

BENCHMARKS

A Baker Company Newsletter

Summer 2006

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The Baker Company Introduces New Class II Type B1 Cabinet The NCB-D

The B1 Cabinet for Today and Tomorrow

The Baker Company is pleased to announce the introduction of our latest ergonomically designed Biological Safety Cabinet, the NCB-D. This new console style cabinet is a Class II Type B1 cabinet providing protection for personnel from particulates as well as gasses and vapors (provided that they work in the direct exhaust area of the work surface).

HEPA Filters Under the Work Surface

The new NCB-D cabinet features primary HEPA filters directly under the work surface. All intake air and HEPA filtered supply air that is not part of the direct exhaust portion passes through these HEPA filters insuring that the cabinet's interior blower plenum is free from particulate contamination. This makes the NCB cabinet well suited for work with toxic powders and other hazardous solids.

These primary, under-the-work-surface HEPA filters also lead to extremely long service life of the motor blower. And, because the supply HEPA filter is downstream of these HEPA filters, the supply HEPA filter will last a very long time.

HVAC Savings

For B cabinet applications, the B1 cabinet may be attractive for customers who only occasionally work with solvents in the direct exhaust area of the cabinet.



Compared with a B2 cabinet (Baker's Steril-ChemGARD), the NCB cabinet exhausts approximately 60% less air.

The savings potential in HVAC costs can be significant

Additionally, lower air flow means less noise for a quieter operation when compared to any B2 cabinet.

Built to Last — Low Life Cycle Costs

The Baker Company builds all of our products with the highest quality components available. Our motor/blower and filter combinations are optimized for long life. We build extra capacity into our cabinets to limit filter changes and thereby limit maintenance costs and reduce downtime over the long life of the isolator.

**EAGLESON INSTITUTE
2006 SEMINAR SCHEDULE**


The Eagleson Institute

SEPTEMBER
11-15 Advanced Certification

16-17 NSF Exam

25-28 Testing HEPA filters

NOVEMBER
6-7 Safety Cabinet Technology

8 Intro to Certification

8 ASHRAE 110 Testing Workshop

9-10 HVAC Systems

13-16 Commissioning Class

4th Annual International Biocontainment Design Colloquium

The Eagleson Institute together with CUH2A will be holding this interactive course in London England from September 24-26. The course will discuss the processes of designing, building, and commissioning BSL-3 laboratories. Upon completion of this 2 day course, participants will be better able to make informed decisions on fundamental laboratory design issues.

Industry experts will be on hand to lead discussions and workshops on topics that include Architectural Planning, Risk Assessment, Waste Management, Engineering Issues (airflow, filtration, exhaust systems, controls, commissioning), Disease Modeling, Primary Containment Systems, and new emerging technologies.

For more information or to register for this important event, please contact The Eagleson Institute at 207.490.1076 or email to: colloquium@eagleson.org

www.eagleson.org

New DVD Training Program from The Eagleson Institute

Using Barrier Isolators in the Pharmacy

The new DVD from The Eagleson Institute explains how to use barrier isolators in the pharmacy. Key concepts are illustrated through dramatic smoke and particle counter demonstrations.

Viewers will learn how isolators function, how to differentiate between types of isolators, how isolators compare to other pharmacy workstations, how to clean and sanitize isolators, and the proper techniques for changing gloves.

ACPE credit is available from the Massachusetts College of Pharmacy & Health Sciences for this DVD training program.

Please contact The Eagleson Institute for additional information: **207-490-1076** www.eagleson.org

Here We Grow Again



To serve you better, The Baker Company is expanding. This new addition will house additional testing laboratories to insure better cabinet performance and to deliver new models to market faster.

Baker's Containment System for the Madison Aerosol Exposure Chamber

Aerosol research purposely exposes animals to high concentrations of aerosolized forms of infectious organisms in order to study their pathogenicity and virulence. These procedures can put the researcher at risk of exposure to these pathogens if proper engineering controls are not applied. The Baker Company worked with biological health & safety professionals and aerosol researchers to develop a containment system to address the inherent risks associated with animal aerosol research.

The Baker Company also worked closely with the mechanical engineering department at The University of Wisconsin- Madison to develop a system that integrates components in a manner that facilitates animal aerosol exposure procedures in safe and efficient manner.

The Madison Chamber system includes a vessel that is used to house the animals. Cages within the chamber hold the animals in position while a nebulizer and air distribution system is used to evenly distribute the aerosol to the animals. The aerosol is aspirated into the chamber through a piping system drawn through the highly negative pressure chamber, and exhausted through double HEPA filtration. During the actual exposure, the aerosol is contained within the system. After exposure there is a purge cycle to reduce lingering aerosols.

Risks are present when the exposed animals, whose fur and secretions will contain infectious materials, are unloaded from the chamber. Other risks concern a failure in the nebulizer system which is located outside of the negative pressure vessel. However, the nebulizer is safely contained inside the Class III Biological Safety Cabinet. The Baker Company developed a system that addresses containment concerns during the transfer of the animal between the aerosol chamber and the microisolator cage. The system also provides containment in the event of an accidental spill of the nebulizer suspension, provides clean air to the work spaces, and provides significant increases in air purge rates. Typical applications include drug resistant TB and Anthrax studies.



The Baker Company's aerosol containment system integrates (from left to right) a Class II BSC, a Class III BSC, and the Madison Aerosol Exposure Chamber.

For more information please contact Baker's Custom Products Division

Visit Our Web Site
at:
www.bakerco.com

You'll be able to:

- See our Tradeshow and Event schedule
- Request a quote
- Download product specifications
- Learn about the different types of biological safety cabinets
- Find your local Baker representative
- Read Technical Bulletins
- Request technical assistance
- Read industry specific white papers
- Register your warranty
- Download .pdf files of all current product brochures
- Find a certifier
- Review our FAQs
- Read Acumen research papers
- Learn about Bio-safety
- Link to the Eagleson Institute
- Request a Catalog
- Read Benchmarks Newsletters

The Baker Company Trains New Consultative Representatives

The Baker Company spends considerable time and effort training new sales representatives on our complete line of Biological Safety Cabinets, Pharmacy Gloveboxes, Clean-benches, Animal Research Equipment, Custom Products, and other Clean Air & Containment Enclosures. Baker works hard to have an intelligent sales force that is knowledgeable about Baker products and their applications. All Baker representatives earn their wings by attending an intensive 3 day series of seminars, demonstrations, and hands on laboratories designed to equip them to speak with confidence and depth about your application needs. We do this so that when you call a Baker Consultative Sales Representative, you can trust that The Baker Company has given the rep the set of skills necessary to provide the correct solutions to your application needs.



Class of 2006

New Sales Representatives from the United States and Canada graduated from Baker's intensive 3 day training session on a beautiful Maine summer day. From left to right — Front row Stephane Gagnon, Deb Flagel, Launa Urbanowski, Stephen Gleason. Back row: Danny Lemieux, Doug Kelly, Ben Chapman, Tom Michals, Kristin Ritchie, Jason Walker, Tiffany Crumrine, and John DeMers.