EdgeGARD®

Where comfort meets *dependability*

Baker

EdgeGARD® Clean Benches are high performance, industry leading equipment

bakerco.com
Progressive Scientific Performance

EDGEGARD® E3 HF

EDGEGARD® VF

Our high-performance laboratory equipment is built with you in mind, with industry-leading ergonomics, energy-efficient engineering, and the lowest life cycle costs available. Baker products help you work more comfortably, boost productivity, save money and minimize environmental impact.

Compare our clean bench models

EDGEGARD® E3 HF

Horizontal-Flow Clean Bench 3', 4', 5', 6' and 8' Models

The EdgeGARD® e3 HF horizontal-flow clean bench ensures product protection for a variety of life science and industrial laboratory and process applications where product protection is essential.

EDGEGARD® VF

Vertical-Flow Recirculating Clean Bench 4', 5' and 6' Models

The EdgeGARD® VF is a vertical-flow recirculating air clean bench that provides protection for samples and work procedures where product protection and particulate control are required.

Baker builds it better

As the pioneer and leading innovator of air containment, contamination control and precision cell culture products, Baker doesn't take shortcuts when it comes to protecting you or your research.

RESEARCH APPLICATIONS

- Pharmaceutical Compounding
- Cell Biology & Biomedical Research
- Clinical / Diagnostic Testing
- Plant Tissue Culture
- Animal Science and Research

Underwriter Laboratories Listed

PRODUCT OVERVIEW

- Baker's exclusive technology maximizes product protection and helps meet up to ISO Class 4 (Class 10) air cleanliness requirements.
- High-performance airflow system provides uniform airflow to the work surface, extends filter life and minimizes maintenance costs.
- HEPA supply filter with 99.99% minimum efficiency in capturing 0.3 micrometer particulates.
- Spacious, easily accessible work areas accommodate multiple users and a variety of applications and instrumentation.
- Ergonomic design increases user comfort and productivity.
- Industry's most reliable clean bench means lower life-cycle costs and years of trouble-free operation.

EdgeGARD® e3 HF

Horizontal-Flow Clean Bench
3', 4', 5', 6' and 8' Models

With a brightly illuminated, spacious work area and unique high-velocity air return slots, the EdgeGARD® e3 HF offers superior user comfort, product protection and productivity.

Equipped with a HEPA supply air filter and redesigned diffuser, the increased laminar airflow provides a greater workable area and a particulate-free work surface.

The patented cabinet design of the EdgeGARD® e3 HF provides precise control of airflow volumes and velocities, thereby maximizing product protection and ensuring up to ISO Class 4 (Class 10) cleanliness in the work area.

ENHANCED ERGONOMICS AND USER EXPERIENCE

- Standard adjustable height stand allows for work surface height range of 27 1/2” to 41 3/8".
- Work area depth of 20 5/16” and height of 34” provides ample space for safe, efficient operation.
- Satin finish work surface diminishes harsh light reflection.
- Each EdgeGARD® e3 HF clean bench includes LED for less eye strain, and greater energy efficiency.
- Vertical touchpad placement for increased accessibility.
- Slanted 10% façade allows operator more comfortable head and elbow position and reduces fatigue.

BAKER BUILDS IT BETTER

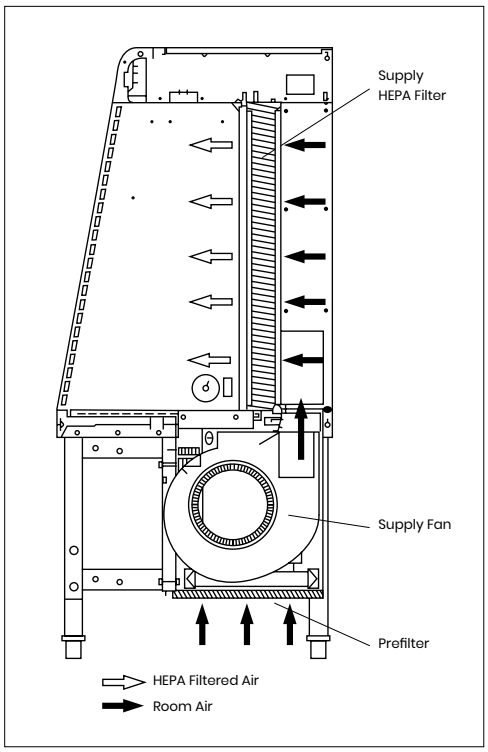
- Designed for a variety of non-hazardous industries and applications, such as IV admixture preparation, drug compounding, plant cell culture, media preparation, pharmaceutical procedures, electronic assembly and limited experimental research.
- High-velocity return air slots maximize cleanliness and product protection by precisely controlling airflow volumes and velocities.
- Diffuser provides unidirectional airflow across the workspace.
- Exclusive StediFLOW® VFD motor controller improves performance, extends filter life and reduces operating costs and downtime by regulating and controlling airflow more efficiently.
- Performance-enhancing design features corrosion-resistant stainless-steel interior, and a powder-coat protected cold-rolled steel exterior.
- Spacious, easily accessible work areas accommodate multiple users and a variety of applications and instrumentation.
- Flexible electrical and plumbing connection options adapt EdgeGARD® e3 HF to your lab.

INDUSTRY LEADING SERVICE, MAINTENANCE, AND EASE OF USE

- Front access to HEPA filters for quick and easy replacement.
- New removable worksurface for increased sterility and easy cleaning.
- Exterior GFCI duplex outlet accommodates most commonly used instruments and equipment.
- Optional wide-tread casters provide stable mobility when needed.
- Washable, reusable Scott Foam® pre-filter extends HEPA filter life

OPTIONS AND ACCESSORIES

- Stainless Steel IV Bar
- Digital Pressure Gauge
- Plastic Storage Bins
- Hydraulic Lift
- Pull Bars
- Seismic Restraints
- Ergotron Arm for Monitor/Keyboard



A FULLY INTEGRATED PHARMACY COMPOUNDING VALIDATION SOFTWARE PACKAGE

To optimize the validation and documentation of sterile compounding procedures, Baker integrates with a variety of IV workflow management systems as well as Pharmacy Verification Software.

- Built-in Fully Integrated IV Prep Software keeps the compounding environment clean with no wires or devices within the hood. Compounding space is not altered.
- Uses a powerful 5 megapixel imaging system that closely focuses in on the names, numbers, labels, color and other details of drugs and syringes.
- Includes image recognition and barcode scanning features.
- Storage and retrieval image system allows documentation of the compounding process for quality purposes.
- Easily accessed from desktops, laptops, tablets, and mobile devices.
- Compounding status dashboard is automatically updated.
- Scalable and modular system is flexible and adaptable to the customer environment.

Vertical, uni-directional and controlled airflow

EdgeGARD®VF

Vertical-Flow Recirculating Clean Bench
4', 5' and 6' Models

Unlike conventional horizontal-flow clean benches, the EdgeGARD® VF provides vertical, uni-directional and controlled airflow over the entire work surface, while reducing energy consumption, noise and airflow turbulence.

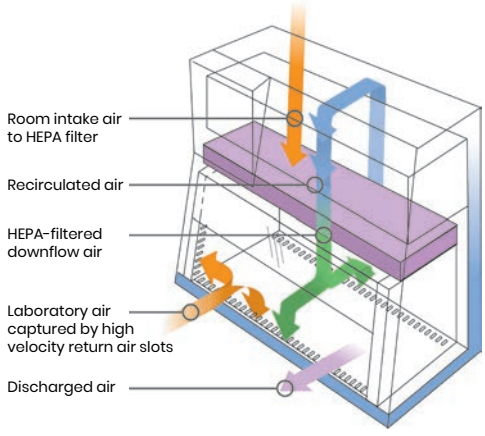
Recognized as the industry's most reliable clean bench, this extension of Baker's EdgeGARD® brand provides lower life-cycle costs and years of trouble-free operation.

COMFORTABLE USER EXPERIENCE

- Slanted 10° viewscreen for operator comfort and direct line-of-sight viewing.
- Low noise level improves operator comfort and reduces effect of ambient noise in the lab.
- Provides ISO Class 4 (Class 10) protection by delivering HEPA-filtered air to the work surface.
- Well-lit workspace reduces eyestrain.

BAKER BUILDS IT BETTER

- Microbiologically challenged for product protection in accordance with NSF International 49.
- Exclusive high-velocity momentum air curtain to help ensure product protection without restricting access.
- One-piece stainless steel work surface helps prevent surface contamination.
- Designed for serviceability – includes access panels for all electrical components, while the primary HEPA supply filter is removed through the front plenum area.
- An additional pre-filter (only available on the AGVF models) below work surface helps capture large particles and prolongs HEPA filter life.

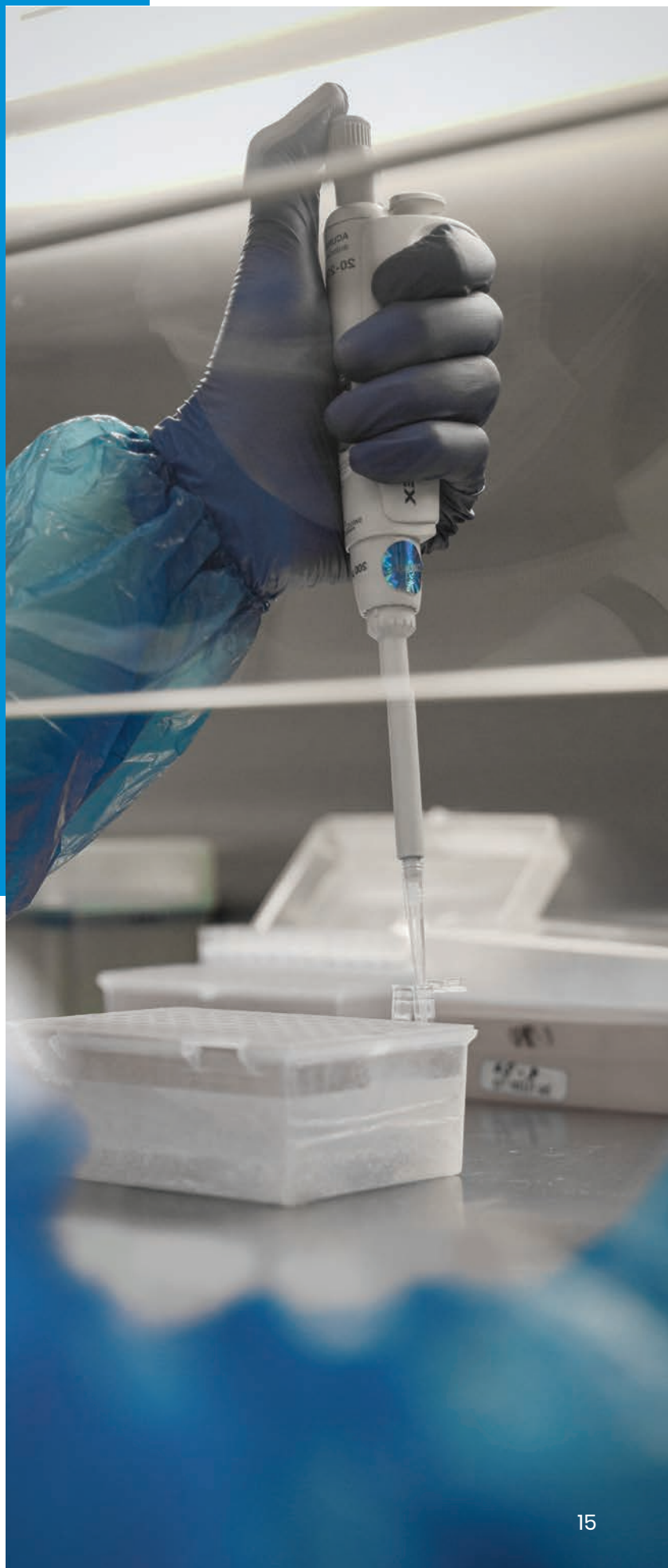


Precision engineered for optimal airflow

VERSATILE AND PRODUCTIVE

- 14" high access opening accommodates a variety of application and instrument needs, and offers a wide work area for multiple users. 20" and 24½" options are available.
- Fits through standard doorways and down laboratory aisles.
- Easy to move and maneuver when configured with mobile stand, casters and pull bars.
- Hinged viewscreen opens to 303/8" allowing access to work area.

Available as a benchtop model or on a channel stand (with or without casters).



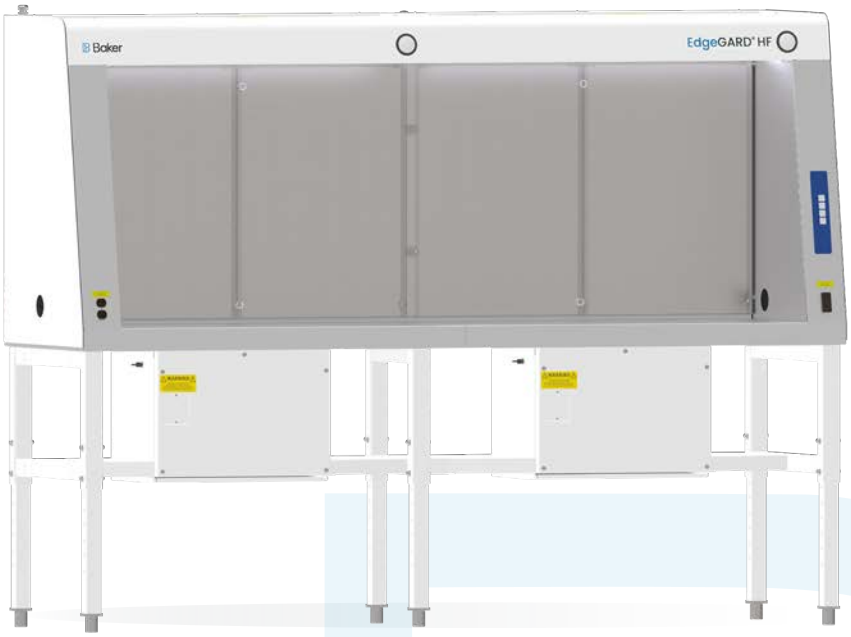
OPTIONS AND ACCESSORIES

- Comes standard with one Petcock on the right side (with options for more on either side).
- Stationary stand with adjustable foot.
- Optional wide-tread, stainless steel casters,5" diameter x 1", with brakes.

Technical Specifications – EdgeGARD® e3 HF

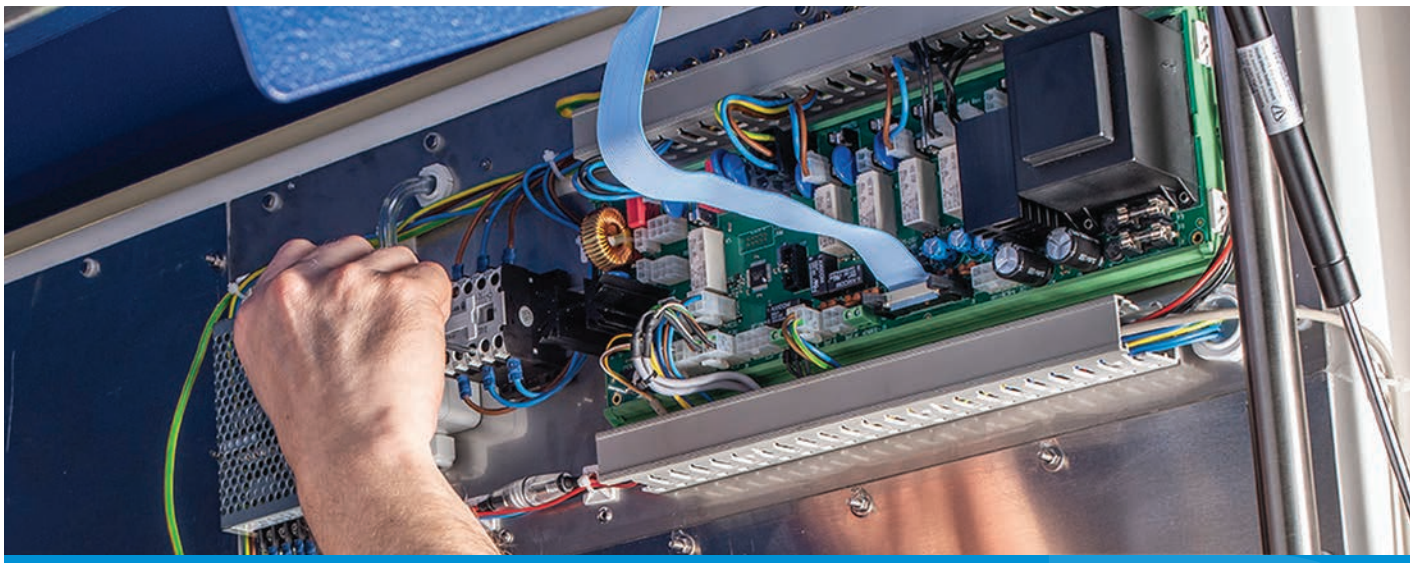
Console Models

Model Number	EG301	EG401	EG501	EG601	EG801
Exterior Dimensions					
Nominal Size	3’	4‘	5‘	6‘	8’
Exterior Footprint *(w x d)*	41 x 30 1/2”	53 x 30 1/2”	65 x 30 1/2”	77 x 30 1/2”	105 3/4 x 30 1/2”
Min Height *(w/telescoping legs and leveling feet)*	70”				
Max Height *(w/telescoping legs and leveling feet)*	81.5”				N/A
Interior Dimensions					
Interior Footprint *(w x d)*	35 X 20 5/16”	47 x 20 5/16”	59 x 20 5/16”	71 x 20 5/16”	95 x 20 5/16”
Height *(h)*	34”				
Weights					
Cabinet *(lbs., w/telescoping legs)*	425 Lbs.	460 Lbs.	509 Lbs.	665 Lbs.	835 Lbs.
Cabinet *(lbs., w/hydraulic lift)*	481 Lbs.	521 Lbs.	575 Lbs.	736 Lbs.	N/A
Performance					
Supply Volume *(at 90 FPM)*	744 CFM	999 CFM	1254 CFM	1509 CFM	2019 CFM
Lighting	Minimum 100 ft candles average at work surface				
Electrical					
Normal Operating Amperage *(115V)*	2.7A	3.9A	6.8A	5.6A	10.3A
Power Cord	One 20’ (6m) power cord with 20A type NEMA 5-20P				
Service Requirement	115 V AC, 20A, 60 Hz, 1Ø, 16A maximum useable current				



Technical Specifications – EdgeGARD® VF

Model Number	EGVF401	EGVF501	EGVF601
Size *(nominal)*	4'	5'	6'
Exterior Dimensions w/ Stationary Stand *(w x d x h [min to max])*	53½" x 32" x [891/16" - 979/16"]	65½" x 32" x [891/16" - 979/16"]	77½" x 32" x [891/16" - 979/16"]
Interior Dimensions *(w x d x h)*	46" x 251⁄8" x 31c"	58" x 251/8" x 3113/16"	70" x 251/8" x 3113/16"
Shipping Weight - Benchtop model - With channel stand	435 lbs. 507 lbs.	499 lbs. 576 lbs.	564 lbs. 646 lbs.
Access Opening *(working position)*	14"	14"	14"
Access Opening *(loading/cleaning position)*	303/8"	303/8"	303/8"
Electrical Requirements	115 V, AC	115 V, AC	115 V, AC
Amps / Breaker	16 / 20	16 / 20	16 / 20



General Specifications

- Interior workspace made from 16-gauge stainless steel.
- ISO Class 4 (Class 10)* air cleanliness in the workspace.
- 16-gauge cold-rolled steel exterior construction with white powder coated finish.
- HEPA filters with 99.99% minimum efficiency in capturing 0.3µm micron particles.
- Separate switches for blower and light; if blower is not on, light switch will not work.
- Washable pre-filter extends HEPA filter life.

Purchase Specifications

EdgeGARD® e3 HF Horizontal Flow Clean Bench

1. High-velocity return air slots to be located at the leading edges of work surface and side walls. Return air slots protect against backwash of dirty air entering the work area when items are placed within the air stream on the work surface.
2. Unit shall be all steel construction,18-gauge, cold-rolled steel, with a white powder coated finish, stainless steel work surface and stainless steel inner work area side walls.
3. Unit shall be provided with permanent Variable Frequency Drive motor which automatically compensates for increasing pressure drop across filter in excess of that which is required by existing standards.
4. Complete unit shall be listed as certified by Underwriters Laboratory (UL) for cULus electrical, fire and mechanical safety.
5. All joints and seams offering a possible path of contaminated air from outside to the inside of the work area shall be sealed.
6. Framing for the filter seal shall be of rigid aluminum construction and only the filter media shall be exposed to the work area opening, to eliminate picture frame effect.
7. Unit shall have washable, reusable Scott Foam® pre-filters.
8. The unit manufacturer must be able to provide evidence that this unit has been tested by an independent laboratory or research organization.
9. Speed controller shall automatically compensate for voltage change to maintain constant voltage to motor while allowing for manual adjustments during filter loading.
10. Unit shall feature removable work surface and drain pan to prevent accidental spillage into HEPA filter area and allow for ease of cleanability.
11. The unit shall have standard HEPA filters for a protection effectiveness of 99.99% when filtering particles of 0.3 micron size.
12. A removable HEPA filter protective screen shall be provided.
13. Shall be provided with two externally mounted GFCI-protected duplex outlets with circuit breaker.

EdgeGARD® VF Vertical-Flow Recirculating Clean Bench

1. EdgeGARD® VF vertical-flow clean bench is available in 4', 5' and 6' work surface widths. Each unit shall be provided with a certified copy of the factory tests showing that filter leak checks, electrical tests, down flow velocities, smoke patterns, and airflow balancing have been performed. Tests to prove Class 10 (ISO Class 4) air cleanliness for 0.3µm particles for model design shall be available if requested.
2. Hinged view screens shall be constructed of ¼ inch shatterproof scratch and chemical resistant polycarbonate, with a maximum opening of 30" for equipment loading. To decrease glare and offer the best ergonomics, the view screen shall be mounted at a 10° angle from vertical.
3. Supply filters shall be front loading and meet the zero-probed HEPA 99.99% efficiency requirements on all particles 0.3 micron in size. System shall have washable pre-filters to extend HEPA filter life. Magnehelic pressure gauge(s) are provided to monitor filter loading and as a secondary means of monitoring mass airflow.
4. The cabinet body shall be double walled. The exterior walls shall be constructed of a single sheet of #16 gauge cold-rolled steel with a white powder coated finish. Internal side and back walls, as well as the work surface, shall be constructed of #16 gauge 304 stainless steel. The side wall and the back shall be of one-piece construction formed with radius 7/16" corners. Either a stainless steel air diffuser or filter protector is provided in the work area.

   Interior Dimensions:
   a) EGVF401 – 46" L x 25 1/8" D x 31 13/16" H
   b) EGVF501 – 58" L x 25 1/8" D x 31 13/16" H
   c) EGVF601– 70" L x 25 1/8" D x 31 13/16" H
5. High-velocity return air slots shall be located at the leading edges of the work surface and side walls. Return air slots protect against the backwash of dirty air entering the work area when items are placed within the air stream on the work surface.
6. Cabinet shall have a momentum air curtain down flow velocity profile, which provides a higher airflow velocity of 100 FPM nominal behind the view screen relative to a down flow velocity of 50-65 FPM nominal over the work surface.
7. Cabinet shall have a welded, full perimeter drain pan with 7/16" radius corners for cleaning ability with a 1" drain valve to capture any cleaning liquids or spills.
8. Each cabinet work area shall be provided with an internally mounted GFCI duplex 120V outlet with drip-proof cover and circuit breaker (mounted on the left), fluorescent lighting providing 100 foot-candles of illumination at work surface and electronic ballasts. The cabinet shall have separate switches for the blower and the light; if the blower is off, the light switch shall not work.
9. The cabinet shall be capable of automatically handling a 40% minimum increase in pressure drop across the filter without reducing total air delivery by more than 10%. A manual speed controller shall be capable of handling a minimum 112% increase in pressure drop across the filter. Test data to verify these capabilities shall be provided upon request.
10. Cabinet design shall utilize a steel plenum provided to allow filters to be directly clamped to the plenum against a closed cell neoprene gasket. Plenum applies force to full perimeter of filters rather than point force. Service of the system shall be accessible from the front.
11. System shall be factory pre-wired and have a 17-foot external length power cord with 20 Amp plug (type NEMA 5-20P). System design shall have easy access to electrical panel
12. All system components shall be certified by Underwriters Laboratory (UL61010-1 2nd Edition) for electrical, fire and personal safety.
13. Noise levels should meet 67 dBa or lower to provide operator comfort and reduce effect of ambient noise in the laboratory.
14. System shall be capable of moving through a standard 80" high doorway.
15. Cabinet shall have permanently affixed label located directly above the viewing window that has the following phrase: "Do not use for biological, chemical or radiological work where hazardous materials are present."
16. The system shall be warranted for three (3) years, parts and labor.

Caution

A clean bench is not designed to protect personnel or the environment from potentially harmful agents. The adequacy of this product for the user's personal safety, as with any clean bench, should be determined by an industrial hygienist or safety officer. Site preparation information, architectural drawings, detailed dimensions and purchase specifications are available.

36 Month Warranty

The Baker Company, Inc., expressly represents and warrants all goods (a) to be as specified (and described) in The Baker Company catalogs and literature, and (b) to be free under normal use, service and testing (all as described in The Baker Company catalogs and literature) from defects in material and workmanship for a period of thirty-six months for units sold in the United States and twelve months for units sold internationally from the invoice date.

The exclusive remedy for any breach or violation of this warranty is as follows: The Baker Company, Inc., will F.O.B. Sanford, Maine, furnish without charge repairs to or replacement of the parts or equipment that proved defective in material or workmanship. No claim may be made for any incidental or consequential damages.

This warranty is expressly in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose unless otherwise agreed in writing signed by The Baker Company. (The Baker Company shall not be responsible for any improper use, installation, service or testing of the goods.)

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Where comfort meets *dependability*

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SafeGARD Solutions

SterilGARD® e3

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

1. Multiple energy-saving features equals up to 60% increase in energy efficiency
2. Safest work environment with new StediFLOW™ self-adjusting motor technology
3. Most comfortable working environment available with reduced noise and vibration
4. 30% more filter life and less impact on the environment
5. More energy efficient and brighter lighting system for easier viewing and reduced eyestrain

IsoGARD®

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

1. Pass-through and main chamber incorporate uniform unidirectional airflow to flush away any generated particles while bathing the work surface in HEPA-filtered air
2. Constructed with thick safety glass, solid closed-cell silicone gaskets and supplied with hypalon gloves
3. Stainless steel glove port design with one-piece sleeve-and-glove assembly allows gloves to be replaced or changed without breaking containment

NCB™ e3

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

1. All exhaust air is removed directly from the work area and pulled through a dedicated exhaust duct into the facility's separate exhaust system
2. Vapors and gases emitted from vessels or work behind the air split approximately half way back from the cabinet front - are removed and not recirculated
3. Dual supply HEPA filters assure that all positive pressure areas are free of particulate contamination. Recirculated air is HEPA-filtered immediately below the work surface before it is passed through a HEPA supply filter above the work area

AeroPROTECT 360°

Aseptic Contamination Enclosure. Optimum personnel & environment protection.

1. 360° visibility to the work area for easy monitoring
2. 8" [203mm] sash opening allows access to the work surface and is the primary means of access to ensure user protection
3. Front facing controls and gauges within easy reach when standing from both sides
4. Dual force hinged front view screen and rear access, offering easy equipment loading

BioChemGARD® e3

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

1. A 70% reduction in electrical power compared to traditional B2 cabinets
2. Increased motor blower reserve extends filter life for less downtime
3. Continuously safe work environment with self-adjusting motor technology enhances productivity
4. Optional fume hood package for versatile laboratory design

BioPROTECT® e3

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

1. Flexible modular design for high-volume robotic and automated equipment applications
2. Accommodates high-through put robotic systems (including ancillary devices), ultra-centrifuges, flow cytometers, aerosol generators and other large laboratory equipment
3. Ideal for high-throughput screening, combinatorial chemistry, immunology, tissue culture, clinical research, drug discovery, molecular biology, and quality control assays

AniGARD® e3

Animal Transfer Station.
Confidence you can rely on.

1. Spacious, easily accessible work areas accommodate a variety of cage sizes and activities
2. Ergonomic design with efficient lighting increases user comfort and visibility
3. Designed for easy movement and maneuverability throughout the laboratory
4. Offers up to ISO Class 4 (Class 10) protection by delivering HEPA-filtered, particulate-free air

SterilSHIELD®

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

1. Offers a contained, pressurized work area for pharmacy applications
2. One of the most comfortable isolators in the industry, with oval gloveports that offer easy reach to interior surfaces, and adjustable height stand
3. HEPA-filtered, unidirectional airflow with better than ISO Class 5 (Class 100) air cleanliness conditions to prevent contaminants from entering the work area

EdgeGARD® e3 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.

1. High-performance airflow system provides uniform airflow to the worksurface, extends filter life and minimizes maintenance costs HEPA supply filter with 99.99% minimum efficiency in capturing 0.3 micrometer particulates
2. Spacious, easily accessible work areas accommodate multiple users and a variety of applications and instrumentation

ChemoSHIELD®

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

1. One of the most comfortable isolators in the industry, with oval gloveports that offer easy reach to interior surfaces, and adjustable height stand
2. Slanted, top-hinged view screen allows for full opening for loading and unloading of pharmacy instrumentation or equipment
3. HEPA-filtered, unidirectional airflow with better than ISO Class 5 (Class100) air cleanliness conditions to prevent contaminants from entering the work area

EdgeGARD® VF

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

1. ISO Class 4 (Class 10) cleanliness (for 0.5 micrometer particles)
2. One-piece stainless steel work surface helps prevent surface contamination
3. Easy to move and maneuver when configured with mobile stand, casters and pull bars
4. Slanted 10° viewscreen for operator comfort and direct line-of-sight viewing
5. Well-lighted workspace reduces eyestrain

Air Sentry Chemical Fume Hood

POWERED BY LAB CRAFTERS

Fume hoods designed for unparalleled safety for critical laboratory applications.

1. Substantially reduces roll effect (fluctuations in the airflow that may cause harm to the worker)
2. Offers a streamlined, unobstructed work area
3. Minimizes lingering concentrations above and behind the view screen
4. Reduces contaminant concentrations near the edge of the sash (window), reducing potential exposure hazard to personnel

93
Sales Professionals

675
Service Technicians

74
B2B Partners

3
Locations

No Minimum Anything

Our global headquarters houses our core operations: manufacturing, engineering and design, research, testing, quality control, technical support, and customer service.

No Shortcuts

The construction of Baker laboratory equipment is marked by a focus on function, user comfort, durability – and always safety. Testing is rigorous, setting us apart in the industry.

We take it Personally

Our employees, from our engineers to our customer service representatives, are motivated by the trust our customers have placed in us to protect life — your life, the life of your research, and ultimately the lives you save through discovery and healing.

Make the World a Better Place

In research and clinical care, you are dedicated to making the world a better place. We not only share your passion for your work, but the wider mission of dedication to principles of sustainability and responsibility.

A Passion for Real value

Baker products have earned a reputation for maximum return on investment through lower life cycle costs and more years of trouble-free operation than those of any other manufacturer.

Baker

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