



MODEL LAFC

Enclosures For Flow Cytometry Systems



Aerosol and bio-safety for operator and contained flow cytometry systems in a range of enclosure sizes.

Bigneat's LAFC enclosure has been designed as a development of the LA Range LABS and LAC2 enclosures, following years of practical experience and customer feedback.

LAFC enclosures provide down flow sterile air to the work surface preventing contaminants from entering the enclosure when in operation and ensuring protection of the contained samples/process.

Access to the enclosure interior during operation can be gained through the three lower sliding windows within the lower door (access 300mm high). Operator protection is provided by high velocity air (minimum 0.4m/s) passing into the enclosure through this lower door and side windows to provide operator protection from hazardous aerosols. This laboratory air flows into the enclosure and into a profiled grille around the enclosure's work surface.

Main doors; operator protection is maintained with two sliding windows open. Side doors/panels; operator and product protection maintained for access through side panels. This enclosure's air flow system is 100% pass through.

- B2 type bio-safe conditions providing protection from hazardous aerosols
- Sterile environment for sample/process protection

USER FEATURES

- All-round visibility of enclosed system
- Compact enclosure
- Ergonomic design and comfortable for user, with access to four sides of the robotic platform
- Facility for underbench wet cart for liquid supplies
- Tubing, cable and utilities ports and glands

OPTIONS AND EXTRAS

- Operator protection is a paramount function for the LAFC model with automatic fan speed control maintaining a minimum face velocity thus complying with worldwide recognised standards
- Programmable control system – displays enclosure status and controls airflow system balance, hour counter
- Audible and visual alarm indication of low airflow and door open warning

PERFORMANCE AND STANDARDS

Meets recognised Standards worldwide. NSF Standard 49, Category B2 and EN 12469:2000 & Clean Air to EN 14644-1.

IMPROVE RELIABILITY, IMPROVE PRODUCTIVITY, IMPROVE SAFETY.

► EVALUATION OF AEROSOL CONTAINMENT

Assessment Reports are available for:

Potassium iodide (KI) Discus method particle testing, as defined in the European standard EN 12469:2000. No more than 1 particle per 100,000 released may be detected outside the enclosure.

GloGerm Method aerosol testing

as described in Perfeto et al. methods mol Biol 2011:699-469. Pellet challenge (aerosols) of the cabinet. Air sampling inside and outside the enclosure.



FILTRATION USED IN LAFC ENCLOSURES

Pre-filtration eliminates particles at 5.0µm or larger to an efficiency of 92% as defined in BS EN ISO 779.

Downflow air flow HEPA filtration (H14 Standard).

Exhaust air HEPA filtration (H14 Standard) eliminates particles 0.3µm or larger to an efficiency of 99.995%.

► TECHNICAL SPECIFICATION

Custom sizes on request. Bigneat is highly flexible and we offer enclosure sizes and options to suit your flow cytometry system. Typical dimensions can be:

Model	External dims mm (WxDxH)	Internal dims mm (WxDxH)	Sound levels	Face Air Velocity
LAFC	2200 x 1300 x 2644	2120 x 1100 x 1144	>0.4	0.25-0.5
F3-XIT-D	600 x 520 x 650	579 x 506 x 455	<50dBA	0.3m/s – 0.5 m/s

Sound level: <65dBA. Lighting: 2 x 18W sealed fluorescent lamps >480Lux.
Cabinets available for power supply: 230V, AC, 50Hz, 13amp, 1Ø
and 110V, AC, 60Hz, 20amp, 1Ø.

ESSENTIALS

- High quality construction
- Largest component of enclosure for on-site assembly will fit through standard laboratory doorway
- Self-levelling/ lockable castors ensure full mobility

OPTIONS AND EXTRAS

- Additional electrical sockets to suit robotics system
- Air lock transfer station
- Automated transfer system
- Carbon filtration
- Computer shelf on flexible arm
- Ducted systems available
- Hydrogen peroxide (or alternative fumigation) connections (night doors, removed for normal operation)
- Under-bench storage and shelving to suit
- Universal control panel
- UV lighting, linked to timed on/off facility in control system
- Waste tips & plates chute and ventilated waste container

► QUALITY ASSURED



Bigneat is accredited to
BS EN ISO 9001: 2008



Bigneat systems
are CE marked

Bigneat manufactures from UL approved components

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