Class II Biological Safety Cabinet for lab instrumentation.

BAKER
Environments For Science™

BioPROTECT®

Underwriter Laboratories Listed

BioPROTECT®

The popularity of robotically assisted technologies has resulted in the continuing development of the BioPROTECT® Series of walk-in and reach-in biological safety enclosures.

Baker offers the highest standard of air containment in the laboratory, accommodating the safest use of robotic technology for drug discovery, high-throughput screening, high-volume sample management, and other fields and applications.

SPACE IN THE BASE FOR FLUIDICS & OTHER ANCILLARY EQUIPMENT

Features

- "Walk-in" biosafety cabinet, featuring Class II performance for containment and protection
- The sidewall and rear wall plenum are under negative pressure
- Available in 3 standard widths with additional options available for extra deep or extra tall configurations
- Instrument table is adjustable, designed to accommodate multiple heights for user access points and varying sizes of instruments
- Allows roll in cart, for instrument loading and service

BioPROTECT®

Advanced Design for Robotic and Automated Equipment.

BioPROTECT® line of Class II clean air and containment enclosures are designed for high-volume robotic and automated equipment applications. BioPROTECT® accommodates high-throughput robotic systems (including ancillary devices), ultra-centrifuges, flow cytometers, liquid handlers and other large pieces of laboratory equipment. Ideal for high-throughput screening, combinatorial chemistry, drug discovery, immunology, tissue culture, clinical research, molecular biology and quality control assays.

- Product protection: HEPA-filtered, particulate-free airflow throughout the work area provides an ISO Class 5 environment and minimizes cross contamination.
- Personnel protection: Intake velocity of 100 fpm [0.5 m/s] into front suctions grilles located in the access doors preventing escape of potentially hazardous aerosols and particulate.
- Environmental protection: The cabinet's internal fan provides HEPA filtered exhaust flow from the cabinet. The exhaust can be vented back into the lab space or connected to the building exhaust system with a canopy exhaust connection should volatile toxic compounds be present.

BioPROTECT® Containment and Protection

Exhaust to room	Product	Personnel	Environmental
Aerosols/Particulate	X	X	X
Volatile Toxic Compounds			

Exhaust to untreated facility exhaust system	Product	Personnel	Environmental
Aerosols/particulate	X	X	X
Volatile toxic compounds		X	

Exhaust to treated facility exhaust system	Product	Personnel	Environmental
Aerosols/particulate	X	X	X
Volatile toxic compounds		X	X

If installed to the facility exhaust system by a canopy connection, the BioPROTECT® line of enclosures provide particulate protection, plus additional protection of personnel from small quantities of vapors and gases. If the facility exhaust system is specially treated with activated charcoal, scrubbing or catalytic conversion, protection from exhausted vapors and gases is extended to the environment.

Benefits Of The BioPROTECT® Lab Automation Enclosure:

Specifically designed to house liquid handling systems eg Beckman Coulter Biomek™, Tecan Freedom EVO/Fluent™ and Hamilton Star™.

- Floor to ceiling workspace allowing heavy duty carts supporting instruments to be rolled in and out of the enclosure for set up and service.
- Multiple sidewall pass through ports, providing Class II performance, accommodating instrument fluidics, power, and data connections.
- Customized Class II openings in sidewalls and rear wall for interface to integrated instruments outside of enclosure.
- Integration of pipette discard chutes.
- Stainless steel floor with fluid spill containment.
- Canopy exhaust connection to facilitate removal of volatile compounds and heat generation from instrumentation.
- Biologically tested to NSF International Standard 49.

Double-wall construction captures and contains contaminated air under negative pressure

Superior HEPA Filter Performance

Because HEPA filters remove micro-organisms and airborne particulates (generally called aerosols) from the air, the quality, performance and useful life of superior HEPA filter performance filters are critical considerations in the biosafety environment.

- Each HEPA filter is scan-tested for leaks and tested for overall efficiency by the manufacturer, then individually scan-tested by Baker to assure leak-free performance.
- Minimum HEPA filter efficiency is 99.99% for particulates of 0.3 micrometer, with increased efficiency for particulates greater and smaller than 0.3 micrometer
- The supply HEPA filter delivers clean air to the interior work area.
- The exhaust HEPA filter can be inserted and removed from the front of the cabinet
- A EPDM gasket provides an airtight seal between the filter assembly and the metal plenum.

Motor/Blower Technology

BioPROTECT® enclosures use a combination of trusted Baker technologies to reduce energy and filter changes while delivering maximum performance.

- StediFLOW™ variable frequency drive (VFD) motor controller uses less energy, reduces heat output, and operates more quietly than other motor blower technologies. VFD is state-of-the-art technology in HVAC systems for performance and energy savings. Only BioPROTECT® e3 and BioPROTECT® e3 MAX have VFD.
- Motor/blower motor designed to deliver the maximum amount of filter life for each cabinet.
- Fine tuned to deliver the maximum amount of filter life for each cabinet, reducing maintenance cost over the life of the cabinet.

Comfortable Lighting Improves Visibility & Reduces Heat

Ergonomic benefits of BioPROTECT® enclosures include externally mounted fluorescent lamps and electronic ballasts which provide better visibility at the work surface, less heat at the face (front) of the cabinet, and improved user comfort.

- Electronic ballasts eliminate fluorescent lamp “flicker”, minimizing eye strain and improving productivity.
- Warm, natural illumination exhibits better color fidelity.

Standard Product Features

- Digital Pressure Gauge monitors
- Supply and Exhaust HEPA filtration
- Energy efficient fluorescent lighting
- Front air capture grille
- Dual access doors (single on the BioPROTECT® Jr)
- Independent GFCI outlets w/self resetting circuit breaker
- Remote circuit breakers for each sidewall (duplex receptacle)
- Front access to the Exhaust HEPA filter
- Stainless Steel interior
- 8” fixed sash opening
- StediFLOW VFD (variable frequency drive)*
- Straight back wall accommodates most lab apparatus and instrumentation
- Cable ports in each sidewall

Optional Accessories:

- Air and vacuum petcock adapters (must supply location and labelling)
- Heavy duty Stainless Steel lift cart with casters
- LE (lower elevation) BioPROTECT® e3 MAX for laboratories with 8’ ceilings
- Additional electrical outlets 115V,220V or 440V (specify location)
- Replaceable service Panels in each sidewall for customer specific cut-outs, conveyors, etc...Can be positioned on either or both sidewalls
- cGMP option package
- Canopy exhaust connection
- Extra tall and extra deep configurations

* excludes BioPROTECT® Jr.

The BioPROTECT® Family - Versatile sizes to accommodate variety of automated applications

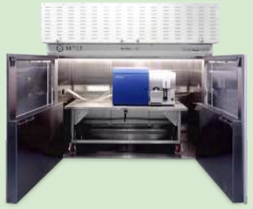
The BioPROTECT® family offers a combination of 3 unique design platforms and 8 standard configurations. Designed to accommodate a wide variety of research and industrial applications where biocontainment is required.

BioPROTECT® Jr.

The BioPROTECT® Jr. has a single door access with a 78-cubic foot interior volume.

BioPROTECT® e3

The BioPROTECT® e3 model has a double door access with a 45-cubic foot interior volume.



BioPROTECT® e3 MAX

The BioPROTECT® e3 MAX model offers spacious 164-cubic foot interior work area (nominal) with combination double doors.

BioPROTECT® Containment and Protection

External Dimensions		Width "		Depth "		Height "	
Measurement		in	mm	in	mm	in	mm
BioPROTECT® Jr.		66"	1677	61.63"	1566	102.5"	2604
BioPROTECT® e3	BP 304-5	48.31"	1228	55.25"	1431	93.87" (vent to room)	2385
BioPROTECT® e3	BP 504-5	75"	1905	55.25"	1431	93.87" (vent to room)	2385
BioPROTECT® e3 MAX	Standard	116.88"	2969	61.63"	1566	102.5"	2604
	Low Elevation	116.88"	2969	61.63"	1566	92.5"	2350
	Extra Tall	116.88"	2969	61.63"	1566	106.5"	2706
	Extra Deep	116.88"	2969	83.63"	2125	102.5"	2604
	Oversized	146.88"	3731	85.75"	2179	102.5"	2604

BioPROTECT® Jr. is supplied with single phase Motor/Blower technology.

BAKER

Environments For Science™

The Best Protection

STERILGARD® e3

Class II Type A2 Biosafety Cabinet. The most energy efficient, comfortable and safe A2 cabinet in the industry.

NCB™ e3

Class II Type B1 Biosafety Cabinet. Developed to exceed the National Cancer Institute's Expectations...and yours.

BIOCHEMGARD® e3

Class II Type B2 Biosafety Cabinet. The most energy efficient, comfortable and safe B2 cabinet in the industry.

ISOGARD®

Class III Glovebox. Designed to Handle Hazardous Microbiological Agents or Pharmaceutical Potent Compounds.

AEROPROTECT 360°

Aseptic Contamination Enclosure. Optimum personnel and environment protection.

BIOPROTECT® e3

Walk-in Equipment Containment Enclosures. Designed expressly for high volume robotic and equipment applications.

ANIGARD® e3

Animal Transfer Station. Confidence you can rely on.

EDGEGARD® HF

Horizontal Flow Clean Bench designed with you in mind. Baker's exclusive technology maximizes product protection and helps meet up to ISO Class 4 (Class 10) air cleanliness requirements.

EDGEGARD® VF

EdgeGARD® Vertical Flow provides vertical, unidirectional and controlled airflow over the entire work surface, while reducing energy consumption, noise and airflow turbulence.

STERILSHIELD®

Compounding Aseptic Isolator (CAI). Designed specifically for ultimate product protection of non-hazardous drugs.

CHEMOSHIELD®

Compounding Aseptic Containment Isolator (CACI). Offers a contained, pressurized work area for pharmacy applications.

AIR SENTRY CHEMICAL FUME HOOD

POWERED BY LAB CRAFTERS

Fume hoods designed for unparalleled safety for critical laboratory applications.

Baker's portfolio of contamination control solutions can be found within many industries, for a wide variety of applications in research and clinical care. Please consult your biosafety professional to understand what is right for you and your application.

Pioneering Tomorrow, Today

93
Sales Professionals

675
Service technicians

74
B2B Partners

3
Locations

SafeGARD

Through innovation and collaboration with customers, we develop truly revolutionary technology in biocontainment and contamination control for a wide range of industries and applications.

Grow

An area of evolution and expansion. Both Baker and Baker Ruskinn aim to supply solutions for an ever-changing global cell culture market.

Partner

We aim to forge partnerships with other commercial brands who share a similar passion for advancing science and clinical care, so that together we may supply our customers with optimal tools for their work.

Collaborate

From aligning ourselves with industry leading experts, Baker have a strong understanding of the wider industry and the complex problems that our customers face.

Innovate & Educate

BAKER
Environments For Science™

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