AirClean® Systems

The Fume Control Experts.

Founded in 1992, AirClean® Systems is the largest North American manufacturer of ductless hoods, workstations and enclosures. We continue to develop and produce a complete range of solutions for protecting the operator or process from toxic vapors, fumes, gases, and particulate.

A forward-thinking company

AirClean® Systems was founded on the premise that it is possible to provide operator or process protection from airborne contaminants using state-of-the-art materials and manufacturing systems. This simple idea has culminated into over twenty years of providing the highest quality ductless fume hoods, clean benches, exhaust hoods and related products to institutions across the globe. We continually strive to infuse our products with cutting-edge technology to further increase their safety, usability and longevity.

An environmentally-conscious company

Our ductless fume hoods are a true "green product", using much less energy and natural resources than traditional exhaust fume hoods. The average traditional "total exhaust" fume hood consumes three-and-a-half times the energy of the average U.S. household.* This is due to the hood exhausting room air, forcing the HVAC system to continually heat or cool makeup air coming into the laboratory. Ductless fume hoods eliminate this costly cycle – reducing environmental impact through significantly reduced energy use.

A quality-focused company

AirClean® Systems products are manufactured at our corporate headquarters located in Creedmoor, NC USA. In addition, AirClean® Systems manufactures products in Melbourne, Australia for the Australian and Southeast Asian market. Each manufacturing facility offers full electronic and mechanical design capabilities with extensive CAD-CAM design experience. Our CNC machining center and in-house engineering expertise allows AirClean® Systems the flexibility to keep pace with our customer's needs.

Before shipment, each AirClean® Systems product is tested in-house to meet or exceed applicable safety standards and regulations. Stringent QA/QC procedures during all phases of production guarantee the highest quality and reliability of each product.

An informed company

AirClean® Systems maintains an extensive application database resulting from thousands of installations, years of field experience and laboratory research in the containment of toxic chemicals and particulate. Our customers are not only using rigorously field-tested hoods, workstations and enclosures; they are accessing years of laboratory application data and experience to ensure the proper safety solution is in place.

** Mills, E. and D. Sartor. "Energy Use and Savings Potential for Laboratory Fume Hoods." Energy, Vol. 30, 2005, pp. 1859-1864. LBNL-55400.*

Manufacturing Green Products Since 1992

LPA Laboratory Products Association

SEFA

U.S. Green Building Council Member

GSA Schedule Contract GS-07F-0078W

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What makes our products superior?

AirClean® Systems products incorporate state-of-the-art microprocessor-based controllers and monitoring systems. Critical to any ductless safety product, the monitoring system must be able to alert the operator if the filtration fails, if there is insufficient airflow or if filter replacement is necessary. All alarms associated with the monitoring system are designed to alert the user immediately if adverse conditions arise.

AirSafe™ Automatic Safety Controller

AirSafe provides a simple-to-use interface with powerful airflow control, filtration monitoring and gas detection capabilities. A proprietary sensor is used to accurately monitor and display face velocity on the LCD display. Blowers can be controlled manually or in "automatic" mode, where AirSafe automatically controls blower speed in order to maintain a user-set face velocity. A solid-state hydrocarbon gas detector is linked to the controller for monitoring filtration breakthrough. Audible and visible alarms alert the user in the event of low airflow or required filter replacement.

UVTect™ Microprocessor Controller

UVTect enables the operator to control any process protection workstation with a single button press, including blower, timed shortwave UV irradiation, fluorescent light and lab event timer. Pressure drop across the HEPA filter(s) is monitored to ensure proper positive-pressure airflow; a visible and audible alarm will sound to alert the operator to change filter(s). A shortwave UV irradiation timer can be set from 1- 59 minutes. UVTect monitors UV bulb effectiveness and will alarm when bulb change is necessary.

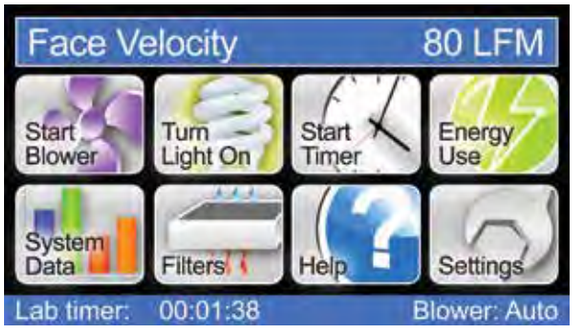
AirMax™ Microprocessor Controller

The AirMax microprocessor controller electronically monitors and displays the instantaneous face velocity of the AirMax total exhaust fume hood. If inadequate face velocity conditions arise, an audible and visible alarm will alert the user. One-touch control of specific options, like the spray bar and wet scrubber package, promote simple operation and user interaction.

UL, CSA and CE COMPLIANT

AirSafe™ NXT Automatic Safety Controller

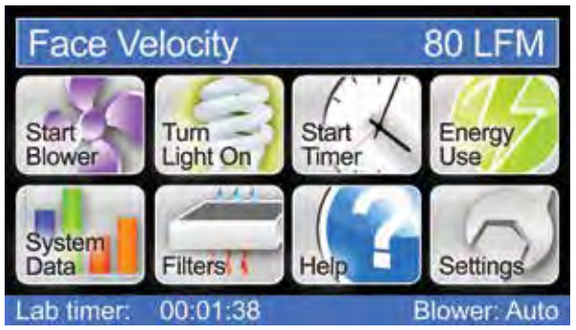
AirSafe NXT is a touchscreen-accessible operating system exclusively designed for ductless fume hoods. AirSafe NXT has vivid user-friendly icons, allowing for simple one-touch control of all ductless fume hood operating and safety functions. Automatic blower control can be monitored and maintained within AirSafe NXT. A unique feature of AirSafe NXT is the ChemMinder™ application acknowledgement system that confirms the approved application with the installed filtration package.

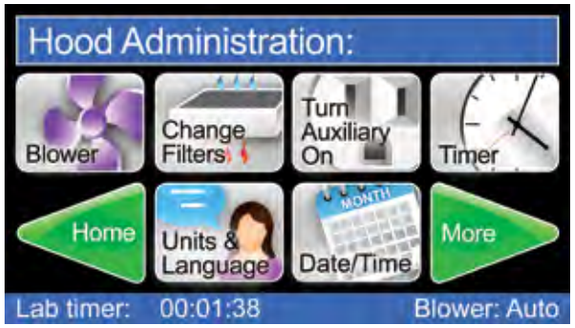


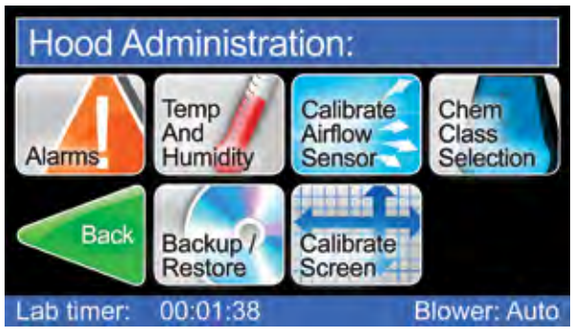
AirSafe™ TOUCH Automatic Safety Controller

AirSafe TOUCH was the first multi-level color touch screen controller available on a laboratory fume hood. Offering an unprecedented level of control, AirSafe TOUCH utilizes AirClean® OS, written specifically for controlling ductless fume hoods and similar laboratory equipment. In addition to controlling and monitoring airflow, AirSafe TOUCH, in conjunction with the built-in PID gas analyzer, monitors and displays the real-time Interfilter™ gas level in absolute PPM. See pages 7-13 for additional details on the advanced features and benefits of AirSafe TOUCH.

UL, CSA and CE COMPLIANT







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AirSafe™ NXT Automatic Safety Controller

Simple and easy ductless fume hood control and operation with vivid icons

AirSafe NXT provides touchscreen access to all critical operation and monitoring functions of the Endeavour™ ductless fume hood. Automatic blower control, filter monitoring, alarm notification and energy use meter are just a few of the features available with AirSafe NXT automatic safety controller.

The energy use meter is standard within AirSafe NXT and provides the operator and laboratory manager with the hood's total operating hours and electrical consumption.

Notifications, both audible and visual, are displayed on the touch screen controller, notifying the user of adverse conditions. Additionally, the filter life meter provides visual indication of current filter status.

INDEPENDENCE™

AirSafe™ TOUCH
Automatic Safety Controller

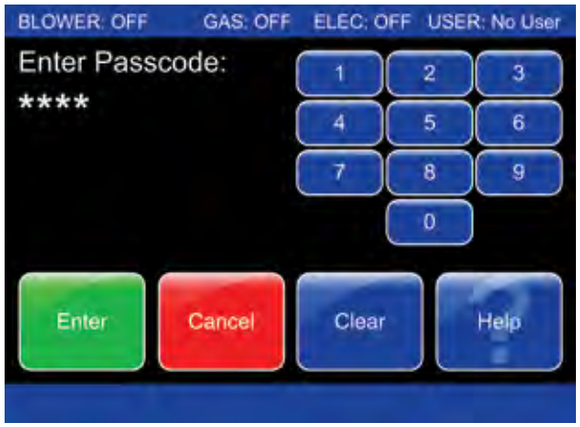
The only microprocessor controller designed exclusively for ductless fume hoods

AirSafe TOUCH is the first color LCD touch-screen controller available for a laboratory fume hood. This streamlined control package is standard on each Independence™ ductless fume hood, offering a wealth of hood control and information.

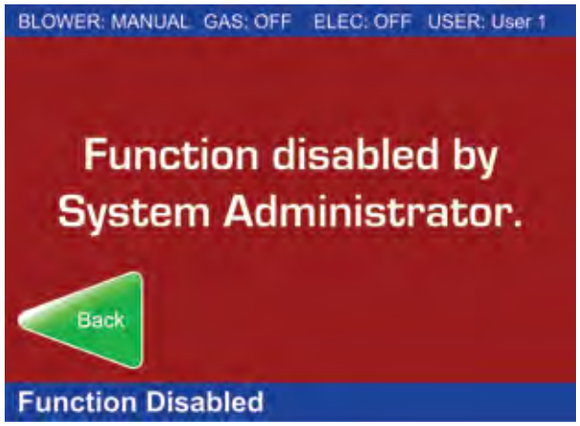
The two "Main Control" screens feature 18 different "Quick Keys" for one-touch access to all primary control and monitoring functions of the hood. The main screen also displays the current Interfilter™ gas detection level and airflow face velocity in real-time. Blower, burning gas and electrical outlet status are constantly displayed in the top status bar along with the logged-in user.

Thousands of times per second, AirSafe TOUCH simultaneously monitors and controls over 900 data points linked to the system's mechanical controls, sensor package and alarms. This is all made possible by AirClean® OS, the first operating system written exclusively for control of laboratory fume hoods and related enclosures.

Eight distinct logins with varying levels of access



Each login has a unique passcode



In the event a user attempts to access a restricted feature, the above warning is displayed

INDEPENDENCE™

Multi-Level User Access

Administrator-defined access for up to eight users

In certain situations, it may be necessary to limit access to administrative functions of Independence.™ AirSafe TOUCH offers eight distinct user logins, each of which can be granted varying levels of access. This feature is especially important in academic and production settings where multiple users will have access to the hood.

Level 3 – Administrator Access

Hood administrators have unrestricted access to all features and setup screens within AirSafe TOUCH. In addition to all "Quick Key" functions on the main control screen, an administrator can enable/disable most safety alarms, set alarm values, modify the approved chemical application, replace filters and perform other administrative functions.

Level 2 – Standard Access

Standard access users can utilize all functions of Independence that are not behind the "Setup" quick key. This includes all controls needed to use the hood on a day-to-day basis.

Level 1 – Restricted Access

As with standard users, a restricted access user does not have access to setup screens, and can be restricted from accessing the following features:

- Burning gas
- Electrical outlets
- Fluorescent light
- Blower on/off and mode change
- Lab countdown timer
- Shutdown

FilterStat™ Application Validation System

Real-time application validation at your fingertips

With any ductless hood, filtered air is recirculated into the laboratory, making it imperative that only filtration-approved chemicals are manipulated inside the hood. The Independence ductless fume hood features FilterStat, the first integrated platform for storing, analyzing, approving and monitoring chemicals for use with a particular filter or combination of filters. To achieve this real-time analysis, FilterStat utilizes an onboard chemical reference library of over 1,000 chemicals approved for use within Independence.

Application and Filter Input

During factory QA/QC, the user's approved chemical application and installed filter type are programmed into Independence.

In the event chemicals are to be added or removed at a later date, an administrator-level Independence™ user can easily make this change via AirSafe™ TOUCH. Updating filter information is also simple, taking only a few seconds via AirSafe TOUCH.

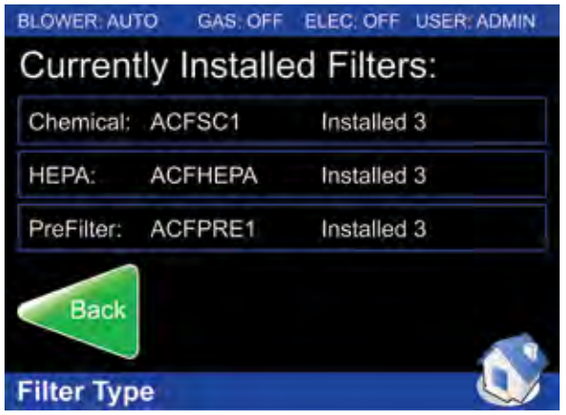
The approved application and installed filter lists are available to any Independence™ user directly from the "Main Controls" screen.

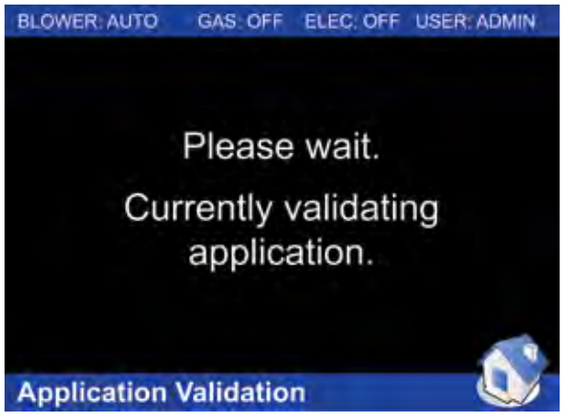
Application/Filter/Sensor Confirmation

Not only does FilterStat store the approved chemical application in memory; it actively validates the chemical application against the installed filtration and gas detection package. In the event the chemical application is altered or new filters are replaced/installed, AirSafe TOUCH will confirm that all chemicals, filters and gas sensors are compatible. If they are not, the system will require the user to install correct filters, modify the application or consult an AirClean® Systems application specialist for further review.

Filtration Monitoring

In the event of impending filter breakthrough, it is imperative to notify the hood operator. FilterStat interfaces with the exclusive TriAnalyze 3x3™ multi-method gas detection system, which includes a PID (photo ionization detector), an acid array and a hydrocarbon detector. FilterStat automatically calibrates the PID, monitoring for a target application chemical, and sets the alarm value based on the chemical's TLV. Real-time Interfilter™ chemical saturation levels are monitored and displayed in parts-per-million.





INDEPENDENCE™

TriAnalyze 3x3™ Multi-Method Gas Detection

The new standard for ductless filtration monitoring

In conjunction with the onboard chemical library and chosen chemical application, the TriAnalyze 3x3 gas detection system utilizes three advanced chemical sensors linked to three gas sample locations to provide a complete, real-time application exposure assessment. The PID gas analyzer component of TriAnalyze 3x3 provides the first "absolute zero" reference measurement method and real-time PPM display found in a ductless fume hood. Gas detection alarm values are auto-set based on TLV information embedded in the chemical library.

3 Sensors

PID Gas Analyzer

Used in conjunction with the extensive onboard chemical database, the PID gas analyzer provides real-time readout of saturation levels in exact parts-per-million.

Metal Oxide Array

This industry-standard sensor constantly monitors for a wide range of hydrocarbons found in common applications.

Acid Array

Real-time acid detection is provided via Independence's custom-tailored electrochemical cell, capable of sensing low-ppm acid gases.

3 Samples

1 *Interfilter™ Sampling Port*

This unique sampling port allows each sensor to monitor air within the filter, giving users the ability to be notified of filter saturation before breakthrough occurs.

2 *Filter Exhaust Sampling*

Located in the exhaust air stream, this sampling port confirms filter saturation and alerts the user to change filters.

3 *Room Air Sampling*

As an added safety measure, room air saturation measurements are taken. A separate target chemical, that may be present in the room but not used in the hood's application, can be selected and monitored.

Airflow Monitoring and Blower Control

Advanced airflow control for increased containment and safety

Connected to AirSafe™ TOUCH is a proprietary self-calibrating airflow sensor, providing accurate real-time face velocity measurements, which are displayed on the Main Controls screen. When Independence™ blowers are set to automatic mode, this airflow data is utilized by AirSafe TOUCH to automatically increase or decrease blower speed in order to maintain the user-set face velocity (80 LFM in most cases). Unlike other ductless fume hoods, this allows Independence to compensate for variances in airflow caused by equipment, personnel, sash height, or even clogged filtration.

Automatic Blower Mode

Allows user to set desired face velocity from 30 to 150 linear feet per minute (LFM) or .15 to .75 meters per second (m/s). Blowers will automatically accelerate/decelerate to maintain face velocity based on input from the proprietary AirSafe™TOUCH airflow sensor.

High/Low Blower Mode

Allows user to store a sash 'mid point' and both a 'high' and 'low' blower speed. When the sash is raised above the mid point, the blowers will run at the high speed. Conversely, when the sash is lowered below the mid point, the blowers will run at the low speed.

Manual Blower Mode

Allows user to set a percentage of maximum blower speed. Regardless of sash position or operator interaction, the blowers will maintain the pre-set speed.

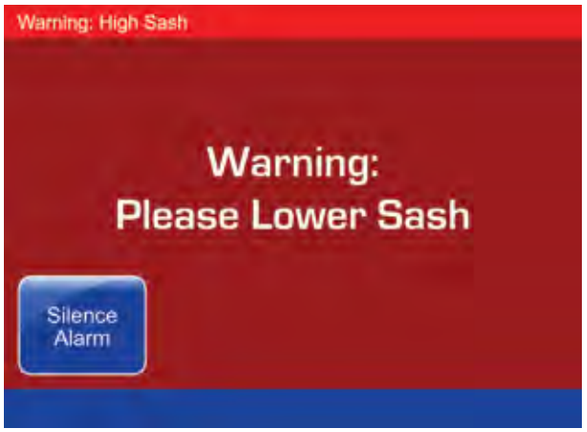
INDEPENDENCE™

Additional Safety Features

Independence is the most advanced ductless fume hood available worldwide.

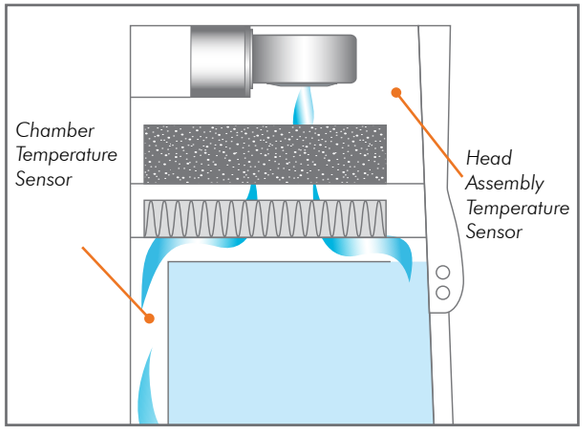
Airflow Monitoring and Alarms

The advanced airflow sensor included with each Independence allows hood administrators to set the minimum and maximum face velocity. Should the face velocity move out of this range, the user is notified with an audible and visible alarm.



Sash Monitoring and Alarms

The sliding safety glass sash is monitored by a sash reader, providing the AirSafe™ TOUCH controller with real-time sash position information. An Independence administrator can set high and/or low sash alarm points that will notify the user if the sash is out of range.



Dual-Zone Temperature Monitoring

Independence incorporates temperature sensors in both the chamber and deep filtration bed, alerting the user both audibly and visibly in the event of a significant increase in temperature.

Burning Gas and Electrical Outlets

Both the burning gas and front-mounted electrical outlets are controlled by the AirSafe TOUCH safety controller. A timed control mode allows the services to run for a pre-set time, then automatically turn off once the timer has expired. Additionally, if blowers are not on, burning gas is disabled. Both features help prevent gas build-up in the event that a manual fixture is left open.

Silconazyne™ Bonded Filtration

Higher adsorption capacity for a wider range of chemicals

At the heart of the Independence™ ductless fume hood is Silconazyne, a revolutionary new bonded gas phase filtration system. Silconazyne is a chemically and thermally enhanced filtration technology featuring silica in conjunction with high capacity activated carbon. The entire structure is layered within a bonded matrix resulting in a dust-free filter.

Silconazyne Bonded Filter

With the development of Silconazyne, AirClean® Systems has improved upon centuries-old gas phase carbon filtration technology by increasing the adsorption capability on a wider spectrum of commonly manipulated laboratory chemicals. Inorganic acids and bases, alcohols, aldehydes, amines, esters, ketones, carboxylic acids, aliphatic and aromatic hydrocarbons (and their halogenated derivatives) are all compatible with Silconazyne.

The Silconazyne filter incorporates an Interfilter™ monitoring port, which allows the TriAnalyze 3x3™ multi-method gas detection system to constantly survey the chemical saturation of the filtration bed.

Silconazyne filters can be used with 99% of all chemicals found in the FilterStat™ integral chemical reference library.

Silconazyne bonded gas phase filtration is available exclusively for Independence ductless fume hoods

Features

- Bonded material — no filter dusting
- Impervious polypropylene filter housing
- Interfilter monitoring

SEFA 9 TESTED

HEPASafe™ Filtration Technology

Redundant filtration for increased operator safety

HEPASafe Filtration Technology incorporates multi-stage filtration, for both toxic powders and chemical vapors, while increasing safety during routine filter change out and enclosure maintenance.

AirClean® Systems PowderSafe Type B, Type C and Bulk Handling Enclosures are designed with HEPASafe Filtration Technology.

All PowderSafe enclosures that incorporate HEPASafe Filtration Technology, manage contaminants with rear wall pre-filter and HEPA filtration. This unique design pulls potentially harmful particulate away from the operator's breathing zone in an even horizontal airflow path, increasing particulate and vapor capture.

The advantage of HEPASafe is that it isolates the pre-filter and main HEPA filter during filter change out. The PowderSafe enclosure continues to operate and provide containment during main pre-filter and HEPA filter replacement.

PowderSafe enclosures are equipped with the AirSafe™ Microprocessor Safety Controller for constant monitoring and control of airflow. AirSafe, through electronic sensors, monitors HEPA filter back pressure, system pressure and face velocity of the enclosure.

HEPASafe filtration technology offers four stages of filtration. The rear wall of each PowderSafe enclosure has two types of particulate filtration. The first layer is a MERV 8 pre-filter. This filter functions as a gross contaminant filter and removes large micron particles from the airstream. The HEPA filter, which is secured independently behind the prefilter, is rated at 99.997% efficient at 0.3 microns. This acts as the second stage of filtration and is also ocated in the rear wall of the enclosure.

The third stage of the HEPASafe filtration technology is a redundant HEPA filter, which is located in the secondary filter housing. The redundant HEPA filter is critical when the primary HEPA filter is being replaced. In this design, the enclosure continues to operate, providing negative pressure, during main HEPA filter replacement. Any particulate that may be freed during this maintenance process, will be captured by the redundant HEPA filter.

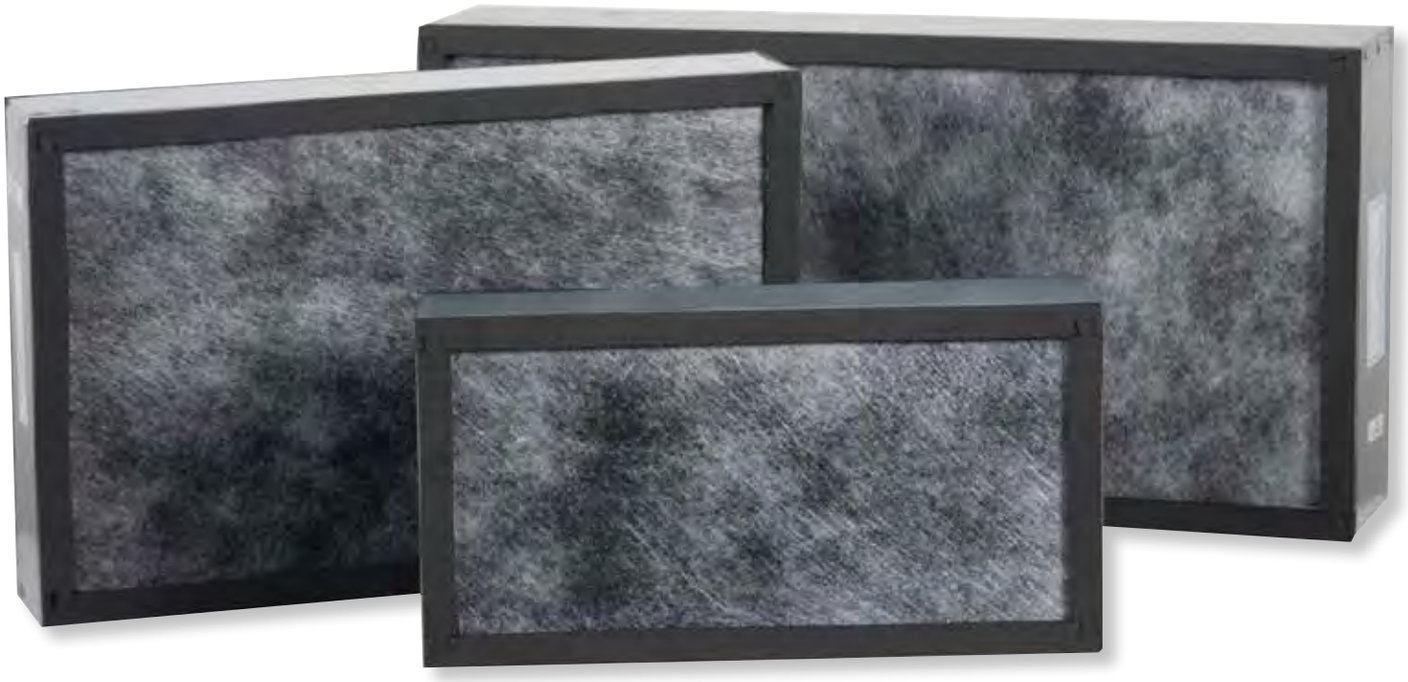
An optional fourth filtration layer of bonded carbon filters will adsorb chemical fumes and vapors, when installed. The bonded carbon filter can be layered in different ways to target a variety of chemical families. The bonded carbon layer is secured independently of the redundant HEPA filter, which is sealed and leak tested to ensure particulate capture.

HEPASafe filtration technology incorporates discreet sampling ports for particulate challenge testing and validation. The sampling ports give certification technicians the ability to hook up their verification equipment directly to the enclosure and test between the HEPA filters.

Bonded Gas Phase Filtration

Predictable and reliable filtration

AirClean® Systems manufactures gas phase bonded carbon and multi-layered filters that are available with standard coconut shell carbon or chemically impregnated carbon, depending on your application.



General Purpose Bonded Carbon Filtration

AirClean Systems gas-phase, coconut shell carbon filters utilize our unique bonded carbon filtration media. This minimizes the release of potentially hazardous carbon dust found in traditional granular carbon filters. Our proprietary bonding process holds carbon in a predictable matrix, preventing carbon shift that can lead to “dead spots”, common in traditional granular filters.

Chemisorptive Bonded Carbon Filtration

General purpose activated coconut shell carbon has a high capacity for most chemical compounds. Chemisorptive gas-phase filters provide a higher capacity for compounds that are not strongly adsorbed by general carbon (such as hydrogen sulfide, mercaptans, sulfur dioxide, chlorine, hydrogen chloride, nitrogen oxides, formaldehyde and ammonia). AirClean Systems’ bonded chemisorptive filters can be designed and constructed in layers, using multiple types of impregnates, to handle a wide array of chemicals.

Features

- Bonded carbon — no filter dusting
- Even distribution of impregnates
- Multi-layering options for larger application compatibility

General Purpose Gas-Phase Activated Carbon

Load Capacity

The general purpose gas-phase bonded carbon filter can be used for a wide range of chemicals. The load factor capacity index below is intended as a guide to approximate how much of a toxic contaminant the filter may adsorb.

At a filter weight of 22 lbs. (10 kg), and an index of "1", up to 50% or 11 lbs. (5 kg) of the toxin may be adsorbed into the filter. The index does not indicate the filtration efficiency, but the approximate weight of the contaminant that may be adsorbed into the filter. In general, an index of "1" or "2" is a good indication of the filter's suitability for use with that specific chemical. If another type of filter would be more appropriate, it has been indicated in parentheses, in the partial chemical listing that follows on page 17. Consulting with an AirClean® Systems filtration specialist is recommended to ensure proper filter selection.

Load Capacity Index for a 22 lb. Activated Carbon Filter			
Index	Load Capacity	%	Approx. Max. Weight of Contaminant
1	Excellent	15-50	3.3 lbs. to 11 lbs. (1.5 kg to 5 kg)
2	Good	5-20	1.1 lbs. to 4.4 lbs. (0.5 kg to 2 kg)
3	OK	<5	Up to 1.1 lbs. (0.5 kg)
4	Poor	<1	Up to .22 lbs. (0.1 kg)

Example: The AC4000 ductless polypropylene fume hood with three 22 lb. (10 kg) filters could adsorb up to 33 lbs. (15 kg) of a contaminant with an index of "1".

Note: Many factors affect filter load capacity. This chart is intended for reference only. Specific load capacity may only be calculated on an application by application basis. Please consult an AirClean Systems filtration specialist for a load capacity analysis of your application.

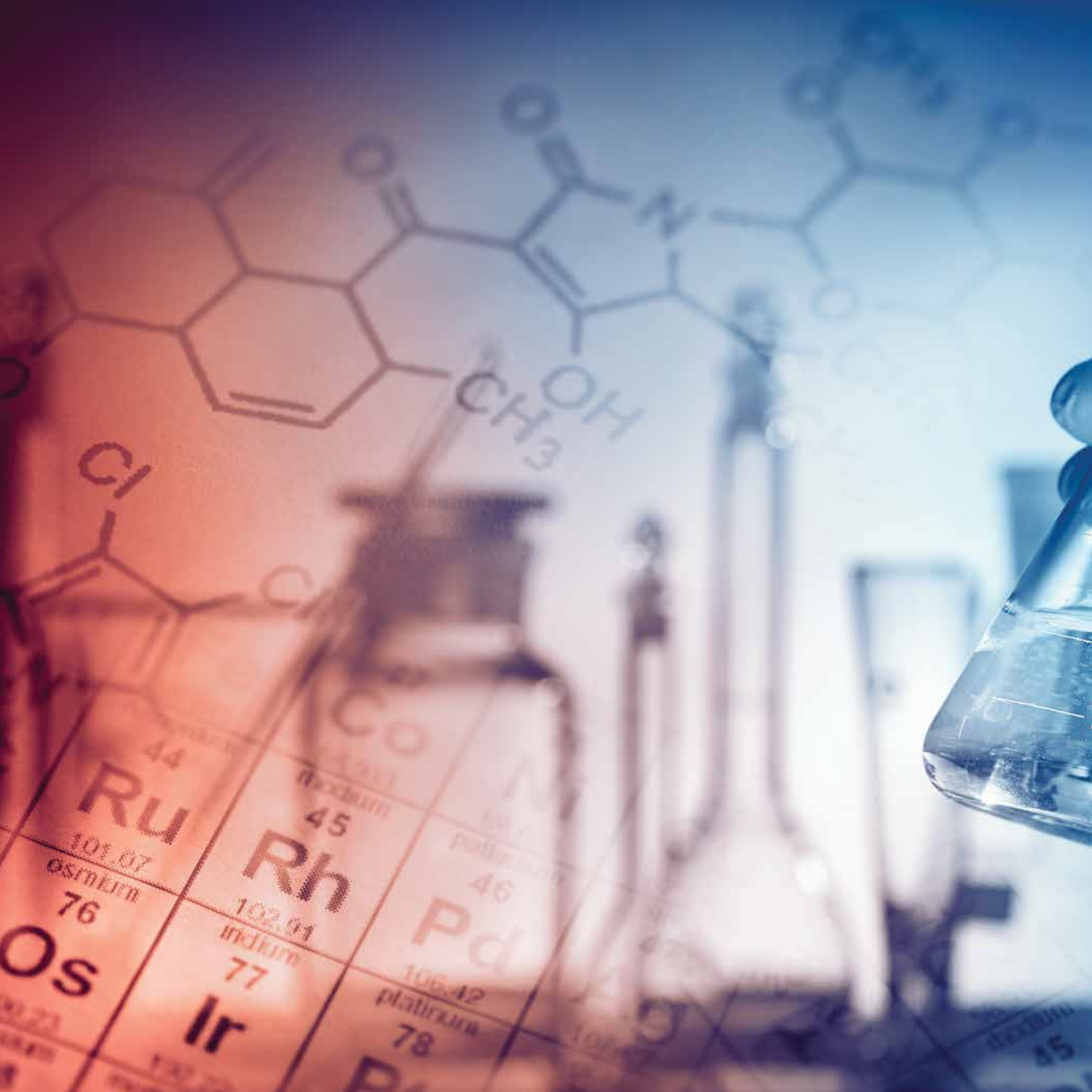
For a free application assessment visit www.aircleansystems.com/assessment

Activated Bonded Carbon Chemisorptive Filters (partial list only)			
Filter Type	Application	Filter Type	Application
ACFGLT	Glutaraldehyde	ACF400	Inorganic Acids
ACFFOR	Formaldehyde	ACF410	Hydrogen Sulphide
ACF300	Ammonia or Amines	ACF430	Mercury Vapors
ACF350	Alkaline Fumes	ACFMULTI	Multi-layered composite for Aldehydes, Acids and General Organic Solvents

*Additional filters are available, for specific applications, upon request.

Filtration Load Capacity Index

Partial Chemical Listing — Contact AirClean® Systems for additional information at: info@aircleansystems.com


Ru
101.07
osmium
76
Os
Rh
102.91
iridium
77
Ir
45
46
78
platinum

Operator Protection

AC600 Series Ductless Chemical Workstation

Flexibility and mobility for today's ever changing laboratory environment

The AC600 Series ductless chemical workstation is a low cost, operator protection product that protects the end user from toxic vapors, gases, fumes and particulate. Smaller and more mobile than a standard ductless fume hood, AC600 Series ductless chemical workstations are the perfect solution for performing low-volume applications with known chemicals. These products come standard with the same advanced safety features and technology as larger AirClean® Systems ductless hoods: gas phase bonded carbon filtration, real-time gas detection and constant airflow control and monitoring.

AC648A Ductless Chemical Workstation

AirSafe safety controller features:

- Constant airflow control and monitoring
- Real-time hydrocarbon gas detection
- Lab event timer
- Visual display of face velocity

Standard Features:

- AirSafe™ automatic safety controller
- Bonded carbon filtration
- Integral base with deep spill lip
- No ductwork required
- No installation required - plugs directly into a standard 110V or 220V electrical outlet
- Clear polycarbonate shell for 360° visibility
- Extremely quiet operation < 49dBA
- Available in standard height or tall version

Safety Features:

- The filter and electronics are located above the workspace, eliminating the chance of a chemical spill entering these sensitive areas
- The brushless, sparkless blower is post-filter
- The deep base effectively contains accidental spills
- The low airflow alarm warns the user both visually and audibly
- Filter safety lockout to ensure correct filter replacement

Options:

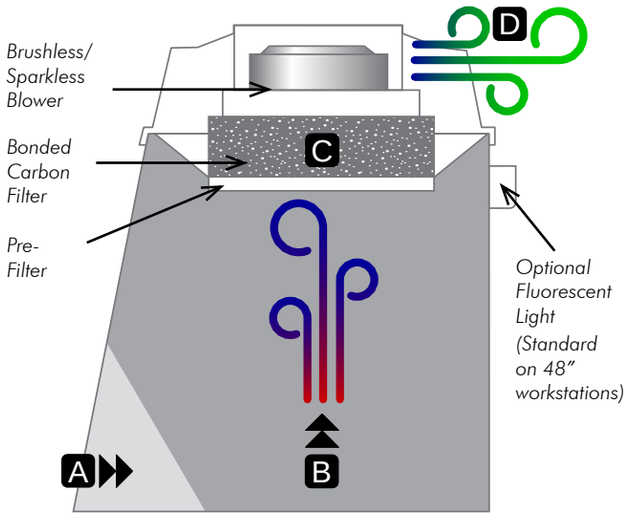
- Cart with locking casters (34" height)
- Polypropylene cup sink
- Deck-mounted fixtures
- Pass-through port
- Fluorescent lighting optional on all 32" width workstations; standard on 48" workstations

UL, CSA and CE COMPLIANT

AC632TAS Ductless Chemical Workstation with optional cart

How the AC600 Series works:

1. Room air enters at "A".
2. Room air mixes with gases at "B" and moves through filtration bed at "C".
3. Filtered, clean air exits workstation at "D".



Hoods, workstations and enclosures are shipped fully assembled

AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

AC600 SERIES CHEMICAL WORKSTATION DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632A	32″	25″	30″	31″	23″	19″
AC632TA	32″	25″	40″	31″	23″	26″
AC632TAS	32″	25″	40″	31″	23″	29″
AC648A	48″	25″	31″	47″	23″	19″
AC648TA	48″	25″	41″	47″	23″	26″
AC648TAS	48″	25″	41″	47″	23″	29″

Polypropylene Ductless Fume Hood - Folding Sash

A ductless solution for most common applications

Polypropylene ductless fume hoods protect both the operator and the environment by filtering toxic fumes, vapors, or gases through AirClean® Systems' proprietary bonded carbon filtration. Standard with a thermally-fused integral spill tray, polypropylene ductless fume hoods are chemically resistant to virtually all corrosive applications.

For the widest application range possible, each polypropylene hood is designed to accommodate up to seven inches of filtration. By stacking a HEPA filter followed by a bonded carbon filter, the operator can effectively filter both toxic particulate and chemical fumes. For high evaporation or multi-chemical applications, a full seven-inch stack of chemical filtration may be recommended.

AC4000 Polypropylene Ductless Fume Hood shown on optional base cabinet

Features:

- AirSafe™ automatic safety controller monitors airflow face velocity and carbon filter saturation
- Polypropylene construction for chemical resistance — the result: NO RUST
- Wide range of bonded activated carbon and HEPA filters for containment of virtually any toxic vapor, fume, gas, or particulate
- AirZone™ baffling establishes a proper horizontal airflow pattern and directs toxins away from the operator in a predictable pattern, eliminating "dead spots" within the hood
- No ductwork required
- Integral vapor-proof fluorescent lighting
- No installation required
- All AirClean Systems hoods are shipped fully assembled and arrive ready to use
- Available in 110V or 220V AC

Options:

- Vented and unvented polypropylene base cabinets
- Pass-through port
- Polypropylene sink and deck-mounted fixtures
- Sturdy stand with leveling feet
- Clear sides and back

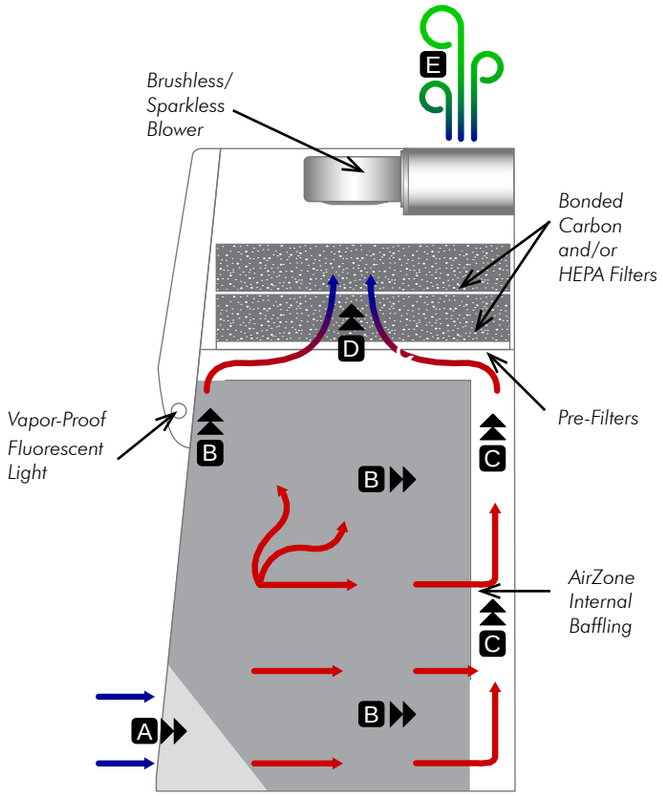
AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

UL, CSA and CE COMPLIANT

AC4000 Polypropylene Ductless Fume Hood on optional stand

How the folding sash polypropylene ductless fume hood works:

1. Room air flows away from the operator and enters the enclosure in a horizontal pattern at "A".
2. Room air mixes with both lighter and heavier gases at "B" before being drawn into the AirZone™ baffling at "C".
3. Contaminated air is directed through the filtration bed at "D".
4. Clean air is recirculated into the room at "E".



POLYPROPYLENE DUCTLESS FUME HOOD DIMENSIONS - FOLDING SASH						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC3000	36″	30″	54″	35″	26″	35″
AC3036	36″	36″	54″	35″	32″	35″
AC4000	48″	30″	54″	47″	26″	35″
AC4036	48″	36″	54″	47″	32″	35″
AC5000	60″	30″	54″	59″	26″	35″
AC5036	60″	36″	54″	59″	32″	35″
AC6000	72″	30″	54″	71″	26″	35″
AC6036	72″	36″	54″	71″	32″	35″

Polypropylene Ductless Fume Hood - Sliding Sash

The look and feel of a traditional fume hood, without the associated installation or energy costs

AirClean® Systems polypropylene ductless fume hoods with vertical sliding sash are similar to traditional exhaust fume hoods, yet do not require connection to costly ductwork or HVAC systems. Operators familiar with exhaust hoods feel at home thanks to the vertical sliding safety glass sash, dual wall construction, and optional front-mounted fixtures. In addition to these time-tested features, the AirSafe™ automatic safety controller provides constant airflow monitoring, automatically maintaining the operator-specified face velocity as the sash is raised or lowered.

AC4000S Polypropylene Ductless Fume Hood shown on optional base cabinet

Features:

- AirSafe automatic safety controller monitors airflow face velocity and carbon filter saturation
- Vertical sliding safety glass sash
- Dual wall construction allows for front mounting of services such as water, gas, or electric
- AirZone™ internal baffling provides even airflow for maximum containment
- FlowSmooth™ airfoil on sash lip promotes consistent laminar airflow
- Polypropylene construction for excellent chemical resistance — the result: NO RUST
- Wide range of bonded activated carbon and HEPA filters for containment of virtually any toxic vapor, fume, gas, or particulate
- No installation required.
- All AirClean Systems hoods are shipped fully assembled and arrive ready to use
- Integral vapor-proof fluorescent lighting
- Available in 110V or 220V AC

AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

Hoods, workstations, and enclosures are shipped fully assembled

ASHRAE110 TESTED

UL and CSA COMPLIANT

AC4000S Polypropylene Ductless Fume Hood

AirSafe™ automatic safety controller

AirZone™ internal baffling provides even airflow for maximum containment

Dual wall construction allows for front mounting of services

Options:

- Vented and unvented polypropylene base cabinets
- Remote services — gas, water, vacuum, and air
- Duplex electrical outlets
- Polypropylene sinks and water fixtures
- Pass-through port

POLYPROPYLENE DUCTLESS FUME HOOD DIMENSIONS - SLIDING SASH

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC3000S	36″	30″	60″	30″	25″	36″
AC3036S	36″	36″	60″	30″	31″	36″
AC4000S	50″	30″	60″	44″	25″	36″
AC4036S	50″	36″	60″	44″	31″	36″
AC6000S	72″	30″	60″	66″	25″	36″
AC6036S	72″	36″	60″	66″	31″	36″
AC8000S	96″	30″	60″	90″	25″	36″
AC8036S	96″	36″	60″	90″	31″	36″

Endeavour™ Ductless Fume Hood - Folding Sash

Monitoring and fume hood control at the touch of an icon

Endeavour ductless fume hoods provide the operator with user-friendly controls, superior construction materials and market-leading safety features needed for effective fume containment. Endeavour ductless fume hoods can be placed virtually anywhere, without the need to connect to building infrastructure, giving you the flexibility expected from modern laboratory equipment.

ACPT4000 Endeavour with AirSafe™ NXT color touch-screen controller shown with optional stand

Features:

- AirSafe™ NXT color touchscreen controller
- Structural thermally-fused polypropylene construction for superior chemical resistance and spill containment
- Constant monitoring of fume hood face velocity with variable airflow control to user preset value
- Built-in solid state gas detection
- Large capacity filtration bed to handle a wide variety of applications
- AirZone™ baffling system that promotes smooth and controlled airflow for optimal containment
- Integral vapor proof fluorescent lighting for effective work area illumination
- Shipped fully assembled, filters installed
- 110V or 220V models available

Options:

- Polypropylene base cabinets, vented and unvented
- Pass-through port
- Polypropylene sinks and deck mounted fixtures
- Epoxy coated metal stand with leveling feet

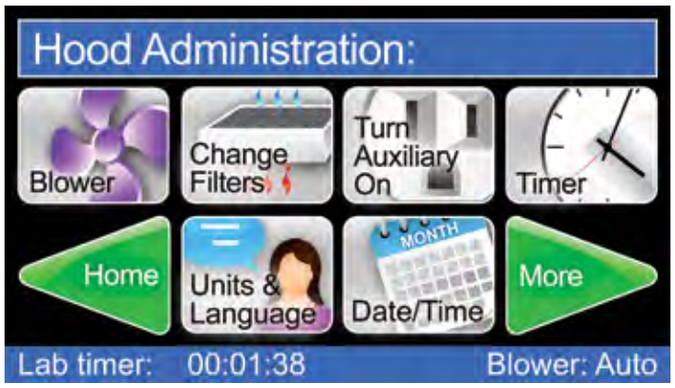
Hoods, workstations, and enclosures are shipped fully assembled

AirClean® Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

UL, CSA and CE COMPLIANT

AirSafe™ NXT provides touchscreen access to all critical operation and monitoring functions of the Endeavour™ ductless fume hood. Automatic blower control, filter monitoring, alarm notifications and energy use meter are just a few of the standard features provided by the AirSafe NXT automatic safety controller.

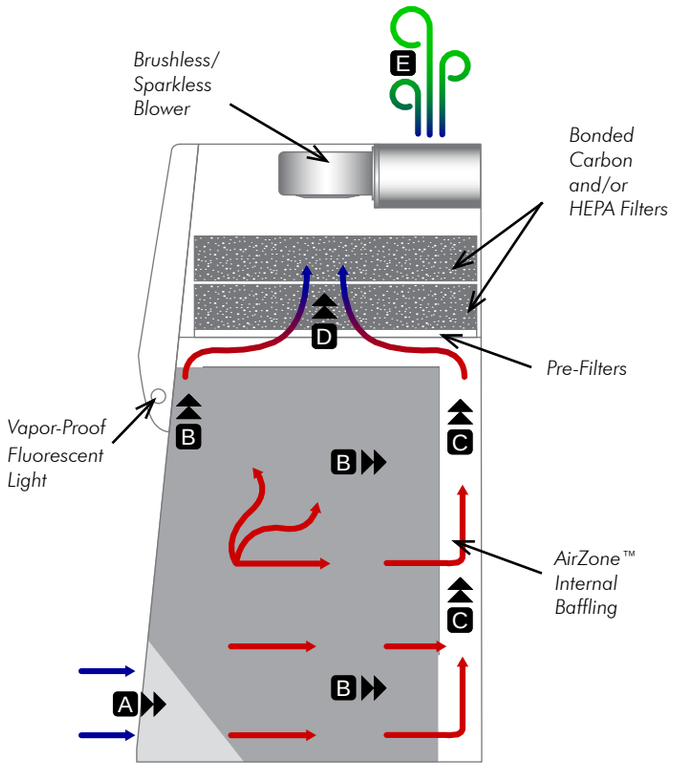
AirSafe NXT home screens allow monitoring and control of all ductless hood features



AirSafe NXT allows the operator to set language preferences and display unit of measure preferences

How the Endeavour ductless fume hood works:

1. Room air flows away from the operator and enters the enclosure in a horizontal pattern at "A".
2. Room air mixes with both lighter and heavier gases at "B" before being drawn into the AirZone™ baffling at "C".
3. Contaminated air is directed through the filtration bed at "D".
4. Clean air is recirculated into the room at "E".



ENDEAVOUR DUCTLESS FUME HOOD DIMENSIONS - FOLDING SASH						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACPT3000	36″	30″	54″	35″	26″	35″
ACPT3036	36″	36″	54″	35″	32″	35″
ACPT4000	48″	30″	54″	47″	26″	35″
ACPT4036	48″	36″	54″	47″	32″	35″
ACPT5000	60″	30″	54″	59″	26″	35″
ACPT5036	60″	36″	54″	59″	32″	35″
ACPT6000	72″	30″	54″	71″	26″	35″
ACPT6036	72″	36″	54″	71″	32″	35″

Endeavour™ Ductless Fume Hood - Sliding Sash

Variable airflow monitoring and control to ensure efficient operation

AirSafe™ NXT provides touchscreen access to all functions of the Endeavour ductless fume hood. Automatic blower control, filter monitoring, alarm notifications and energy use meter are just a few of the standard features provided by the AirSafe NXT automatic safety controller. ChemMinder™ application acknowledgement system provides the end user with real-time data on approved chemical class.

ACPT4000S Endeavour shown on optional base cabinet

Features:

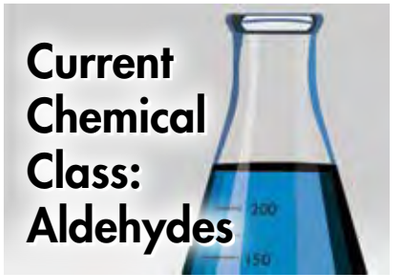
- Touch-screen control with variable airflow controller and constant filter monitoring
- Structural thermally-fused polylpropylene construction for superior chemical resistance and spill containment
- ChemMinder chemical class confirmation — user notification of chemical/filtration compatibility
- AirZone™ baffling to promote uniform airflow and containment
- Dual wall design to allow for placement of fixtures, taps and electrical outlets like a typical total exhaust fume hood
- Sliding safety glass sash
- Large capacity filtration bed to handle a variety of chemical applications and
- Energy Use Meter — displays real-time and lifetime energy use
- Built-in gas detector
- Shipped fully assembled, filters installed
- 110V or 220V models available

Options:

- Polypropylene base cabinets, vented and unvented
- Electrical outlets
- Polypropylene sinks and remote fixtures
- Epoxy coated metal stand with adjustable leveling feet

ASHRAE110 TESTED

UL, CSA and CE COMPLIANT



ChemMinder™

Provides user confirmation of chemical classes approved for use in Endeavour™

Filter Life Meter

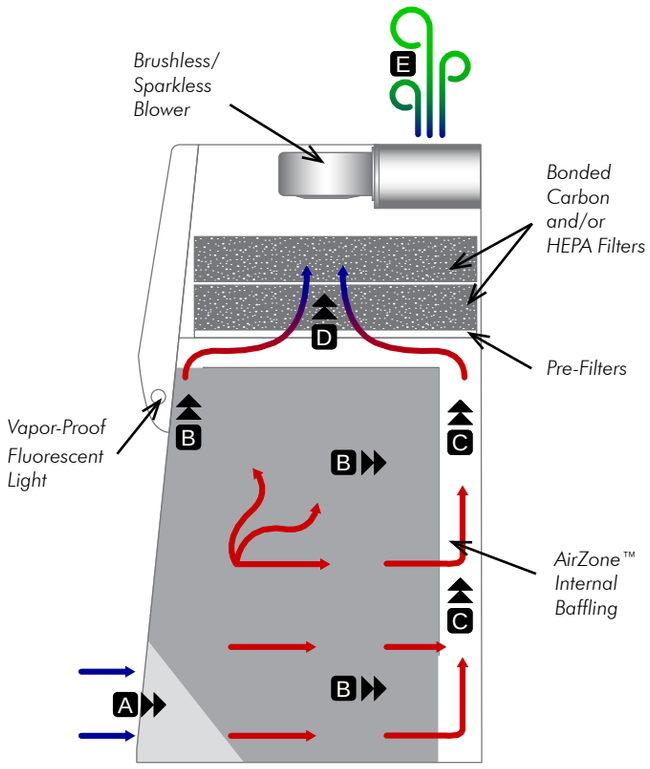
Real-time visual filter life monitoring with a meter that tracks consumption of the installed fume hood filtration

Energy Use Meter

Provides operator or laboratory manager with total use hours as well as electrical consumption

How the Endeavour ductless fume hood works:

1. Room air flows away from the operator and enters the enclosure in a horizontal pattern at "A".
2. Room air mixes with both lighter and heavier gases at "B" before being drawn into the AirZone™ baffling at "C".
3. Contaminated air is directed through the filtration bed at "D".
4. Clean air is recirculated into the room at "E".



AirClean® Systems ductless hoods, workstations, and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

ENDEAVOUR DUCTLESS FUME HOOD DIMENSIONS - SLIDING SASH						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACPT3000S	36"	30"	60"	30"	25"	36"
ACPT3036S	36"	36"	60"	30"	31"	36"
ACPT4000S	48"	30"	60"	42"	25"	36"
ACPT4036S	48"	36"	60"	42"	31"	36"
ACPT6000S	72"	30"	60"	66"	25"	36"
ACPT6036S	72"	36"	60"	66"	31"	36"
ACPT8000S	96"	30"	60"	90"	25"	36"
ACPT8036S	96"	36"	60"	90"	31"	36"

Independence™ Fume Hood

Next generation ductless fume hood technology

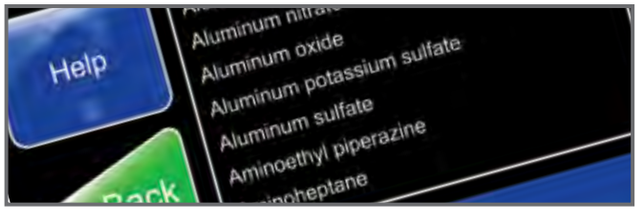
As research and laboratories evolve, AirClean® Systems continues to innovate with sophisticated, efficient fume containment solutions. Independence™ is the culmination of two decades of research and development in airflow design, gas-phase filtration, fume detection and fume hood control technologies. The ductless fume hood has now come of age.

Independence provides real-time PPM measurements for filter saturation, an on-board application validation system, class-leading airflow control and a host of innovative features unique to the ductless fume hood marketplace. Never before has a fume hood been able to offer this level of safety and performance.

ACRJ4030 Independence Ductless Fume Hood with optional base cabinet, sinks and fixtures

Breakthrough Technology:

AirSafe™ TOUCH Automatic Safety Controller



FilterStat™ Application Validation System

Silconazyne™ Bonded Filtration

TriAnalyze 3x3™ Multi-Method Gas Detection

Reduced Carbon Footprint

Reduced Energy Use

Reduce your carbon footprint.

The average traditional "total exhaust" fume hood consumes 3.5 times the energy of an average U.S. household. Through its ductless recirculating design, automatic variable airflow control and unique energy conservation mode, Independence™ eliminates this energy waste. Gone is the cycle of exhausting conditioned room air while an energy-draining, over-built HVAC system supplies conditioned 'make-up air' to the same room.

Independence™ has the physical design elements of a traditional fume hood with Silconazyne™ filtration that is approved for most common chemical applications.

Go ductless with AirClean®.

Construction Features:

- Ductless design for significantly reduced installation costs
- Polypropylene construction eliminates potential for rust
- High-performance curved air entry
- Removable flame-retardant base positioned above integral spill basin
- AirZone™ baffling promotes even airflow pattern and provides exceptional capture capability
- Dual wall construction for service and fixture placement
- Motorized safety glass sash
- Hinged front panel for simple filter access and replacement
- Designed, tested and manufactured in the USA

AirClean® Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

ASHRAE110 TESTED

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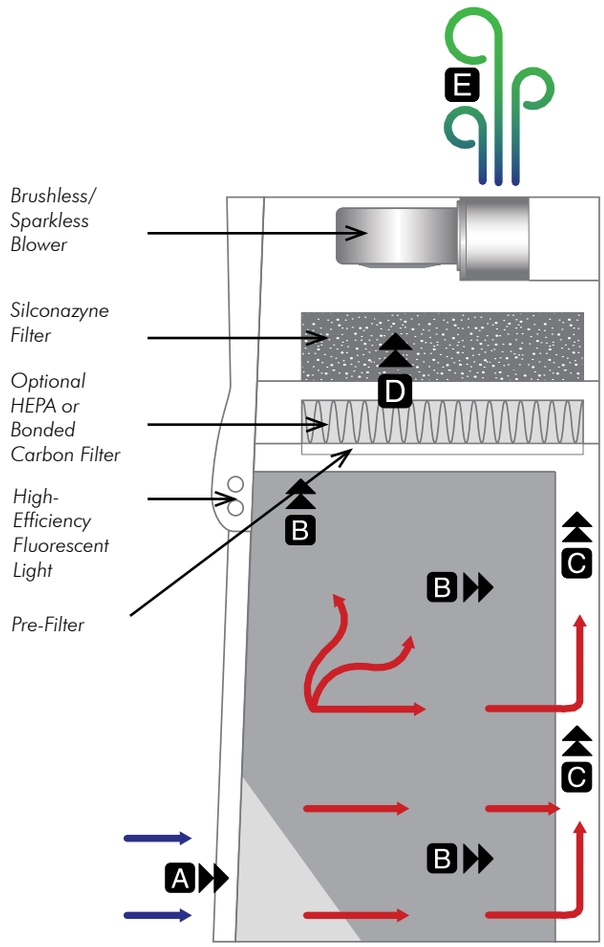
How the Independence ductless fume hood works:

1. Room air flows away from the operator and enters the enclosure in a horizontal pattern at "A".
2. Room air mixes with both lighter and heavier gases at "B" before being drawn into the AirZone baffling at "C".
3. Contaminated air is directed through the filtration bed at "D".
4. Clean air is recirculated into the room at "E".



INDEPENDENCE FUME HOOD DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACRJ4030	50″	30″	60″	39″	22″	35″
ACRJ4036	50″	36″	60″	39″	28″	35″
ACRJ6030	72″	30″	60″	61″	22″	35″
ACRJ6036	72″	36″	60″	61″	28″	35″

Polypropylene Free-Standing Ductless Enclosure

Extra vertical height from a proven ductless filtration platform

AirClean® Systems E-Series polypropylene free-standing ductless enclosures are designed to accommodate applications that require additional vertical height. Typically floor mounted, each free-standing enclosure features an upper folding sash combined with lower access doors, providing easy ergonomic access during manipulation. Full access design allows equipment to be easily inserted or removed from the enclosure, making the E-Series perfect for use with mixers, mills, grinders, reactors or other tall equipment.

AC6000E Free-Standing Ductless Enclosure

Features:

- AirSafe™ automatic safety controller
- Seamless polypropylene construction for excellent chemical resistance. The result: NO RUST
- Wide range of bonded activated carbon and HEPA filters for containment of virtually any toxic vapor, fume, gas or particulate
- No ductwork or installation required. All AirClean Systems hoods are shipped fully assembled and arrive ready to use
- Integral vapor-proof fluorescent light
- Filter stacking options for a variety of applications
- Available in 110V or 220V AC

Typical Applications:

- Testing and sifting of bulk powders
- Filling applications — large containers
- Large-scale chemistry setups
- Enclosing tall pieces of equipment

Hoods, workstations and enclosures are shipped fully assembled

AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

POLYPROPYLENE FREE-STANDING DUCTLESS ENCLOSURE						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC3000E	36″	32″	79″	35″	30″	60″
AC4000E	48″	32″	79″	47″	30″	60″
AC5000E	60″	32″	79″	59″	30″	60″
AC6000E	72″	32″	79″	71″	30″	60″

Walk-In Free-Standing Ductless Enclosure

Up to 272 cubic feet of fume, vapor and particulate containment

AirClean® Systems polypropylene walk-in enclosures are an effective containment solution for fumes or particulate released from equipment during manipulation or bulk handling applications. A variety of enclosure widths, depths and sash options maximize operator access without compromising safety.

AC8000WI Walk-In Free-Standing Ductless Enclosure

Features:

- Multiple depth options
- AirSafe™ automatic safety controller
- Polypropylene construction — seamless design
- Bonded carbon and HEPA filter stacking options for a variety of applications
- Vapor-proof fluorescent light
- No ductwork required
- Available in 110V or 220V AC

Options:

- Larger pass-through access ports
- Slotted rear wall for horizontal airflow patterns
- Customization of standard design to accommodate equipment or workplace layout

Typical Applications:

- Enclosing large equipment while retaining full operator access
- Bulk chemical mixing and weighing

AC10000WI shown with custom built-in countertop

WALK-IN FREE-STANDING DUCTLESS ENCLOSURE						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth Options	Height	Width	Depth Options	Height
AC6000WI	72″	3′, 4′, 5′	96″	71″	28″, 40″, 52″	74″
AC8000WI	96″	3′, 4′, 5′	96″	95″	28″, 40″, 52″	74″
AC10000WI	120″	3′, 4′, 5′	96″	119″	28″, 40″, 52″	76″

**Walk-In enclosure may vary in dimensions depending on final design per customer need assessment.*

Process Protection

Vertical Laminar Flow Workstation

Compact and portable ISO 5 airflow

AirClean® Systems AC600 Series vertical laminar flow workstations are ideal for non-hazardous applications that require a clean work area. These compact, lightweight workstations provide positive-pressure, ISO 5 air throughout the chamber and sash opening, thus keeping airborne particulate away from sensitive applications. Given the small footprint and ease of installation (simply plug in the power cord), the AC600 Series vertical laminar flow workstations are an excellent choice for mobile 'clean zones' within your facility.

AC632LFC with UVTect microprocessor controller

UVTect controller features:

- HEPA filter monitoring with audible/visible filter change alarms
- One-touch feature control
- Lab event timer
- Standard on all process protection products 32″ and larger

Features:

- UVTect™ microprocessor controller
- ISO 5 vertical laminar flow air
- 360-degree visibility
- Integral polypropylene base for easy cleaning
- All thermoplastic construction
- Built-in fluorescent light
- Pass-through port
- HEPA filter monitor automatically indicates when filter change is required
- Available in 110V or 220V AC (32″ & 48″ only)

Options:

- Sturdy cart for mobility
- Metal-free polypropylene construction available
- ULPA filter
- IV bar

Typical Applications:

- Media plate pouring
- Non-hazardous cell culture
- Optics cleaning
- Plant tissue culture
- Trace metal analysis
- Component testing and assembly
- Sterile compounding — IV mixing

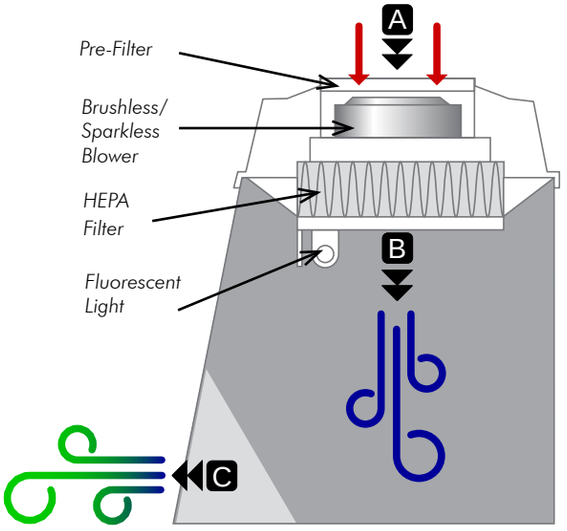
AC600 Series Vertical Laminar Flow Workstation design meets or exceeds ISO 5 cleanroom requirements

AC648LFC with UVTect™ microprocessor controller

AC632LFC shown with optional metal-free polypropylene construction

How the vertical laminar flow workstation works:

1. Room air enters at "A" where it is cleaned via electrostatic pre-filtration.
2. Air then moves through the HEPA filter.
3. Clean vertical laminar flow air enters the chamber at "B" and exits at "C".



Hoods, workstations and enclosures are shipped fully assembled

UL, CSA and CE COMPLIANT

VERTICAL LAMINAR FLOW WORKSTATION DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
*AC624LF	24″	24″	30″	23″	23″	18″
AC632LFC	32″	24″	30″	31″	23″	18″
AC632TLFC	32″	24″	39″	31″	23″	27″
AC648LFC	48″	24″	32″	47″	23″	18″
AC648TLFC	48″	24″	40″	47″	23″	29″

**AC624LF not available with UVTect™ microprocessor controller*

Polypropylene Horizontal Laminar Flow Clean Bench

Clean ISO 5 air for a variety of applications

Constructed from all white seamless polypropylene, AirClean® Systems horizontal laminar flow clean benches are the ideal solution for ISO 5 (Class 100) applications. Standard on all horizontal laminar flow workbenches, the UVTect™ controller constantly monitors filter conditions, alerting the operator of insufficient airflow.

AC5000HLF Single-Wall Clean Bench shown

- Constantly monitors workstation effectiveness, alerting the operator if HEPA filter(s) need replacing
- Allows the operator to manually adjust airflow speed, accommodating the most fragile samples or delicate applications

AirClean Systems horizontal laminar flow clean benches are offered in two structural configurations; single-wall and dual-wall.

The single-wall configuration offers the end user maximum work space while maintaining ISO 5 conditions within the cabinet. The entire rear wall of the clean bench is a HEPA filter that pushes clean air from the rear of the cabinet to the front opening.

The dual-wall configuration allows fixtures and services to be added. The dual-wall design, as pictured on page 39, can have electrical outlets, gas, water or air fixtures installed. Both single-wall and dual-wall horizontal clean benches can be fitted with a polypropylene cup sink.

Features:

- Single-wall design
- UVTect microprocessor controller
- NO RUST — all polypropylene construction
- Seamless, smooth construction minimizes air turbulence
- Built-in fluorescent lighting
- All-white polypropylene — surfaces are easy to clean
- Available in 110V or 220V AC

Options:

- Custom sturdy cart or stand
- Electrical cord access port
- Polyproylene cupsink

POLYPROPYLENE SINGLE WALL HORIZONTAL LAMINAR FLOW CLEAN BENCH DIMENSIONS						
AC4000HLFSW	48″	30″	37″	47″	18″	27″
AC5000HLFSW	60″	30″	37″	59″	18″	27″
AC6000HLFSW	72″	30″	37″	71″	18″	27″
AC8000HLFSW	96″	30″	37″	95″	18″	27″

AC5000HLF Dual-Wall Clean Bench shown

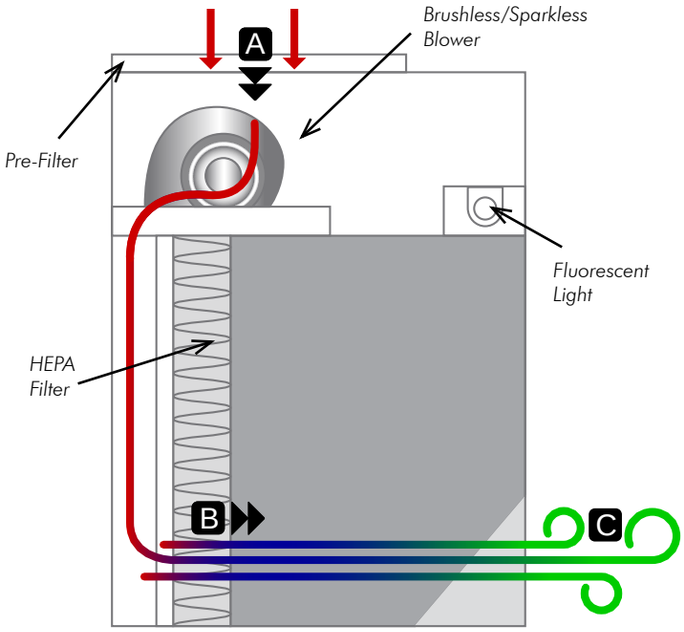
Applications that require an ISO 5 environment, such as parts inspection or optics assembly, are typical uses for the AirClean Systems horizontal laminar flow clean bench. These products are constructed from polypropylene and feature rear-wall filtration, making it perfect for these and other critical applications and manipulations.

Typical Applications:

- IV admixture preparation
- Drug Compounding
- Plant Cell Culture
- Tissue Culture (non-biological)
- Media Preparation
- Pharmaceutical procedures
- Electronic assembly

How the polypropylene horizontal laminar flow clean bench works:

1. Room air enters at "A" where it is cleaned via electrostatic pre-filtration.
2. Air then moves to the rear of the bench and exits at "B" through a HEPA filter.
3. Ultra-clean, ISO 5 air exits the workstation at "C".



Hoods, workstations and enclosures are shipped fully assembled

UL and CSA COMPLIANT

POLYPROPYLENE DUAL WALL HORIZONTAL LAMINAR FLOW CLEAN BENCH DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC4000HLF	48″	30″	37″	41″	18″	27″
AC5000HLF	60″	30″	37″	53″	18″	27″
AC6000HLF	72″	30″	37″	65″	18″	27″
AC8000HLF	96″	30″	37″	89″	18″	27″

Polypropylene Vertical Laminar Flow Enclosure

Extra height and depth for large applications

Constructed from all white seamless polypropylene, AirClean® Systems vertical laminar flow enclosures are the ideal solution for applications that require clean HEPA filter environments. Standard on all vertical laminar flow enclosures, the UVTect™ controller constantly monitors filter conditions, alerting the operator of insufficient airflow.

The HEPA-filtered polypropylene vertical laminar flow enclosures provide extra workspace height and depth, with a variety of sash options to match your application.

AC8036VLF Polypropylene Vertical Laminar Flow Enclosure on optional stand

Features:

- UVTect microprocessor controller
- Vertical laminar airflow
- Larger workspace to accommodate equipment
- Retracting front sash frame for full chamber access
- Solid polypropylene construction
- Fluorescent lighting

Options:

- Multiple sash or door configurations available
- Custom access ports for routine equipment maintenance
- Shortwave ultraviolet light
- Metal-free interior
- ULPA filters
- IV bar
- Sturdy metal stand
- Polyproylene base cabinet

Typical Applications:

- Robotic handling equipment
- IV drug preparation
- Liquid filling equipment
- Optical assembly

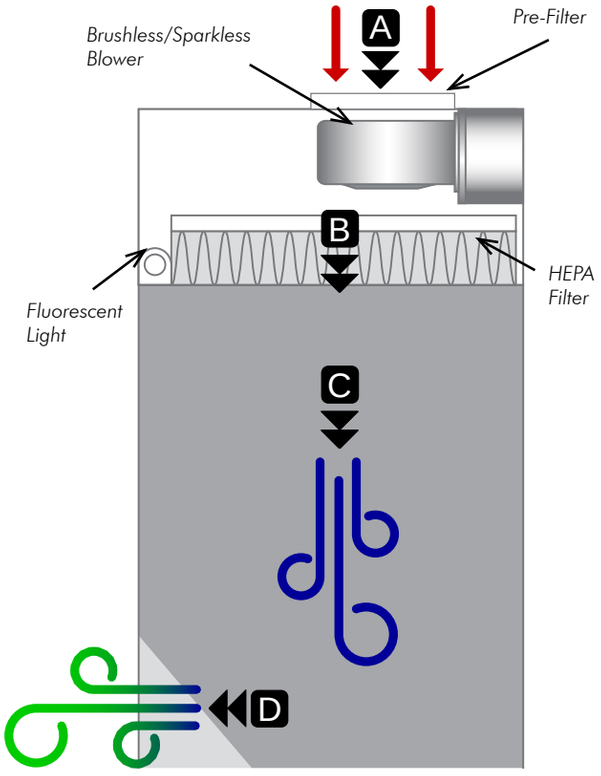
- Constantly monitors workstation effectiveness, alerting the operator if HEPA filter(s) need replacing
- Allows the operator to manually adjust airflow speed, accommodating the most fragile samples or delicate applications

AirClean® Systems vertical laminar flow enclosures offer a high degree of localized control for aseptic processes and handling sterile products. The interior and exterior of the enclosure is constructed from polypropylene. AirClean® Systems incorporates the highest quality construction standards and materials to ensure each laminar flow enclosure will be suitable for any critical environment, including cleanrooms.

How the polypropylene vertical laminar flow enclosure works:

1. Room air enters at "A" where it is cleaned via electrostatic pre-filtration.
2. Air then moves downward through the HEPA filter at "B".
3. Clean air moves vertically through the chamber at "C" before exiting at "D".

AC6036VLF Polypropylene Vertical Laminar Flow Enclosure



A full-access retracting front sash, pictured above, provides an easy means for loading or unloading equipment.

Designed with horizontal sliding doors that provide complete access over the linear range of the enclosure, these access points allow the user to easily manage any equipment or operation and help maintain the HEPA clean environment within the enclosure.

POLYPROPYLENE VERTICAL LAMINAR FLOW ENCLOSURE DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC4036VLF	48″	36″	66″	47″	33″	47.5″
AC6036VLF	72″	36″	66″	71″	33″	47.5″
AC8036VLF	96″	36″	66″	95″	33″	47.5″

Powder Containment

PowderSafe™ Type A Enclosure

The compact, mobile solution for powder containment

PowderSafe Type A enclosures provide a safe and effective weighing environment for toxic compounds and/or liquid chemicals. Engineered specifically for balances, PowderSafe Type A enclosures protect the operator by capturing particulate in HEPA filtration without sacrificing balance stability. These compact, ductless enclosures are factory leak tested, certified and shipped fully assembled for simple installation on any countertop.

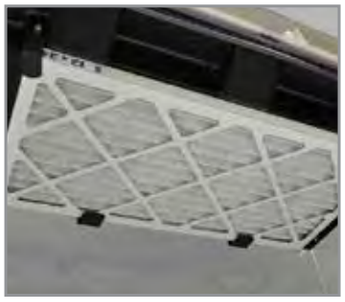
AC710C 32″ wide PowderSafe Type A ductless balance enclosure

Features:

- AirSafe™ automatic safety controller
- Audible/visible filter and airflow alarms
- Portable HEPA filtration — NO DUCTWORK REQUIRED
- SafeChange™ technology for pre-filter changeout
- Electrical cord access ports
- Solid 3/8″ polypropylene base
- Tested with 3- and 4-place balances
- Leak tested and certified before shipment
- Quiet operation < 49dB
- 360° visibility
- Compact ergonomic design takes up less space than similar enclosures
- Electrostatically charged pre-filter prevents 'particle rain'
- Available in 110V and 220V AC

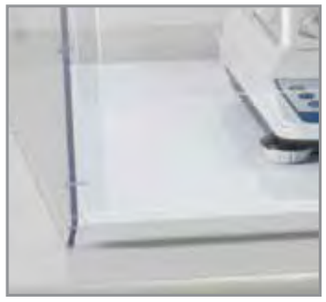
Options:

- Carbon filtration for liquid chemicals
- Contrasting base color
- Waste port for weighing vessels
- Mobile cart with locking casters



SafeChange technology allows the pre-filter to be bagged-out while the enclosure is running

Real-time face velocity read-out with precise airflow control and monitoring



Solid 3/8″ polypropylene base

Electrical and utility cord access port

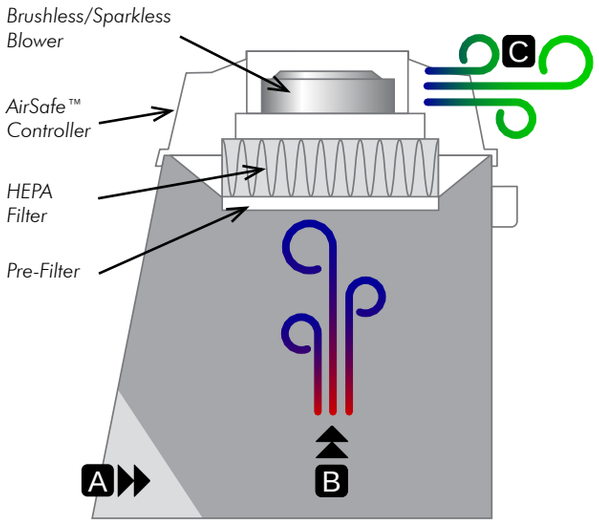
AC720C 48" wide PowderSafe Type A ductless balance enclosure

AirSafe™ automatic safety controller constantly monitors airflow velocity and filter conditions. The operator can set a desired face velocity, minimizing balance disturbance.

- Constant airflow monitoring
- Variable airflow volume
- Constant filter monitoring
- Audible and visible alarms

How the PowderSafe™ Type A enclosure works:

1. Turbulence-free laminar flow room air enters enclosure at "A".
2. Air moves evenly through enclosure at "B" while capturing any particulate.
3. Clean air is exhausted at "C" after passing through pre-filtration and HEPA filtration.



Hoods, workstations and enclosures are shipped fully assembled

AirClean® Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

UL, CSA and CE COMPLIANT

POWDERSAFE TYPE A ENCLOSURE DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC705*	24″	24″	30″	23″	23″	19″
AC710C	32″	24″	30″	31″	23″	19″
AC710CT	32″	24″	40″	31″	23″	26″
AC710CTS	32″	25″	40″	31″	23″	29″
AC720C	48″	24″	30″	47″	23″	19″
AC720CT	48″	24″	41″	47″	23″	26″
AC720CTS	48″	25″	41″	47″	23″	29″

**AC705 not available with AirSafe controller*

PowderSafe™ Type B Enclosure

Effectively weigh powders to seven decimal places

Seamless polypropylene construction provides the mass and vibration resistance crucial for accurate powder weighing, while the AirSafe™ automatic safety controller monitors airflow and filter conditions. The full rear-wall HEPA filtration zone moves powders and particulate away from the operator in a smooth horizontal laminar pattern. HEPASafe™ technology allows filters to be safely and easily bagged-out under negative pressure.

AC740C 48" PowderSafe Type B ductless balance enclosure

Features:

- Variable airflow volume with AirSafe
- Continuous HEPA filter monitoring
- High mass – thermally welded solid polypropylene construction
- Effectively weigh to 7 decimal places
- Seamless construction is easy to clean
- Real-time airflow display on LCD
- Audible and visible airflow and filter alarms
- Permanent backup HEPA filter
- Fluorescent light – one touch operation
- Portable; no installation cost
- Electrical cord access ports
- Available in 110V and 220V AC

Options:

- Contrasting base color
- Waste port for weighing vessels

USP 800 COMPLIANT

HEPASafe technology allows the operator to safely and easily change both the pre-filter and the primary HEPA filter while the enclosure is operational

Real-time face velocity read-out with precise airflow control and monitoring

Air foil provides even air distribution throughout enclosure, preventing turbulence

Electrical and utility cord access port

AC730C 32″ PowderSafe Type B ductless balance enclosure

HEPASafe™

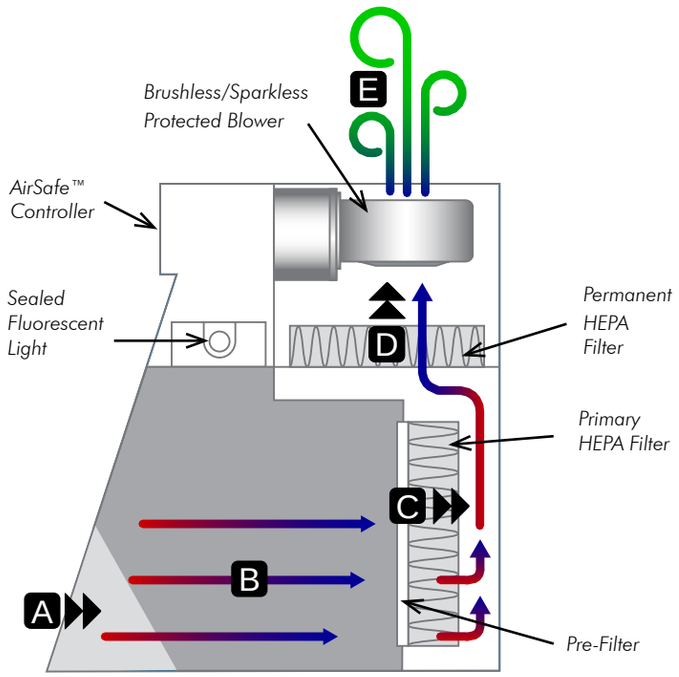
AirClean® Systems PowderSafe Type B enclosures utilize HEPASafe™ filter change-out, allowing the operator to safely and easily bag-out contaminated filters under negative pressure. The heart of this system is a secondary, permanent HEPA filter that protects the operator during primary HEPA filter change-out. If the primary HEPA filter should ever become compromised, this secondary filter also serves as a backup safety filter.

SafeBridge® CONSULTANTS, INC.

PowderSafe Type B has been independently tested and verified for operator protection by SafeBridge ® Consultants, Inc.

How the PowderSafe™ Type B enclosure works:

1. Turbulence-free air enters at "A" and is drawn in an even horizontal laminar fashion toward the rear plenum of the enclosure while being mixed with contaminated air at "B".
2. At "C" the contaminated air first enters a pre-filter before entering the primary HEPA filter.
3. Air cleaned by the primary HEPA filter enters the permanent safety HEPA filter at "D".
4. Clean air is returned to the room at "E".



AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

UL and CSA COMPLIANT

POWDERSAFE TYPE B ENCLOSURE DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC730C	32″	30″	33″	31″	21″	18″
AC740C	48″	30″	33″	47″	21″	18″

PowderSafe™ Type C Enclosure

A universal enclosure built with the application and operator in mind

AirClean® Systems Type C PowderSafe ductless balance enclosures incorporate the airflow dynamics and HEPASafe™ features of the PowderSafe Type B with the user-friendly features and chemical fume containment capabilities of an AirClean Systems ductless fume hood. Thermally-fused polypropylene construction makes the PowderSafe Type C enclosure perfect for weighing powders or solvents.

AC760C PowderSafe Type C shown with optional stand

Features:

- AirSafe™ automatic safety controller
- Horizontal laminar airflow pattern
- Chemically impervious construction
- HEPASafe filter change-out
- High mass — solid polypropylene construction
- Vapor-proof fluorescent light
- Ductless — no installation required
- Available in 110V and 220V AC

Options:

- Bonded carbon multipurpose filtration
- Contrasting base color
- Stand with leveling feet
- Waste port for weighing vessel disposal

Typical Applications:

- Pharmaceutical compounding
- Powder weighing
- Package opening
- R&D of pharmaceutical compounds
- Animal surgery
- Soldering

ASHRAE110 TESTED

UL and CSA COMPLIANT

Rear wall filtration zone featuring HEPASafe filter change-out technology

Real-time monitoring of face velocity and filter condition via AirSafe

High mass polypropylene construction for balance stability

Electrical and utility cord access port

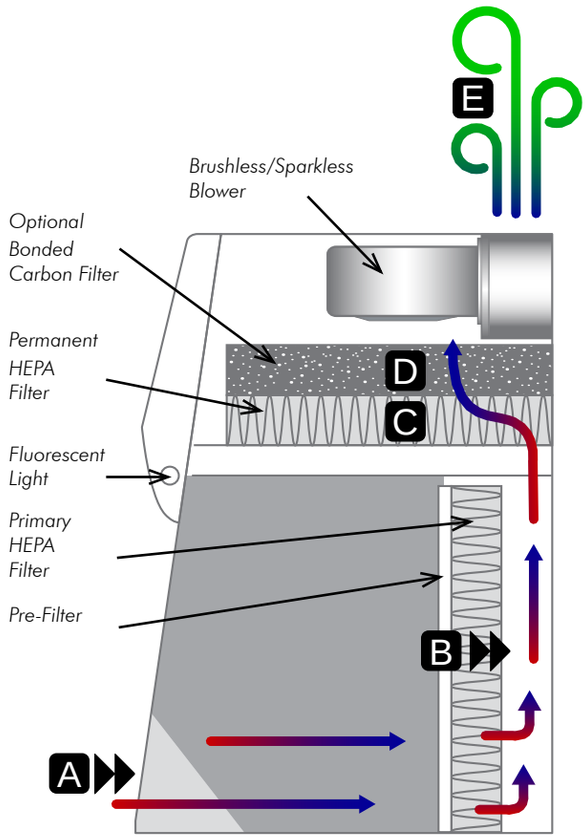
AC780C PowderSafe Type C with standard white base and disposal port. The disposal port minimizes operator exposure to residual powders left on used weighing vessels

AirSafe™ Automatic Safety Controller provides:

- Constant airflow monitoring
- Variable airflow volume
- Constant monitoring for both HEPA and optional carbon filters
- Audible and visible alarms

How the PowderSafe™ Type C enclosure works:

1. Air enters at "A" in an even horizontal laminar fashion.
2. Contaminated air enters "B" where particulate is removed via electrostatic pre-filtration and HEPA filtration.
3. Particulate free air moves upward to "C" where it enters the HEPASafe™ filtration area.
4. Particulate-free air then passes into "D", the optional bonded carbon filtration bed, where dangerous chemical fumes and vapors are removed.
5. Clean air is then exhausted at "E" for return to the laboratory.



USP 800 COMPLIANT

POWDERSAFE TYPE C ENCLOSURE DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC760C	36″	30″	44″	35″	22″	25″
AC765C	36″	30″	54″	35″	22″	35″
AC770C	48″	30″	44″	47″	22″	25″
AC775C	48″	30″	54″	47″	22″	35″
AC780C	72″	30″	44″	71″	22″	25″
AC785C	72″	30″	54″	71″	22″	35″

PowderSafe™ Bulk Handling Enclosure

Effective containment during bulk powder manipulations

When effective powder containment is needed during bulk manipulation, the PowderSafe Bulk Handling enclosure is an economical and space-saving alternative to larger walk-in enclosures. With a unique drum access port incorporated into the base of the enclosure, the drum can be raised and sealed to the access port, effectively extending the enclosure's containment area into the drum. Designed to provide a turbulence-free airflow environment, PowderSafe Bulk Handling enclosures move air in a horizontal pattern to maximize containment while minimizing sample loss and balance instability.

AC794BE PowderSafe Bulk Handling enclosure shown with stand and optional hydraulic lift

Standard Features:

- Dark blue base for ease of cleaning
- Disposal port for weighing vessels
- HEPASafe™ filter change-out
- AirSafe™ automatic safety controller
- Bulk container access port cover
- Available in 36", 48", and 72" widths
- Vapor-proof fluorescent light
- No installation required
- White epoxy coated stand with leveling feet
- Available in 110V and 220V AC

Options:

- Gas phase carbon filtration
- Hydraulic lift

Typical Applications:

- Pharmaceutical compounding
- Bulk packaging
- Powder weighing
- Package opening
- Food science

ASHRAE110 TESTED

UL and CSA COMPLIANT

USP 800 COMPLIANT

AirClean® Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

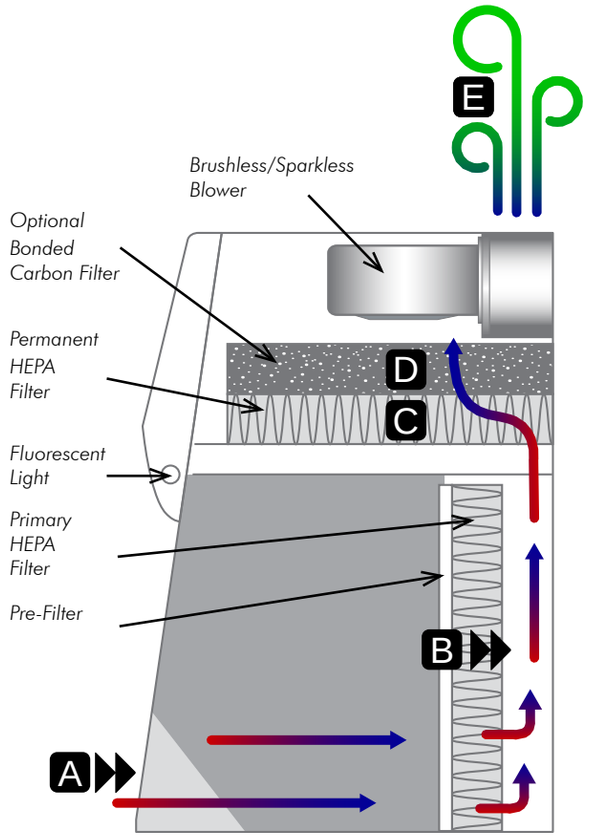
AC794BE PowderSafe Bulk Handling enclosure in use

Bulk Container Access Port

Utilizing a unique access port and optional hydraulic lift, the bulk powder drum can be raised or lowered to a comfortable working height, depending on the volume of powder in the drum. When drum access is not needed, the included access port cover can be used to seal the base, allowing the work surface to be fully utilizational.

How the PowderSafe™ Bulk Handling enclosure works:

1. Air enters at "A" in an even horizontal laminar fashion.
2. Contaminated air enters "B" where particulate is removed via electrostatic pre-filtration and HEPA filtration.
3. Particulate-free air moves upward to "C" where it enters the HEPASafe™ filtration area.
4. Particulate-free air then passes into "D", the optional bonded carbon filtration bed, where dangerous chemical fumes and vapors are removed.
5. Clean air is then exhausted at "E" for return to the laboratory.



POWDERSAFE BULK HANDLING ENCLOSURE DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC794BE	48″	36″	54″	47″	29″	35″
AC795BE	60″	36″	54″	59″	29″	35″
AC796BE	72″	36″	54″	71″	29″	35″

**Once mounted on stand, overall height is 94″*

Application Solutions

PCR Workstation

Get results – not background

AirClean® Systems AC600 Series PCR Workstations combine ISO 5 HEPA-filtered air with UV light irradiation for the ultimate DNA/RNA manipulation and amplification work area. Cross-contamination during amplification of DNA and RNA can lead to results that are inaccurate, costing the lab technician valuable time and reagents. PCR Workstations minimize this risk by keeping airborne contaminants away from samples and irradiating work surfaces and tools between amplifications.

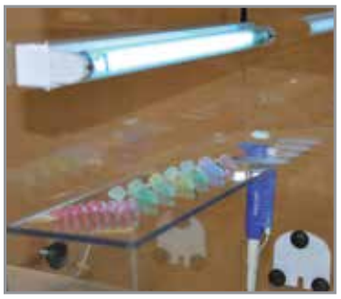
AC632LFUVC PCR Workstation

Features:

- UVTect™ microprocessor controller
- ISO 5 vertical laminar airflow
- UV and fluorescent lights
- Polycarbonate and polypropylene design reflects UV energy
- Seamless plastic design — no joints or gaps in construction
- UV shelf with built-in pipettor holder
- Digital UV light timer 1-59 minutes
- Constant monitoring of UV light and HEPA filter effectiveness
- Lab event timer
- Pass-through port
- Available in 110V AC or 220V AC

AirClean Systems laminar flow workstations and clean benches meet and exceed ISO 5 standards

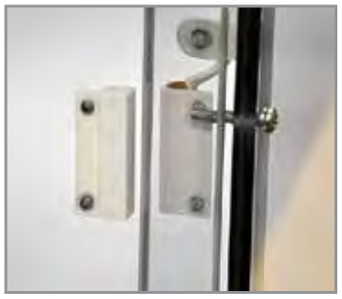
Unique Safety Features



UV light with UV shelf offers enhanced irradiation of supplies

Polypropylene base reflects ultraviolet energy and is easily cleaned

Unique interlocking sash with a safety overlap to prevent gaps in sash



Sash safety switch automatically turns off UV light and activates the blower when sash is raised

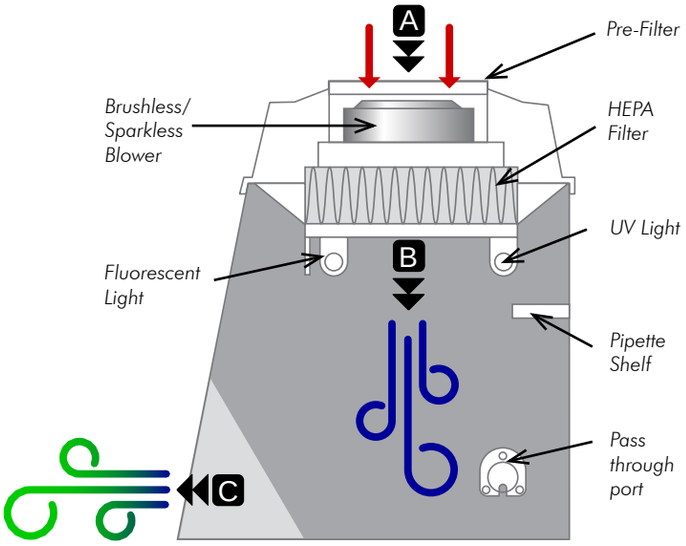
PCR is a registered trademark of Hoffman-LaRoche

AC632LFUVC PCR Workstation in use

- Standard feature on AirClean® Systems Combination PCR Workstations. (32" and 48" models)
- Constantly monitors workstation effectiveness, alerting the operator if HEPA filter(s) or UV bulb(s) need replacing
- Allows the operator to manually adjust airflow speed, accommodating the most fragile samples

How the PCR Workstation works:

1. Room air enters at "A" where it is cleaned via electrostatic pre-filtration.
2. Air then moves through the HEPA filter, capturing smaller particulate.
3. Clean vertical laminar flow air enters the chamber at "B" and exits at "C".
4. UV light sterilizes pipette tips, tubes, flasks and work surface.



Hoods, workstations and enclosures are shipped fully assembled

UL, CSA and CE COMPLIANT

PCR WORKSTATION DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC624LFUV	24"	24"	30"	23"	23"	18"
AC632LFUVC	32"	24"	30"	31"	23"	18"
AC632TLFUVC	32"	24"	39"	31"	23"	27"
AC648LFUVC	48"	24"	32"	47"	23"	18"
AC648TLFUVC	48"	24"	42"	47"	23"	29"

**AC624LFUV available in 110V only and not equipped with UVTect controller*

Dead Air Box

Circulation-free air for sample protection

AirClean® Systems dead air boxes provide a circulation-free environment for the amplification and manipulation of DNA/RNA. Each dead air box is standard with the UVTect Microprocessor controller and a 254nm ultraviolet light source for irradiation between amplifications. A safety interlock switch disables the UV light when the sash is raised, preventing operator exposure. Seamless design and UV-reflective construction materials further ensure no harmful UV energy escapes the enclosure.

AC648DBC dead air box in use

Hoods, workstations and enclosures are shipped fully assembled

Features:

- Polycarbonate and polypropylene design reflects UV energy
- Safety switch prevents exposure to harmful UV energy
- Full-access folding sash
- 1-59 minute digital timer
- Seamless plastic design — no joints or gaps in construction
- UV and fluorescent lights
- Pass through port
- Shipped fully assembled

Options:

- Cart with locking casters

UVTect controller included on 32"- and 48"- wide models

Enhanced Features:

- UV bulb monitoring
- UV timer 1-59 minute
- Lab event timer

UL, CSA and CE COMPLIANT

DEAD AIR BOX DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
*AC624DB	24″	24″	30″	23″	23″	21″
AC632DBC	32″	24″	30″	31″	23″	21″
AC648DBC	48″	24″	32″	47″	23″	23″

**AC624DB not equipped with UVTect controller*

MailSafe™ Ductless Class 1 Mail Handling Workstation

Guarding against exposure to biological agents

MailSafe workstations protect the user from airborne biological agents when opening envelopes and small packages. HEPA-filtered negative pressure airflow effectively contains unknown or suspicious substances that may be found during mail handling. MailSafe features polycarbonate and polypropylene construction, making it a lightweight, portable mail handling solution.

A technician opens mail inside the AC632MS MailSafe workstation

In the event that a suspicious substance is found, the operator simply closes the full-length sash. Blowers will automatically stop, and the enclosure acts as a barrier until hazmat professionals can assess the substance.

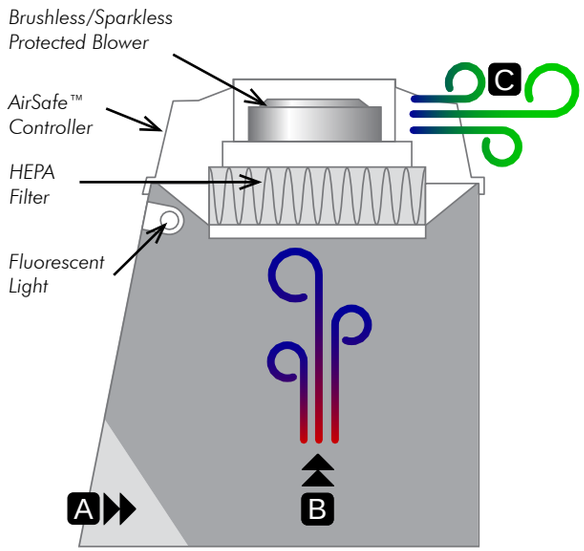
Options:

- Mobile cart or stand
- ULPA filter
- Solucide hard surface disinfectant

UL, CSA and CE COMPLIANT

Features:

- Ductless design for mobility and simple installation
- Leak-tested and factory-certified
- HEPA filtration for capture of particulate to 0.3 microns in size
- Automatic sash switch turns blowers off when sash is closed
- Mini-helic gauge monitors filter life, indicating when to change HEPA filter
- Internal 15W fluorescent light
- Lightweight and portable
- Available in 110V or 220V AC



How the MailSafe Class 1 mail handling workstation works:

1. Room air is drawn into the workstation at "A".
2. Air moves evenly through the workstation at "B" while capturing any harmful particulate (e.g. anthrax spores) in the HEPA filter.
3. Clean, HEPA-filtered air exits the workstation at "C".

MAILSAFE CLASS 1 MAIL HANDLING WORKSTATION DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632MS	32″	24″	30″	31″	23″	20″
AC648MS	48″	24″	30″	47″	23″	20″

TeachAide™ Classroom Demonstration Workstation

Student and teacher protection with 360° classroom engagement

AirClean® Systems TeachAide ductless classroom demonstration workstations are a safe, low-cost solution for protection of students, teachers and the environment during common chemistry experiments. Bonded carbon and HEPA filtration, sturdy thermoplastic construction and the AirSafe™ automatic safety controller assure protection from experiments generating toxic fumes, vapors, particulate or smoke. True 360° visibility promotes total classroom engagement.

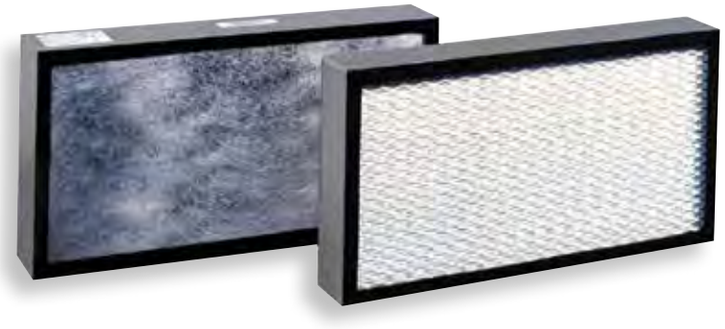
The ACTA32 is ideal for group presentations or lab set up

Standard Safety Features:

- AirSafe automatic safety controller displays and adjusts blower speed to maintain set face velocity
- AirSafe automatic safety controller constantly monitors bonded carbon and HEPA filter life
- Filtration and electronics are located above the work area eliminating the chance of chemical spills entering these sensitive areas
- Post-filter sparkless/brushless blower
- Built-in work surface with deep spill lip effectively contains accidental spills
- Audible and visible low airflow alarm

Options:

- Cart available in fixed 34" height (meets ADA requirements)
- Built-in polypropylene cup sink and drain
- Access panel for electrical cords
- Water and gas fixtures



Bonded Carbon and HEPA Filtration

TeachAide utilizes gas phase bonded carbon filters, providing effective containment of toxic vapors, gases, and fumes while minimizing exposure to hazardous carbon dust. Carbon is evenly distributed throughout the filter, maximizing capture potential and load capacity, compared to traditional granular carbon filters. A heavy-duty flame-retardant pre-filter and full-size HEPA filter capture particulate before air passes into the bonded carbon filtration bed.

AirSafe Features:

- One-touch control of all primary features
- Constant airflow monitoring and adjustment to preset velocity
- Constant monitoring of filter conditions
- Audible and visible alarms

ACTA32 is shown with optional mobile cart

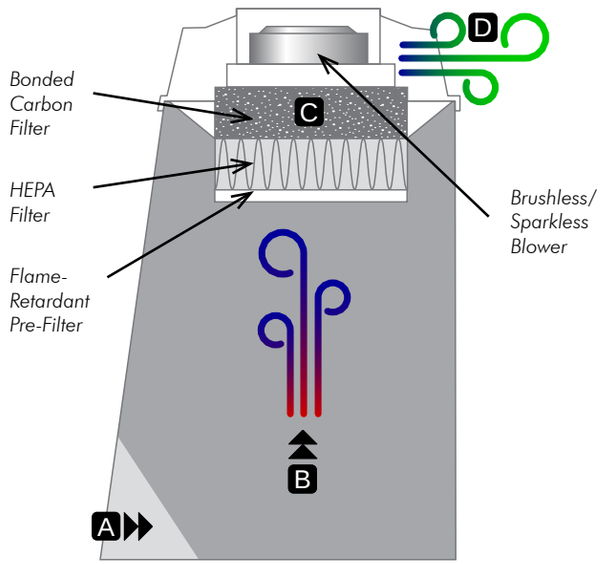
TeachAide meets or exceeds applicable OSHA and ANSI Z9.5 standards for ductless workstations

Typical Experiments Performed in TeachAide™:

- Burning of magnesium ribbon
- Production of smoke and ash
- Sugar/concentrated sulfuric acid reaction
- Production of iodine vapor
- Solubility tests using organic solvents
- Flame tests of metal salts

How the TeachAide classroom demonstration workstation works:

1. Room air enters at "A".
2. Air mixes with gases and vapors to be filtered at "B".
3. Contaminated air passes through filtration bed at "C". Filtration bed consists of flame-retardant pre-filter, HEPA filter and bonded carbon filter.
4. Filtered clean air exists workstation at "D".



All contact surfaces are constructed from UL94 V-0 materials

UL, CSA and CE COMPLIANT

TEACHAIDE CLASSROOM DEMONSTRATION WORKSTATION DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACTA32	32″	25″	40″	31″	23″	25″
ACTA48	48″	25″	40″	47″	23″	25″

Microscope Enclosure

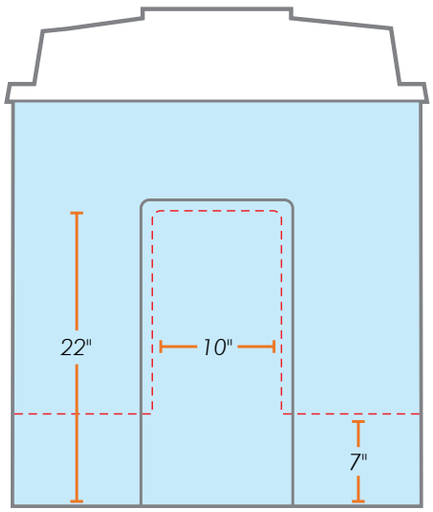
Operator or process protection for microscope applications

AirClean® Systems ductless microscope enclosures provide either an ISO 5 work environment for sample preparation or operator protection from exposure to particulates and gases. Each enclosure is designed to work with a wide range of microscopes. The microscope access port provides easy access to the eye piece and viewing platform.

AC632TLFUVMIC process protection microscope enclosure in use with optional cart

Features:

- Sash closure allows for maximum operator protection without compromising airflow
- Process protection workstations equipped with UV safety interlock
- Constructed from UV and chemical resistant materials
- Shipped fully assembled and ready for use
- Microprocessor controlled
- Audible and visible alarms
- Self-contained
- No installation required
- Bench-top design with optional cart or stand
- Pippette shelf optional



The specialized sash opening on each microscope enclosure provides ample room for microscope access

UL, CSA and CE COMPLIANT

ISO 5 LAMINAR FLOW ENCLOSURE

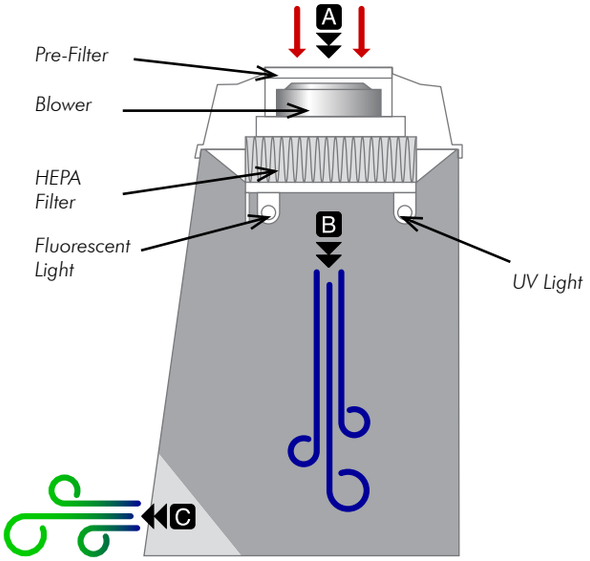
The downflow microscope enclosure provides a clean work environment and a UV light for irradiation between processes. UVTect™ microprocessor controller provides one-touch operation of all enclosure features. This configuration does not provide operator protection.

PROCESS PROTECTION MICROSCOPE ENCLOSURE						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632TLFUVCMIC	32″	24″	40″	31″	23″	28″
AC648TLFUVCMIC	48″	24″	42″	47″	23″	30″

AirClean® Systems laminar flow workstations and clean benches meet and exceed ISO 5 standards

How the laminar flow enclosure works:

1. Room air enters at "A" where it is cleaned via electrostatic pre-filtration.
2. Air then moves through the HEPA filter.
3. Clean vertical laminar flow air enters the chamber at "B" and exits at "C".



OPERATOR PROTECTION ENCLOSURE

The upflow microscope enclosure protects the operator from gases, fumes or particulate with bonded carbon or HEPA filtration. AirSafe™ automatic safety controller constantly monitors filter and airflow conditions and allows one-touch control of all enclosure features. This configuration does not provide process protection.

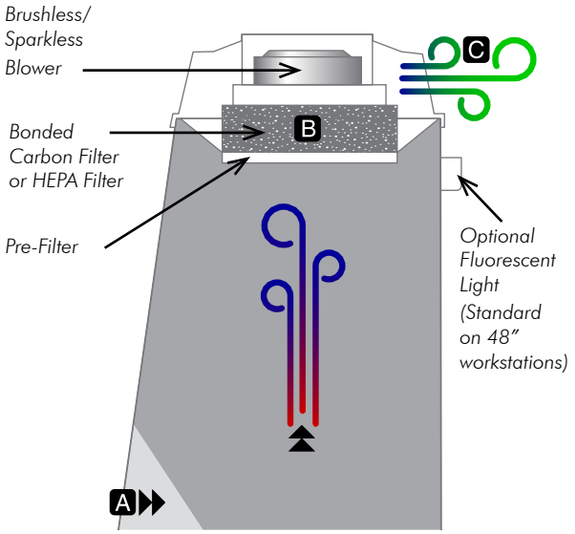
OPERATOR PROTECTION MICROSCOPE ENCLOSURE						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632TMIC	32″	25″	40″	31″	23″	29″
AC648TMIC	48″	25″	42″	47″	23″	29″

AirClean® Systems ductless hoods, workstations, and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

Hoods, workstations and enclosures are shipped fully assembled

How the operator protection microscope enclosure works:

1. Room air enters at "A".
2. Room air mixes with gases and particulate and is filtered at "B".
3. Filtered, clean air exits workstation at "C".



Robotic Safety Enclosure

Custom-fitted to your robotic equipment

AirClean® Systems robotic enclosures are designed to protect either the process or the operator from fumes, vapors, or particulate. A variety of sizes, construction materials and sash configurations are available to match your robotic apparatus. Operator protection enclosures utilize the AirSafe™ automatic safety controller technology. For enclosures designed to provide process protection only, the UVTect™ microprocessor controller is incorporated.

AirClean Systems enclosures provide containment of toxic chemical fumes and vapors

Features:

- Bench-top designs
- Microprocessor controller (AirSafe or UVTect)
- Self contained — no ductwork required
- Service port access
- Optional sturdy cart or stand
- Available in 110V or 220V AC

Robotic safety enclosures can be custom fitted to meet a variety of application challenges. AirClean® Systems has enclosed many leading manufacturer's robotic instruments. Below is a partial listing:

- Gilson®
- Hewlett Packard®
- Teledyne ISCO®
- Beckman Coulter®
- Tecan®
- Hamilton®
- Caliper®
- Genevac®

** The above companies registered trade names are provided for informational purposes only. Endorsement of these companies' products by AirClean Systems or their endorsement of AirClean Systems is neither given nor implied.*

Controller Options:

AirSafe automatic safety controller for operator protection enclosures

UVTect controller for process protection enclosures

AirSafe Features:

- Constant monitoring and adjustment of face velocity
- Electronic gas detection
- Audible and visible alarms

UVTect Features:

- Constant monitoring of HEPA/ULPA filter(s)
- UV light monitoring (if equipped)
- Audible and visible alarms

Rotary Evaporator Enclosure

Perfect for enclosing laboratory apparatus

AirClean® Systems rotary evaporator enclosures are engineered specifically for enclosing rotary evaporators, chromatography equipment and robotic equipment while allowing unrestricted access for operator interaction. The clear polycarbonate shell and horizontal sliding doors provide visibility and ergonomic access for monitoring the enclosed equipment. The AirSafe™ automatic safety controller maintains airflow and constantly monitors filter condition. At only 24 inches deep and 38 inches wide, this enclosure takes up very little counter space.

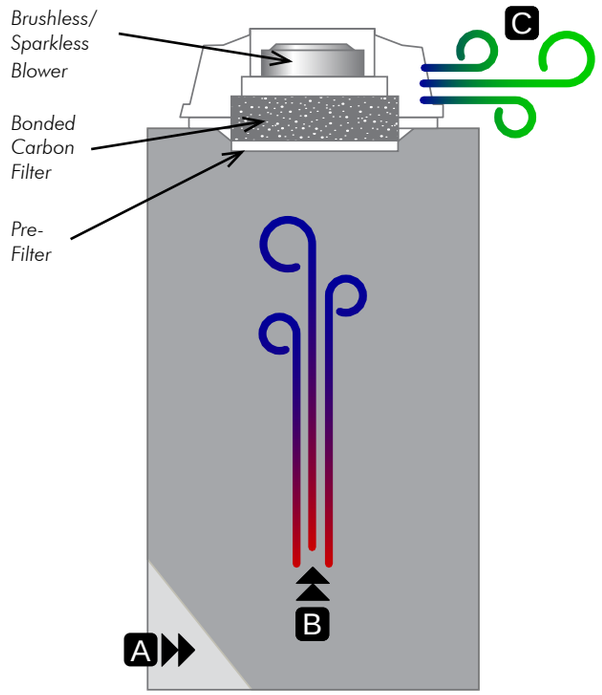
AC23824A rotary evaporator enclosure

Features:

- AirSafe automatic safety controller constantly monitors airflow and filter conditions
- Integral base with deep spill lip
- Quiet operation: < 49 dB
- Horizontal sliding access doors for equipment manipulation
- Airflow automatically increases when doors are opened, preventing fumes from escaping
- No ductwork required
- Space-saving design
- Safely encloses rotary evaporator, vacuum pump and waste bottle
- Dust-free bonded carbon filter

How the rotary evaporator enclosure works:

1. When enclosure doors are closed, room air enters the chamber through access slots at "A".
2. Air moves evenly through the chamber while pulling fumes into the bonded carbon filter at "B".
3. Clean air is recirculated into the room at "C".



ROTARY EVAPORATOR ENCLOSURE DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC23824A	38″	24″	48″	37″	21″	38″

Available in total exhaust configuration

Custom and Walk-In Laboratory Enclosures and Workstations

Work with our full service design engineering team

AirClean® Systems can design, build and deliver a custom solution for laboratories that require a particular size or configuration not commonly found in our standard hoods, enclosures and workstations.

Laboratories that work with a variety of applications, materials and environments have varying workstation and enclosure needs. Requirements, regulations and standards can vary from one institution to another and even between states and countries. Meeting the demands of a dynamic market place is what sets AirClean Systems apart from other ductless hood, workstation and enclosure manufactures. Our in-house engineering department will work closely with you to develop a product that meets both regulatory and operational requirements.

HEPA-filtered AC10000WI with custom built-in table and go/no-go light linked to customer-supplied chemical sensor

PowderSafe™ Type C balance enclosure with custom horizontal sliding sash panels

Custom bench-top metal-free recirculating enclosure for trace metal analysis

Examples of custom enclosures:

- Walk-In Fume Hood with modified access
- Bench-top Filtered Hoods
- Filtered Robotic Safety Enclosures
- Double-Faced Fume Hoods
- ADA Compliant Fume Hoods
- Perchloric Acid Fume Hoods
- Canopy Hoods
- Raw Sampling Receiving Enclosures
- Bench-top equipment enclosures
- Variable Air Volume Fume Hoods

Custom dual-wall AC3000 folding-sash ductless fume hood with lock-out sash to prevent unauthorized use

Forensic Containment

DrySafe™ Evidence Drying Cabinet

Protecting both the evidence and the operator

The AirClean® Systems DrySafe evidence drying cabinet provides protection for both the officer and the evidence. Pre-filtration removes particulate from the incoming "drying air", thus protecting vital evidence from cross-contamination. The HEPA and bonded carbon filters protect the officer from harmful bacteria, viruses and putrid odors associated with evidence drying.

ACEVD30A DrySafe Evidence Drying Cabinet

Features:

- Self-contained ductless design
- AirSafe™ automatic safety controller monitors bonded carbon and HEPA filters
- Airflow automatically increases when chamber door is opened, preventing particulate escape
- NO RUST: Seamless, thermally-fused polypropylene construction is corrosion resistant
- Exhaust air is HEPA-filtered to capture pathogens and other particulate to 99.997% efficiency at 0.3 microns
- Bonded carbon filtration captures putrid odors and other gases without the need for an after-filter
- Easily cleaned – no glues or resins inside the cabinet
- Automatic waste pump removes waste water up to 200 feet from cabinet
- Removable shelves and stainless steel drying rod
- Locking .375" Lexan® doors with safety clasps and tamper-resistant hardware
- Available in 110V and 220V AC

DrySafe evidence drying cabinets include the AirSafe automatic safety controller, which provides:

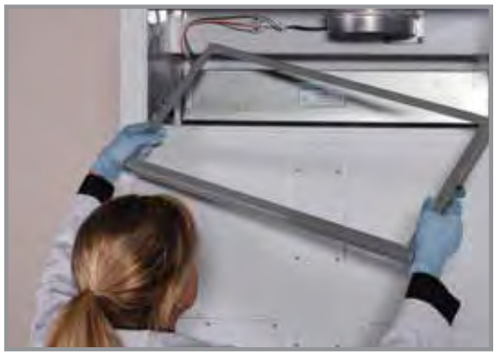
- Timing of evidence drying cycle
- Monitoring of main HEPA and carbon filter life
- Automatic waste pump control and timing
- Automatic "lockout" feature ensures use of correct filters
- User-preset blower speed (provides control of drying time)
- One-touch control of all cabinet features

UL and CSA COMPLIANT

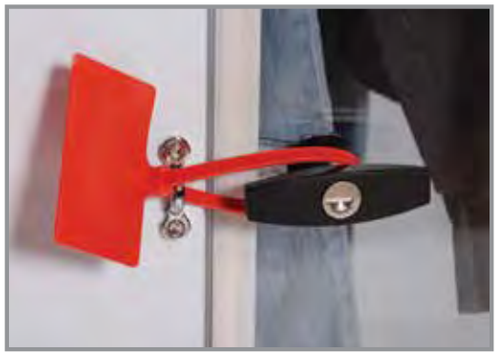
Lexan is a registered trademark of GE

Unique DrySafe™ Features:

AirSafe™ monitors filter life and controls airflow, waste pump and drying time



Main cabinet filters are easily accessed for quick filter change-out



Locking front door with safety hasp

Three removable polypropylene shelves for a variety of drying configurations

Cold water spray hose hookup

Automatic waste pump transfers waste water up to 200 feet from the cabinet

AirClean® Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards.

DRYSAFE EVIDENCE DRYING CABINET DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACEVD30A	30″	26″	84″	29″	24″	60″
ACEVD36A	36″	26″	84″	35″	24″	60″
ACEVD48A	48″	26″	84″	47″	24″	60″
ACEVD60A	60″	26″	84″	29″*	24″	60″
ACEVD60AS	60″	26″	84″	58″	24″	60″
ACEVD72A	72″	26″	84″	35″*	24″	60″
ACEVD72AS	72″	26″	84″	70″	24″	60″
ACEVD96A	96″	26″	84″	47″*	24″	60″
ACEVD96AS	96″	26″	84″	94″	24″	60″

**Dual chamber unit, single chamber dimension*

CyanoSafe™ Filtered Cyanoacrylate Fuming Chamber

Safe and automated latent fingerprint development

The CyanoSafe filtered cyanoacrylate fuming chamber is designed to safely and effectively process evidentiary items using the cyanoacrylate fuming method. It provides a controlled environment for processing latent fingerprints on most nonporous surfaces, while eliminating exposure to hazardous cyanoacrylate fumes. CyanoSafe utilizes solid-state heating elements that accelerate cyanoacrylate polymerization while providing proper humidity levels inside the chamber. AirSafe™ Cyano automatic safety controller incorporates user-friendly controls to manage all functions of the chamber.

CAS48 CyanoSafe fuming chamber

Features:

- AirSafe Cyano safety controller automates processing and monitors filters
- Polypropylene construction for easy cleaning
- Chamber door automatically locks during processing to prevent accidental cyanoacrylate exposure
- Cyanoacrylate accelerator with automatic temperature shut-off
- Automated processing time of up to 59 minutes
- Recirculation fans assure even distribution of cyanoacrylate fumes and humidity
- Vapor-proof fluorescent light
- Gas sensor
- Hanging rods and clips
- Control clip provided for hanging test print card
- Audible and visible filter breakthrough alarms
- Available in 110V or 220V AC
- Brushless, sparkless motor

CyanoSafe is shipped fully assembled

UL and CSA COMPLIANT

Safe and simple processing with AirSafe Cyano:

1) Place cyanoacrylate and water in the individual heating tray
2) Close door and press 'Process'
3) Select process time and press 'Process" to begin
4) Chamber auto-locks and automated processing begins
5) Wait for timed processing to end or press 'Purge' once desired results are obtained

CyanoSafe™ Features:

CAS30T pictured

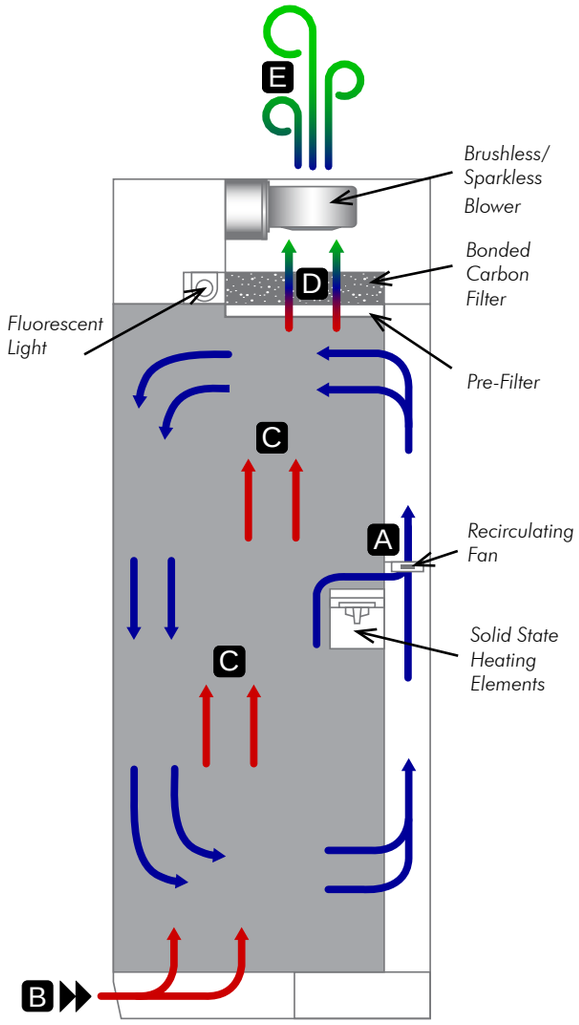
Auto-lock chamber door remains locked until fumes have been evacuated

Solid-state heating elements provide cyanoacrylate vapor acceleration and humidity

AirSafe™ Cyano automatic safety controller monitors all functions of the cabinet including humidity levels, filter conditions and airflow

How the CyanoSafe fuming chamber works:

1. Once automated processing begins, cyanoacrylate and water vapor are pulled into the rear baffle at "A" and circulated throughout the enclosure.
2. At cycle end, room air is pulled into the enclosure at "B", where it moves through the chamber at "C".
3. Cyanoacrylate fumes are captured in the bonded carbon filter at "D".
4. Clean air is recirculated into the room at "E".



CYANOSAFE FUMING CHAMBER DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
CAS30	30″	30″	54″	29″	25″	36″
CAS30T	30″	30″	82″	29″	25″	64″
CAS48	48″	30″	54″	47″	25″	36″
CAS48T	48″	30″	82″	47″	25″	64″
CAS60T	60″	30″	82″	59″	25″	64″
CAS72T	72″	30″	82″	71″	25″	64″

Mini DrySafe™

Evidence drying for mobile labs

The Mini DrySafe drying cabinet protects evidence from airborne cross-contamination while minimizing personnel exposure. The cabinet is configured to clean the incoming "drying" air though pre-filtration and then filter the cabinet exhaust air through a combination of bonded carbon and HEPA filtration.

Features:

- Small size for portability – only 24″ wide
- Polypropylene construction for easy cleaning
- Incoming "drying" air is filtered to remove airborne contaminants
- Stainless steel drying rod and removable shelf
- Chemisorptive bonded carbon filter
- Vapor-proof fluorescent light

MINI DRYSAFE DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACEVD24	24″	23″	30″	23″	22″	19″

ACEVD24 Mini DrySafe

Mini CyanoSafe™

Process fingerprints quickly and effectively

The Mini CyanoSafe is designed to safely and effectively process evidentiary items using the cyanoacrylate fuming method. It provides a controlled environment for the processing of latent fingerprints on most non-porous surfaces while eliminating exposure to hazardous cyanoacrylate fumes. Solid-state heating elements accelerate cyanoacrylate polymerization while providing proper humidity levels inside the chamber.

Features:

- Small size for portability – only 24″ wide and 18″ deep
- Bonded carbon filter
- AirSafe Cyano automatic safety controller
- Automated processing cycle
- Hanging rods and clips for evidence
- Vapor-proof fluorescent light

MINI CYANOSAFE DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
CAS24	24″	18″	32″	23″	16″	16″

CAS24 Mini CyanoSafe

Downdraft Latent Print Dusting Station

Eliminate inhalation risk from fingerprint powders

AirClean® Systems downdraft latent print dusting station is the ideal solution for particulate containment during latent fingerprint dusting. Multi-directional negative pressure airflow pulls powders into both the base and rear wall of the dusting station, ultimately capturing excess particulate in HEPA filtration. The dual-zone filtration keeps potentially dangerous powders out of the operator's breathing zone, while allowing full access to the work space.

ACDDS36 downdraft dusting station

Features:

- Multi-directional negative pressure airflow pulls powders away from the operator's breathing zone
- HEPA filtration with 99.997% efficiency at 0.3 microns capture errant powders
- High velocity rear-wall airflow slots draw lighter weight particulate to the rear of the workstation
- Perforated stainless steel work surface provides constant downward airflow to trap heavier particulate
- HEPA filtration monitoring with filter replacement warning light
- Stainless steel work surface is removable for easy cleaning
- Seamless polypropylene construction
- Low profile design fits on a standard countertop or beneath storage cabinets

With its 17.5" height and 24" depth, the downdraft dusting station fits perfectly on any counter top and underneath typical cabinetry. The low profile design can be placed anywhere in the law enforcement setting and is light enough to be carried to the crime scene for on-site processing.

Low-profile design fits easily on counter-tops and under cabinets

DOWNDRAFT DUSTING STATION DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
ACDDS24	24"	24"	17.5"	23"	15"	14"
ACDDS36	36"	24"	17.5"	35"	15"	14"
ACDDS48	48"	24"	17.5"	47"	15"	14"

AC600 Series Forensic Workstation

Multi-purpose portable operator protection

The AC600 Series forensic workstations are compact, ductless solutions for capturing fumes and particulate during routine forensic analysis. This lightweight model is constructed from durable materials specifically chosen for use in typical forensic applications. The clear shell is constructed from 1/4" polycarbonate with a hinged front sash. The AC600 Series workstations are ideal for low volume applications like latent print development with Ninhydrin, drug qualification, and examination of potentially harmful or toxic evidentiary exhibits.

AC632A shown with optional cart

These forensic workstations are equipped with AirClean® Systems industry leading AirSafe™ automatic safety controller. The AirSafe controller is the same technology used on many of AirClean Systems laboratory fume hoods. The controller package automatically adjusts the airflow, as required, to maintain a safe face velocity. The installed filter is constantly monitored electronically with AirSafe. Through either an electronic gas detector or differential pressure switch, AirSafe monitors and alarms, audibly and visually, when the filter requires change out.

Features:

- AirSafe automatic safety controller for constant monitoring of airflow and filter conditions
- Integral base with deep spill lip
- 360° visibility
- Extremely quiet operation: < 49 dBa
- Optional sturdy cart allows unit to be portable
- Available in 110V or 220V AC
- No installation cost

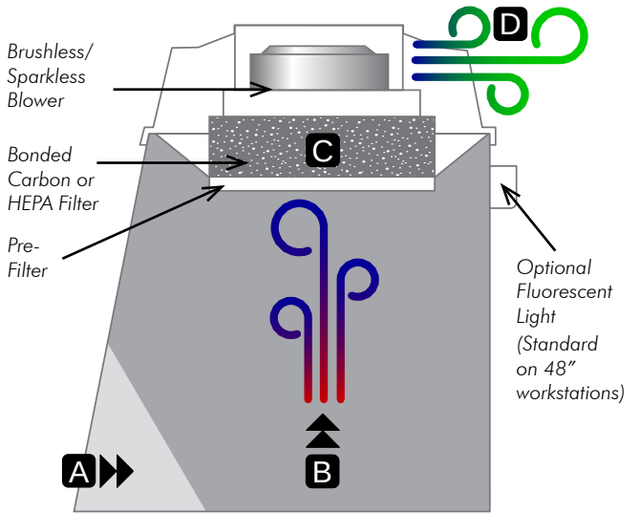
AirSafe safety controller features:

- One-touch control of all primary features
- Constant airflow monitoring and adjustment to preset velocity
- Constant monitoring of filter conditions
- Audible and visible alarms

AC632TA shown above

How the AC600 Series works:

1. Room air enters at "A".
2. Room air mixes with contaminants at "B" and moves through filtration bed at "C".
3. Filtered, clean air exits workstation at "D".



Hoods, workstations and enclosures are shipped fully assembled

AirClean Systems ductless hoods, workstations and enclosures meet and exceed relevant OSHA and ANSI Z9.5 standards

Typical Applications:

- Drug identification where solvents and ethers are used to determine drug purity
- Weighing of dangerous particulates and narcotics
- Removal of dust from fingerprint powders
- Removal of fumes from cyanoacrylate, iodine, Ninhydrin and DFO
- Elimination of putrid odor associated with decaying evidence

UL, CSA and CE COMPLIANT

AC600 WORKSTATION DIMENSIONS						
Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632A	32″	25″	30″	31″	23″	19″
AC632TA	32″	25″	40″	31″	23″	26″
AC632TAS	32″	25″	40″	31″	23″	29″
AC648A	48″	25″	31″	47″	23″	19″
AC648TA	48″	25″	41″	47″	23″	26″
AC648TAS	48″	25″	41″	47″	23″	29″

Medical Solutions

ACVP50 Endocavity Ultrasound Probe Workstation

Protect probes and personnel during disinfection

AirClean® Systems ultrasound probe workstations are a convenient and safe way to soak endocavity ultrasound probes without exposing the technician to fumes from toxic disinfectants. Glutaraldehyde, OPA, Cidex®, Hydrogen Peroxide or Peracetic Acid fumes are captured by the bonded carbon filter, which is guaranteed to last 12 months. SoftClips™ keep the probe secure during disinfection without damaging sensitive electronics.

The ACVP50 endocavity ultrasound probe workstation in use

Features:

- Bonded "no dust" carbon filter — guaranteed for 12 months
- No Rust. Structural polypropylene does not corrode
- All plastic construction — no scuffed probes
- Removable front panel provides easy access for refilling bottles
- Two-speed fan
- Wall-mount or counter-top position for convenient access
- Meets OSHA and TJC regulatory requirements

The ACVP50 Endocavity Ultrasound Probe Workstation

SoftClips hold probes in position for disinfection without damaging sensitive electronics

See page 83 for more information on storage

ACVP50 ULTRASOUND PROBE WORKSTATION DIMENSIONS	
Dimensions	16"W x 12"D x 16"H

TEE/ENT Probe Soaking Station

Effectively neutralize fumes during disinfection

The wall-mounted ACTE50 is designed for disinfecting longer devices such as transesophageal probes, while minimizing potential probe damage from oversoaking in cumbersome pans and trays. The12-month guaranteed bonded carbon filter captures the disinfectant vapors, preventing exposure to the technician. Several different polycarbonate soaking tube lengths are available to fit your probe type.

The ACTE50 TEE/ENT probe soaking station shown with 48" soaking tubes

Features:

- SoftClips™ hold probes in position for disinfection without damaging sensitive electronics
- Bonded carbon filter effectively adsorbs and neutralizes disinfectant fumes, guaranteed for 12 months
- Soaking tubes are removable for easy filling and available in a variety of lengths
- No Rust. Structural polypropylene does not corrode
- All plastic construction — no scratched probes
- Removable front panel provides easy access for refilling polycarbonate soaking tubes
- Wall-mounted for convenient access
- Meets OSHA and TJC regulatory requirements
- Two speed fan

See page 82 for more information on storage

ACTE50 TEE/ENT PROBE SOAKING DIMENSIONS	
Main Assembly Dimensions	16"W x 12"D x 16"H
Tube Length Options	12-48 inches

AC600 Series Ductless Endoscopy Workstation

Mobile operator protection from disinfectant fumes

The AC600 Series endoscopy workstation is an economical and space-saving solution, providing technician protection from high-level disinfectant vapors. The AirSafe™ automatic safety controller maintains the user-set face velocity during endoscope reprocessing, while additionally monitoring airflow and filter conditions. Multiple sizes and a small footprint allow this product to fit on virtually any countertop.

AC632C endoscopy workstation shown with optional cart and shelf

Features:

- AirSafe safety controller for complete system monitoring
- Chemisorptive bonded carbon neutralizing filter
- Uses no more bench space than your current trays
- Virtually any layout of disinfectant and rinse trays
- Suitable for use with rigid or flexible endoscopes
- Quiet operation
- No installation or ductwork required
- Integral base will hold up to a 3-gallon spill
- Bi-fold sash provides easy access to trays and acts as eye shield against potential splashing
- Filter and electronics are located above the work area, preventing spills from contacting these components

Standards Compliance:

- Meets and exceeds ANSI Z9.5 standard for ductless workstations
- Complies with OSHA and TJC requirements
- Meets current AAMI/ANSI ST58 guidelines for safe handling of glutaraldehyde

Options:

- GlutAway™ waste pump for transferring disinfectant and rinse water to waste
- Sturdy cart with shelf

Optional Accessories:

- CleanShield™ endoscope storage cabinet see page 84

UL, CSA and CE COMPLIANT

TJC COMPLIANT

AC600 SERIES DUCTLESS ENDOSCOPY DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC632C	32″	25″	30″	31″	23″	19″
AC648C	48″	25″	31″	47″	23″	19″

Neutralization Station

Safely dispose of glutaraldehyde and OPA

AirClean® Systems AC-DS-03 neutralization station is a semi-automated system for neutralizing high-level disinfectants such as glutaraldehyde and OPA, prior to disposal into facility drains. The large reservoir holds up to four gallons of disinfectant per neutralization cycle. Devices capable of pumping spent disinfectant, such as the AC600 endoscopy workstation with GlutAway™ pump, can be connected to the AC-DS-03, eliminating operator exposure when transferring disinfectant for neutralization.

Features:

- Semi-automated system designed to contain high-level disinfectant during neutralization
- Works with both glutaraldehyde and OPA
- Contains up to four gallons of disinfectant per neutralization cycle
- Connects to Glutaway™ pump on the AC600 endoscopy workstation to form a complete high-level disinfectant containment and neutralization system
- Discharges neutralized disinfectant to drain
- Easy to use — simply turn on and add Glycinex™ to reservoir. The AC-DS-03 handles the rest
- Small footprint for placement near disinfection area
- Meets California guidelines for treatment and disposal of used high-level disinfectants
- Activated bonded carbon filter to capture fugitive gases

AC-DS-03 neutralization station shown with AC632C endoscopy workstation and optional cart

AC-DS-03 NEUTRALIZATION STATION DIMENSIONS			
Product #	External Dimensions		
	Width	Depth	Height
AC-DS-03	12.5″	16″	42″

CleanShield® TEE Probe Storage Cabinet

Dedicated and secure storage for TEE probes

TEE probe storage cabinets provide a dedicated and secure place to store disinfected TEE probes. Each cabinet is designed to bathe TEE probes with positive pressure HEPA-filtered clean air during storage, minimizing probe contact with airborne contaminants. Thermally-fused seamless polypropylene construction makes the cabinet easy to clean with any disinfectant.

AC-TE-03 TEE probe storage cabinet

Features:

- Thermally-fused polypropylene construction
- Positive pressure HEPA filtered clean air
- Specially designed hanging shelves
- Locking front door for securing TEE probes
- Clear viewing panel in door
- Padded lower section to protect delicate TEE probe tip

AC-TE-03 TEE probe storage cabinet

UL, CSA and CE COMPLIANT

TJC COMPLIANT

TEE PROBE STORAGE CABINET DIMENSIONS			
Product #	External Dimensions		
	Width	Depth	Height
AC-TE-03	25″	10″	88″
AC-TE-06	51″	10″	88″

CleanShield® Endocavity Ultrasound Storage Cabinet

Dedicated and secure storage for Endocavity probes

The CleanShield Ultrasound Storage Cabinet is designed to effectively and securely store disinfected endocavity transducers and semi-critical devices by suspending each disinfected probe in a vertical position. This minimizes stress on the connection cable, strain relief and electrical pack of the probe.

AC-VR-06 endocavity ultrasound storage cabinet

Features:

- Thermally-fused polypropylene construction — NO chemical compatibility issue
- Two stage filtration — electro-statically charged pre-filters and 99.997% at 0.3 micron HEPA filtered clean air
- Specially designed hanging mounts for endocavity and general purpose ultrasound probes
- Locking front door for securing ultrasound probes
- Clear polycarbonate viewing panel in door

AC-VR-06 Endocavity probe storage cabinet

UL, CSA and CE COMPLIANT

TJC COMPLIANT

ENDOCAVITY PROBE STORAGE CABINET DIMENSIONS			
Product #	External Dimensions		
	Width	Depth	Height
AC-VR-06	25″	10″	88″

CleanShield® Endoscope Storage Cabinet

HEPA-clean, secure storage for endoscope probes

The CleanShield Endoscope Storage Cabinet provides a proper storage environment for protecting delicate endoscopes from possible damage while minimizing environmental contamination after disinfection.

During storage, disinfected endoscopes are hung securely in a vertical position while filtered ambient air bathes the chamber and disinfected scopes. Room air is drawn through pre-filtration and HEPA filtration before contacting the disinfected endoscopes. Specialized hanging mounts allow for secure and easy placement of the endoscope control unit, while the channel and power pack cables hang freely within the cabinet.

Features:

- Secure vertical hanging of endoscopes
- Filtered dust-free area for storage
- Good ventilation with two-stage filtered air
- Polypropylene seamless construction for easy cleaning and disinfection
- Locking epoxy coated steel door
- UL, CSA and CE compliant

CleanShield Endoscope Storage Cabinet is designed to accommodate the following types of endoscopes:

- Colonoscopes
- Gastroscopes
- Laryngoscopes
- Sigmoidoscopes
- Esophagoscopes
- Enteroscopes
- Bronchoscopes
- Choledochoscopes
- Rhinolaryngoscopes
- Duodenoscopes
- Echoendoscopes
- Fiberscopes

CleanShield will effectively accommodate either six or nine disinfected endoscope probes.

Access into the storage cabinet is gained through the epoxy-coated steel door with polycarbonate viewing panel. For added security, the steel door can be locked to prevent access or removal by unauthorized personnel.

The Society of Gastroenterology Nurses and Associates (SGNA) not only recommends that stored endoscopes hang vertically, but also that the distal tip hangs freely in a well-ventilated, dust-free area. Good ventilation encourages continued air drying of the surfaces and prevents undue moisture build-up, thus discouraging any microbial proliferation. Storage surfaces should be of a material that can be cleaned and disinfected easily.

AC-CSES09 CleanShield endoscope storage cabinet

CLEANSHIELD DIMENSIONS

Product #	External Dimensions		
	Width	Depth	Height
AC-CSES06	38″	15″	92″
AC-CSES09	38″	15″	92″

Glycinex™ Disinfectant Neutralizer

Glycinex completely neutralizes disinfectant in 5 minutes. Each pre-measured packet is simple to use and can be added to a container of disinfectant or applied to a spill in seconds. A noticeable color change will occur during deactivation. No overnight waiting to dispose of waste.

Glycinex has no corrosive acids or unstable oxidizers. Heating is not required for de-activation. Larger volumes of glutaraldehyde and OPA based products can be safely neutralized without dangerous heat build-up. Glycinex and the neutralized product that is formed are not harmful to active bacteria used in treating sewage and sewer sludge.

Aldehyde Clean-Up Kit

The Aldehyde Clean-Up Kit is compact and can be placed near the point of use as The Joint Commission Hazardous Material Plan requires. Each kit contains materials to effectively neutralize and clean up small spills.

Spill Kit Contains:

- 5 oz. bottle of Green Z solidifier
- Nitrile gloves
- 2 oz. pouch of ACX4400
- Ventilated goggles
- Aldehyde respirator mask
- Scoop/scraper (2)
- 30 gallon bag
- Instructions

Solucide® Hard Surface Cleaner

Solucide is an EPA registered hard surface cleaner, disinfectant and deodorizer. Solucide is a broad-spectrum disinfectant spray that is effective in the presence of organic soil. Solucide contains no alcohol or glutaraldehyde, and has a fresh lemon scent.

Effectively Kills:

- Norovirus (Norwal Virus)
- Fast Parvo Virus
- SARS associated Conronavirus
- Hepatitus A Virus
- Hepatitus B Virus
- Hepatitus C Virus
- Fast TB Kill
- HIV
- Bactericidal (MRSE, MRSA, VRE, VISA, Strep pyogenes)
- Virucidal
- Fungicidal
- Pseudomonacidal

Approved for use when cleaning AirClean® Systems DrySafe™, PCR Workstation and Dead Air Boxes. Solucide is ready to use, shipped with a convenient spray pump.

TEEZyme® TEE Probe Enzymatic Sponge

TEEZyme has a neutral pH, multi-tiered enzymatic detergent, specifically formulated to remove gross contaminants while targeting insoluble polysaccharides that encase biofilm, exposing them to the high-level disinfectant .

TEEZyme super absorbent sponges are designed to hold the enzymatic detergent in, so that it guarantees to disperse the detergent over the probe surface and distribute it more evenly. This will provide longer contact time with biofilm and contaminants so the detergent can help break them down.

Features:

- The only TEE probe specific sponge on the market
- TEEZyme enzymatic detergent aids in the solubilization of polysaccharides and removal of biofilm allowing for high-level disinfectants to kill
- Proprietary blend of enzymes designed to break down all bio burden — blood, carbohydrates, protein, polysaccharides, fats, oils, uric acid and other nitrogenous compounds
- Pre-cleans inanimate surfaces where biofilm, germs, allergens or microorganisms can hide, thrive, and grow
- Individually-wrapped for single use to help decrease cross-contamination
- Lint-Free/Latex-Free/Dust-Free
- The sponges have been treated with a preservative to inhibit and protect the product from mold and fungus
- The product is preserved against the growth of bacteria

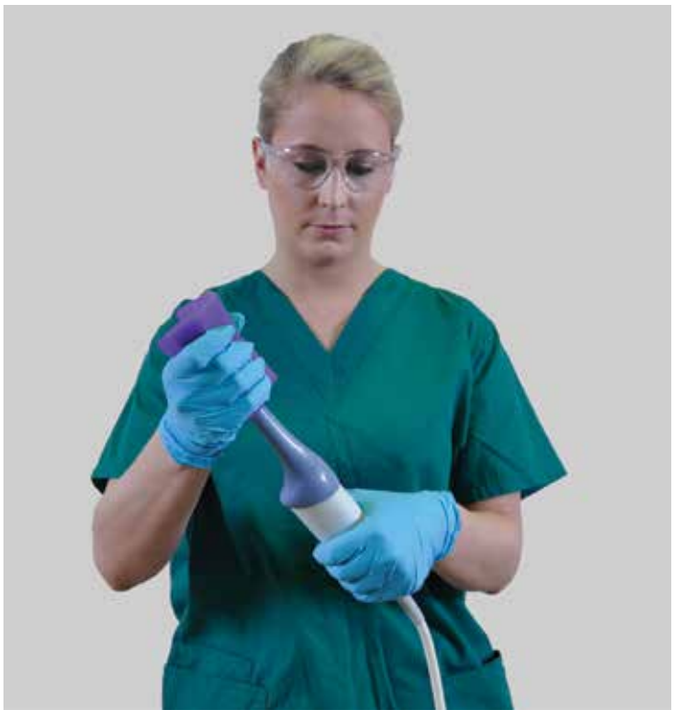
TEEZyme and NUZyme are registered trademarks of CS Medical, LLC

NUZyme™ Enzymatic Sponge

NUZyme, pre-saturated sponges, evenly disperse the detergent over the transducer while the operator adds mechanical scrubbing action to effectively remove gross contaminates from the transducer surface. The sponge applicator will provide longer contact time with biofilm and contaminants so that the detergent can help break them down.

Features:

- NUZyme enzymatic detergent aids in the solubilization of polysaccharides and removal of biofilm allowing for high-level disinfectants to kill
- Proprietary blend of enzymes designed to break down all bio burden — blood, carbohydrates, protein, polysaccharides, fats, oils, uric acid and other nitrogenous compounds
- Pre-cleans inanimate surfaces where biofilm, germs, allergens or microorganisms can hide, thrive, and grow
- Individually wrapped for single use to help decrease cross contamination
- Lint-Free/Latex-Free/Dust-Free
- The sponges have been treated with a preservative to inhibit and protect the product from mold and fungus
- The product is preserved against the growth of bacteria



QwikDry® Ultrasound Probe Drying Cloth

A properly dried ultrasound probe, prior to storage, is critical in minimizing the possibility of water-borne bacteria contamination during storage. QwikDry Ultrasound probe drying cloths have been developed to give healthcare professionals the added confidence of properly dried ultrasound probes prior to re-use or storage.

QwikDry is an individually-packaged, irradiated cloth with a super absorbent matrix and ultra-smooth textured surface that effectively removes moisture and slides freely over the ultrasound probe shaft. Each cloth is designed for single-use, thus removing the potential for cross-contamination and potential microbiological growth.

Features:

- Lint-free
- Single-use
- Non-abrasive surface for easy glide on ultrasound probe
- Individually packaged, irradiated cloth
- Engineered textile with internal high absorbent membrane

QwikDry Ultasound Probe Drying Cloth

Passive Dosimeter Badges

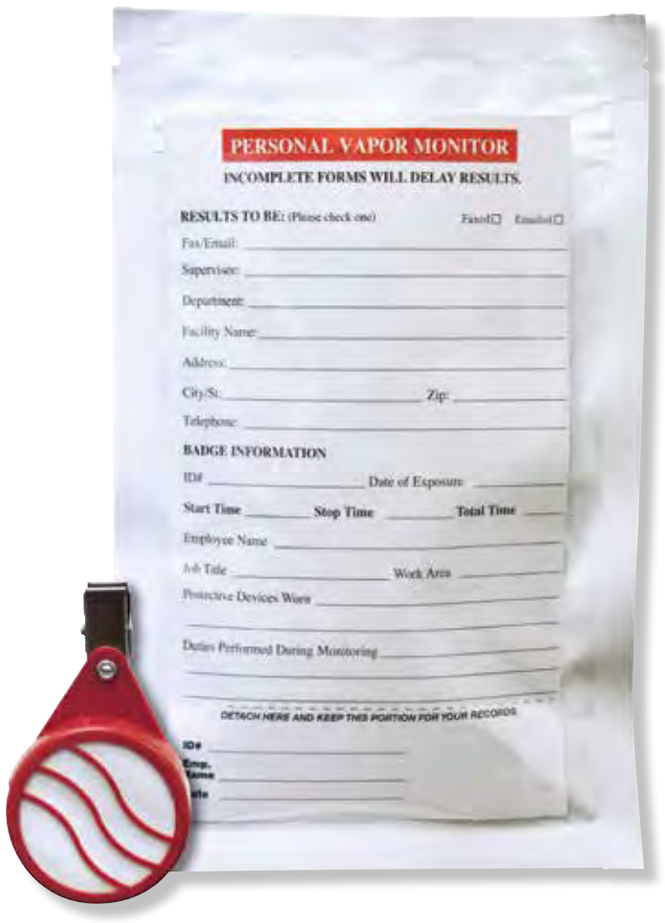
Passive dosimeter monitoring is a reliable solution for sampling healthcare employees' exposure to hazardous high-level disinfectants. Exposure monitoring is achieved by simply clipping a badge on the employee's collar; the dosimeter badge collects vapor levels in the employee's breathing zone. The results are scientific and give a scientific, detailed analysis of the employee's exposure to vapor levels without hampering their performance or workflow.

Features:

- Pre-assembled clip-on style badges allow measurement of 8-hour TWA or 15-minute STEL
- Packaged in a box of six which allows for three separate tests of TWA or STEL
- Compliant with OSHA recommended accuracy of +/- 25% for the 8-Hour TWA or 15-minute STEL
- Compliance with OSHA 95% confidence level
- Laboratory analysis and full report provided

Advantages:

- Gives you real TWA and STEL exposures, not estimates or assumptions of risk levels
- Allows you to evaluate individual differences in employee work practices by comparing results of employees doing the same jobs without direct observation
- Allows you to measure exposure without interference from an "expert observer" during onsite visits
- Permits you to test immediately if employee(s) report exposure concerns
- Gives you the necessary data to establish baselines and acceptable practices within the work place



Passive dosimeters (badges) are an economical and practical way to monitor hazardous vapors in the workplace.

TPorter®

TEE TRANSPORT DEVICE

TPorter®, TEE Ultrasound Probe Transportation and Procedure Case, was designed to effectively and securely move high-level disinfected TEE ultrasound probes to the procedure area and then return the biologically soiled TEE ultrasound probe for reprocessing. TPorter is a complete delivery system that allows healthcare personnel to move delicate TEE ultrasound probes throughout the healthcare facility and deliver them in a manner that creates a standardized operating procedure. TPorter, as a dedicated transportation device, will help minimize the risk of probe damage and reduce staff exposure to potentially hazardous biological material. CS Medical engineers created TPorter to be more than just a transportation case; TPorter is an engineered solution for the healthcare professional that cleans, high-level disinfects, stores and delivers TEE ultrasound probes for patient care.

TransPorter™ mobile cart

Patent pending # 62/347,838

TPorter is designed with a variety of molded compartments to accommodate the TEE ultrasound probe, bite block(s), a PullUp™ Bio-Barrier Sleeve and a TEEZyme® enzymatic sponge. Carried just like a suitcase or placed into a multiple compartment utility cart, TPorter solves the current issues associated with TEE ultrasound probe transportation. The TPorter transport case provides a standardized method for delivering the necessary components to the procedure room. It then promotes the proper point of care bedside cleaning, as described by the TEE ultrasound probe manufacturers and allows for the secure transport of the biologically soiled ultrasound probe to the reprocessing area.

Transporting to the Procedure Room using TPorter

TPorter should be placed on a flat and stable area, like a counter top or mobile procedure cart, to allow the high-level disinfection technician to insert the following items into the molded compartments: one TEEZyme enzymatically pre-saturated sponge, one PullUp Bio-Barrier Sleeve, bite blocks, two red tie bands and one dried and high-level disinfected TEE ultrasound probe with the insertion tube covered by a PullUp TEE Probe Cover.

Prior to placement into TPorter, the TEE ultrasound probe should have been stored in a vertical position and within a HEPA clean environment. The CleanShield TEE Ultrasound Probe Storage Cabinet, is one option available to healthcare professionals and it complies with current TJC (The Joint Commission) standards for care.

Once TPorter is loaded with the necessary components, the clear transportation lid should be placed over the molded transportation device and slide lid into the lock position. Green tie bands should be placed on TPorter for added security and identification during transportation to the point of use within the healthcare facility.

Procedure transportation case

Reprocessing the TEE Probe using TPorter

Once the TEE ultrasound probe has been enzymatically pre-cleaned, the healthcare professional should place the PullUp Bio-Barrier Sleeve, located within the TPorter case, onto the TEE ultrasound probe insertion tube. The purpose of the PullUp is to prevent the enzymatic and non-HLD components of the TEE ultrasound probe from contacting each other. The PullUp is designed to completely cover the insertion tube of the TEE ultrasound probe. The unique cone shaped receiver allows healthcare professionals to place the insertion tip of the TEE ultrasound probe into the PullUp Bio-Barrier Sleeve and easily pull the cover over the complete distance of the enzymatically cleaned TEE ultrasound probe. The receiver cone provides another identification label of the potential biohazard in the sealed, red tagged TPorter transportation case.

Once TPorter arrives at the point of reprocessing, the high-level disinfection technician will physically remove the red tags and slide the lid for removal and access to the soiled TEE ultrasound probe. The ultrasound probe should be removed from TPorter and reprocessing should begin per TEE ultrasound probe manufacturer's recommendation.

Soiled transportation case

TPORTER® TEE TRANSPORT DEVICE DIMENSIONS	
Product #	Description
CS-200950	TPorter® TEE Transport Device, 27.5" W x 19" D x 3.75" H
CS-200905	PullUp™ Bio-Barrier Sleeve, Box of 100
CS-200915	PullUp™ TEE Probe Cover, Box of 100
CS-200920	TPorter® TEE Tie Band, 200 count (100 red, 100 green)
CS-200980	TransPorter™ Mobile Cart, holds 4 TPorter™ cases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Total Exhaust Hoods

AirMax™ Fume Hood with Wet Fume Scrubber

The complete solution for scrubbing acids and other water soluble gases from fume hood exhaust

AirMax, with wet fume scrubber, is a total solution for minimizing personnel, ductwork and environmental exposure to caustic acid gases. Contaminated air passes through the scrubber's water-washed contact media before being exhausted. The water used during the scrubbing process is captured in the holding tank and recirculated. An optional pH dosing system can be added to neutralize acids captured during the scrubbing process.

AC6030TEML AirMax Fume Hood with wet fume scrubber

Wet Scrubber Features:

- NO RUST: thermoplastic construction is resistant to gases being scrubbed
- Direct-mount to fume hood exhaust — eliminates contaminated ductwork between the fume hood and scrubber
- Observation window for media inspection
- Scrubber holding tank with recirculating pump (located inside base cabinet)

Typical Applications:

Scrubbers are used with extraction systems where soluble substances are being evaporated at accelerated rates.

Examples include:

- Trace metal analysis
- Hot acid etching
- Acid digestions for metal analysis
- Precious metal purification
- Fat testing in food industry

Options:

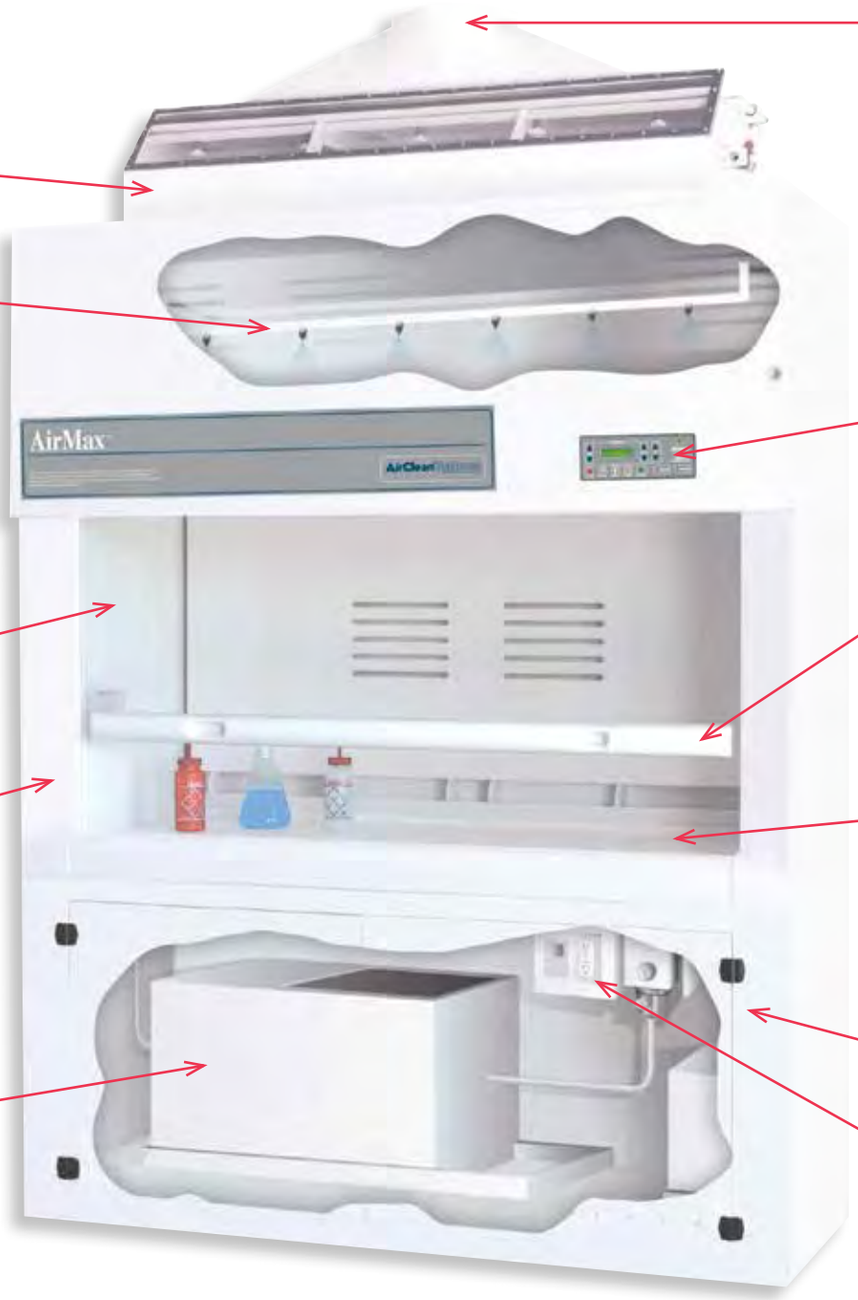
- Auto dosing system
- Spray bar for perchloric acid use
- Service fixtures and sinks
- Polycarbonate sash
- PVC base material
- Polypropylene blowers
- Variable speed driver for blower

ASHRAE110 TESTED

UL, CSA and CE COMPLIANT

Partial list of chemicals that AirClean® Systems scrubbers are appropriate for:			
HCl	Hydrochloric Acid (Hydrogen chloride)	NaOCl	Sodium Hypochlorite
H_2SO_4	Sulfuric Acid	H_2O_2	Hydrogen Peroxide
HF	Hydrofluoric Acid (Hydrogen fluoride)	$C_2H_4O_2$	Acetic Acid
$HClO_4$	Perchloric Acid	NH_3	Ammonia
NaOH	Sodium Hydroxide	H_3PO_4	ortho-Phosphoric Acid
KCl	Potassium Chloride	H_3BO_3	ortho-Boric Acid
NaCl	Sodium Chloride	HNO_3	Nitric Acid
Contact AirClean Systems for additional chemicals not listed.			

AirMax™ Wet Scrubber Features



Standard exhaust hook up

Wet Scrubber

Optional spray bar for perchloric acid use

AirMax microprocessor controller

Seamless, flame-retardant polypropylene interior

Vertical sliding safety glass sash with rounded hand foil to eliminate eddy currents

Removable access panel for services (water, gas & electric)

Removable work surface with spill basin

Polypropylene base cabinets

Scrubber holding tank

Optional pH dosing system

AC6030TEML pictured with optimal dosing system

AirMax™ Total Exhaust Fume Hood

Featuring corrosion-free polypropylene construction

AirMax total exhaust fume hoods are manufactured from structural polypropylene, which eliminating the threat of corrosion. Featuring standard bypass design, AirMax exhausts a constant volume of air regardless of sash position. Optional features are available for more precise control of blower speed and face velocity.

AC6030TE AirMax total exhaust fume hood

AirMax Microprocessor Controller

The AirMax microprocessor controller monitors face velocity and displays real-time airflow, in linear feet per minute, on the LCD screen. Blowers can be turned on/off via the AirMax controller as well.

Safety Features:

- Rolled-entry airfoil design prevents reverse flow and eddy currents
- Effective spill containment — a removable work surface exposes a large-volume spill basin that may be fitted with a drain
- Rear baffle extends below the work surface to effectively remove any heavy gases or evaporation from a spill
- Flame-retardant polypropylene interior

Construction Features:

- Double sidewall construction allows mounting of services and outlets on posts
- NO RUST: seamless, thermally-welded polypropylene
- Non-hydroscopic — will not absorb moisture

Options:

- Variable speed airflow controller
- Polypropylene blowers
- Laboratory fixtures
- Polypropylene sinks
- Polycarbonate sash
- PVC base material
- Polypropylene base cabinet

ASHRAE110 TESTED

UL, CSA and CE COMPLIANT

AIRMAX TOTAL EXHAUST FUME HOOD DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC3030TE	36″	30″	59″	25″	21″	32″
AC4030TE	48″	30″	59″	37″	21″	32″
AC5030TE	60″	30″	59″	49″	21″	32″
AC6030TE	72″	30″	59″	61″	21″	32″
AC8030TE	96″	30″	59″	85″	21″	32″

Basic Polypropylene Total Exhaust Fume Hood

Single-wall design for maximized work space

AirClean® Systems' single-wall polypropylene total exhaust fume hood is ideal for industrial applications where a ductless hood, workstation, or enclosure is not appropriate. These fume hoods come standard with a folding sash, single wall design and 36-inch depth, providing maximum work area.

AC5000TE total exhaust fume hood

Features:

- All polypropylene corrosion-resistant construction
- Single-wall design allows for maximum work space
- Internal baffling promotes smooth airflow
- Seamless construction allows for easy cleaning
- Vapor-proof fluorescent light

Options:

- Polypropylene base cabinets
- Deck-mounted service fixtures
- Polypropylene sinks
- Polypropylene exhaust blower
- Pass-through port

POLYPROPYLENE TOTAL EXHAUST FUME HOOD DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC3000TE	36″	36″	59″	35″	32″	34″
AC4000TE	48″	36″	59″	47″	32″	34″
AC5000TE	60″	36″	59″	59″	32″	34″
AC6000TE	72″	36″	59″	71″	32″	34″

DuraMax™ HEPA-Filtered Vertical Laminar Flow Fume Hood

Application solution for trace metal analysis and heavy acid usage

The DuraMax vertical laminar flow fume hood is constructed from rugged polypropylene, offering superior compatibility for applications involving strong acids or trace metal analysis. By combining HEPA-filtered incoming air with a traditional 'total exhaust' hood configuration, clean turbulence-free air blankets the work surface while users are protected from chemicals manipulated within the hood. The DuraMax hood meets NSF/ANSI standards for personnel, application and environmental protection.

AC6030TELF pictured with duplex electrical features

Options:

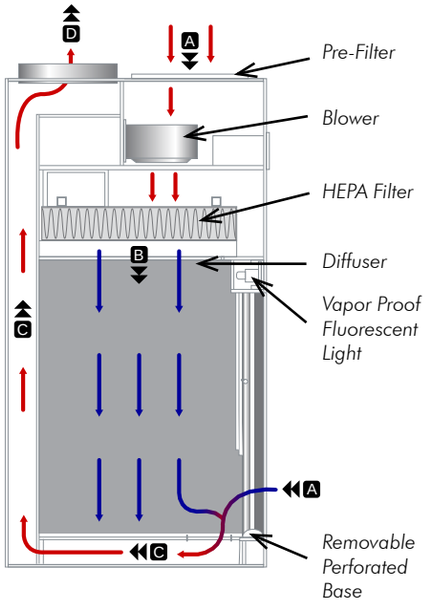
- ULPA filters: 99.999% Efficient at 0.125 micron particle
- Remote control service fixtures; air, vacuum, N2
- Electrical outlets, duplex
- Polypropylene Base Cabinets, non-vented

Features:

- Microprocessor controlled
- ISO 5 work area
- Large metal-free HEPA filters, 99.99% efficient at 0.3 microns
- Main chamber and all airflow channels constructed from polypropylene - metal-free
- Clear viewing window with large access opening

How the DuraMax vertical laminar flow fume hood works:

1. Room air enters at "A" .
2. Clean, HEPA filtered air enters the chamber at "B".
3. At "C" air is collected from chamber for exhaust to atmosphere at "D".



TRACE METAL ANALYSIS EXHAUST HOOD DIMENSIONS

Product #	External Dimensions			Internal Dimensions		
	Width	Depth	Height	Width	Depth	Height
AC4030TELF	48″	32″	60″	38″	24″	34″
AC6030TELF	72″	32″	60″	62″	24″	34″
AC8030TELF	96″	32″	60″	86″	24″	34″

Polypropylene Base Cabinet

Base cabinets, with a variety of shelving options, are available for each AirClean® Systems polypropylene fume hood. Constructed completely of polypropylene, these cabinets are ideal for storage of corrosive chemicals. Base cabinets may also be vented into the corresponding hood to prevent excessive fume buildup in the base cabinet.

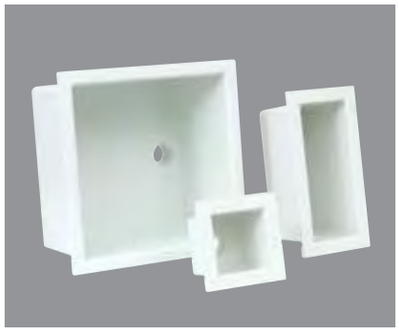
Polypropylene Blowers

AirClean® Systems offers injection-molded polypropylene blowers. These blowers are used especially in situations that require resistance to chemical agents, silent operation and energy savings.

Polypropylene blowers are treated to be resistant to UV rays and chemical agents. The blower can be adjusted to eight positions through 360° and is constructed for outdoor use.

Polypropylene Sinks

Polypropylene is an ideal material for minimizing corrosion problems due to it's excellent chemical resistance. Polypropylene molded sinks are light weight and easy to install. A variety of standard sizes are available.



Fixtures and Faucets

Fixtures and faucets are available on all AirMax™ and DuraMax™ polypropylene total exhaust fume hoods and sliding sash version ductless fume hoods. They are installed and color coordinated on each post. All services are pre-plumbed and wired for easy installation.

www.aircleansystems.com