# **CON**Biocontainment System



#### Two bCON™ Racks . . . Four bCON™ Cages . . . Maximum Species Flexibility

In the research community, requirements of the modern Biocontainment facility constantly evolve in response to new knowledge and opportunity. For decades, the most widely accepted animal caging used in ABSL-3 facilities has been the simple, static (non-ventilated) Micro-Isolator<sup>TM</sup>—and for good reason . . . until we introduced the **b**CON<sup>TM</sup> Biocontainment System. Combining strict engineering controls, flexibility and superior performance with ease of use, **b**CON<sup>TM</sup> provides a simple and reliable ABSL-3 animal housing solution that dramatically improves upon static caging performance.

And now, you can provide a complete Multi-species<sup>TM</sup> high-density housing for all your rodents with only two racks, the **b**CON<sup>TM</sup> Super Mouse 1800<sup>TM</sup> and **b**CON<sup>TM</sup> One Cage 2100<sup>TM</sup> housing systems. For **mice**, select the Super Mouse 1800<sup>TM</sup> and mix and match Super Mouse 750<sup>TM</sup> Micro-Isolator<sup>TM</sup> cages in any combination you choose. For maximum flexibility, you can house **mice**, **rats**, **hamsters** or **guinea pigs** with interchangeable One Cage 2100<sup>TM</sup> and One Cage<sup>TM</sup> Micro-Isolator<sup>TM</sup> cages on one rack, featuring modular snap-on feeders.

- Negative cages in controlled environment cabinet for housing mice in ABSL-3
- Dual-Layer Protection: mechanical & air curtain barriers between cages & room
- Containment & Micro-Isolation: cage to cage, cage to room & room to cage
- Airlock™ Cage Exhaust with negative pressure—cages do not become positive
- Cage filter top Locking Security with quick & quiet operation
- · Cage Docking Security with automatic visual indicator
- Micro-Shield™ Cage Filter prolongs HEPA Filter
- Available UPS battery power system maintains rack ventilation during power outages
- During airflow disruption cages revert to static mode—Animals can breathe
- Minimal components for ease of use & excellent cage visibility
- Decontaminate entire system: Chlorine Dioxide Gas or Vaporized Hydrogen Peroxide
- Maximum Species Flexibility with a choice of two racks and four cages
- **b**CON<sup>TM</sup> Super Mouse 1800<sup>TM</sup> Interchangeable Micro-Isolator<sup>TM</sup> Housing System
  Super Mouse 750<sup>TM</sup> **b**CON<sup>TM</sup> Micro-Isolator<sup>TM</sup> (Floor Area >75 in² / >483 cm²)
  Super Mouse 1800<sup>TM</sup> **b**CON<sup>TM</sup> Micro-Isolator<sup>TM</sup> (Floor Area >180 in² / >1161 cm²)
- **b**CON<sup>™</sup> One Cage 2100<sup>™</sup> Interchangeable Micro-Isolator<sup>™</sup> Housing System
   One Cage 2100<sup>™</sup> **b**CON<sup>™</sup> Micro-Isolator<sup>™</sup> (Floor Area >210 in² / >1354 cm²)
   One Cage<sup>™</sup> **b**CON<sup>™</sup> Micro-Isolator<sup>™</sup> (Floor Area >80 in² / >516 cm²)





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### Effective Dual-Layer Protection for Your People and Your Animals

Specifically engineered for maximum species flexibility in ABSL-3 facilities, the bCON<sup>TM</sup> Biocontainment System design places a negative cage within a controlled environment cabinet system providing dual-layer protection—at the cage and cabinet level. Engineering controls create a 3-zone containment system, the bCON<sup>TM</sup> negative Micro-Isolator<sup>TM</sup> Cage (primary), the controlled environment of the cabinet (secondary) and the animal holding room (tertiary).

### Cage-Level Containment & Cage-to-Cage Airflow Balance

The **b**CON™ Biocontainment System maintains Micro-Isolator™ cages exclusively under negative pressure; surrounded by HEPA filtered cabinet air, cages do not become positive. HEPA filtered cabinet air is drawn through each cage filter top membrane (indirect connection) replacing the same amount of air evacuated through our unique Airlock™ cage exhaust connection (direct connection). With any number of docked cages on the rack, the system provides cage-to-cage airflow balance—without compromising performance—with simple, effective cage-level containment, previously unachieved with ABSL-3 animal housing.

While docking or removing cages, the **b**CON<sup>TM</sup> Biocontainment System airflow patterns continue to protect the integrity of the Micro-Isolator<sup>TM</sup> environment. Insert a cage into the fully docked position and a hinged plate in front of the cage moves downward for visual confirmation. During power outages, an optional UPS back-up battery power system maintains rack ventilation. In a worse case scenario, cages revert to a static Micro-Isolator<sup>TM</sup> condition; for decades, the most widely accepted type of animal housing used in ABSL-3.



## E2™ Environmental Control Systems

E<sup>2™</sup> Cabinet Supply and E<sup>2™</sup> Cage Exhaust Units provide microprocessor controlled HEPA filtered (99.99% efficient to .3 micron particles) airflow, protecting the **b**CON™ Biocontainment System and are interfaced through a touch screen control panel with digital menus. Operational parameters are continuously monitored including; cage air changes, cabinet airflow, air pressure, temperature,

humidity, fan performance and HEPA filter hours. Remote monitoring, historical reporting and alarm alerts can be accessed with a facility network or up to 60 days of data stored into on-board memory is available for download onto a memory card.

