)
- Gas/Vapor Adsorption
- Sample and Test Ports

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We reserve the right to make changes in product design and product specifications without prior notice or obligation.

BLC INDUSTRIES INC.
Breathe Easy, We Have The Line On Air Filtration.

MECHANICAL SPECIFICATIONS - SURE-LINE BIO CONTAINMENT HOUSINGS

Filter housings shall be SURE-LINE Bag-In/Bag-Out BIO Containment Housings as provided by BLC Industries, Inc. under a Quality Assurance Program that meets the requirements of ASME NQA-1 (Quality Assurance Program Requirements for Nuclear Facilities). Units shall be completely factory assembled and include turned out mounting flanges (at least 1 1/2") for easy field installation and elimination of contamination risks. Standard design shall be for 10" W.G. positive or negative pressure. Units shall include the following equipment features and options:

STANDARD UNIT CONSTRUCTION

Material of Construction

Series BIO Bag-In/Bag-Out Containment Housing(s) shall be side access, manufactured from 304 stainless steel, and not painted. Pressure retaining joints and seams shall be welded airtight and reinforced to withstand 10" W.G. positive or negative pressure. The design and filter arrangement shall be for side access utilization, allowing air to enter and exit the unit without changing directions. Standard filter housings shall be seismically qualified, up to Seismic Zone 3 levels, in accordance with the criteria of the Uniform Building Code (1994 and 1997).

Airtight Welding

All pressure retaining weld joints and seams shall be continuously welded with no pores allowed. Joints and seams requiring only intermittent welds, such as reinforcement members, shall not be continuously welded. Every joint and seam shall be wire brushed and/or buffed to remove heat discoloration, burrs and sharp edges. All weld joints and seams that are a portion of any gasket sealing surface (for example, filter seal surface or duct connecting flanges) shall be ground smooth and flush with the contiguous base metal. All welding procedures, welders and welder operators shall be qualified in accordance with ASME Boiler and Pressure Vessel Code, Section IX.

Filter Locking Mechanism

Series BIO Bag-In/Bag-Out Containment Housing(s) shall incorporate a flat sealing surface that mates with the gasket on the face of the filter to accommodate gasket seal filters. Before leaving the factory, each sealing surface shall be verified with a flatness gage to ensure adequate mating with the filter. Each tier of filters shall be fitted with a filter clamping mechanism that shall be operated from outside the housing and include independent pressure bars for each final filter. Each pressure bar shall have pre-loaded springs that exert a minimum sealing force of 1,400 lbs. per full width filter and 1,050 lbs. per half width filter that shall be applied as an even, uniform load along the top and bottom of each final filter cell side.

All Stainless Steel

Series BIO Bag-In/Bag-Out Containment Housing(s) shall be provided with 304 stainless steel for all hardware on the housing and all mechanical components of the final filter locking mechanism, except for the cast aluminum access door knobs and brass pivot blocks in the final filter locking mechanism (to prevent galling).

Filter Removal Rods

Series BIO Bag-In/Bag-Out Containment Housing(s), when multi-wide housings, shall be provided with filter removal rods to draw the filters to change-out positioning. These filter removal rods shall be operated from inside the change-out bag.

Bagging Ring

Series BIO Bag-In/Bag-Out Containment Housing(s) shall have a ribbed bagging ring around each filter access port. The bagging ring shall have two (2) continuous ribs to secure the PVC change-out bag. The outer edge of the ring shall be hemmed to prevent the bag from tearing. Each filter access port and bagging ring shall be covered by a door having an extruded neoprene gasket that is manually replaceable after the door has been removed. When closed, the door shall not press against the bag-out port and the PVC change-out bag, therefore eliminating the possibility of damage to the bag.

PVC Change-Out Bag

Series BIO Bag-In/Bag-Out Containment Housing(s) shall be provided with one (1) PVC change-out bag for each filter access port. Each bag shall have its stock number rolled in the hem. The PVC bag material shall be 8 mil thick, yellow, with a translucent taffeta texture finish, and shall not stick together. For visibility during the change-out process, the bag shall include approximately 16 inches of clear PVC at the mouth. Three (3) glove sleeves shall be built into the bag to facilitate handling of the filter(s) during change-out. PVC bags of this design shall have been tested by an independent laboratory to prove the bag's operability at extreme temperature ranges of 0°F - 130°F (a test report shall be supplied upon request). The elastic shock cord shall be hemmed into the mouth of the bag so that it fits safely when stretched around the bagging ring. To prevent the bag from sliding off the bagging ring during change-out, one (1) nylon safety cinch strap shall be provided with each filter access port. A smaller nylon cinch strap shall also be provided with each filter access port to tie off the slack in the bag while the ventilation system is operating. A minimum of four (4) feet clearance in front of the filter access door is recommended for filter change-out.

UNIT OPTIONS

Series BIO Bag-In/Bag-Out Containment Housing(s) shall allow the following options: 316 Stainless Steel Construction, 4" or 6" Prefilter, Transition(s), Dual Access Doors providing a Separate Prefilter Access, Adsorption, Static Pressure Taps, Sample and Test Ports, Isolation Dampers and In-Place Test Sections. Please consult factory for detailed specifications about these options.