

# SYNGENE AIRCLEAN SYSTEMS

## PCR WORKSTATIONS, DEAD AIR BOXES, LAMINAR FLOW HOODS



## PCR Workstation

Combination PCR Workstations have a built-in 254nm ultraviolet light that allows the operator to irradiate tubes, flasks and pipettes between amplifications. Clean, class 100/ISO 5 laminar flow air prevents outside contaminants from entering into the work area during manipulation. The 254nm UV light will effectively destroy potentially contaminating DNA and RNA within minutes. UVtect™ microprocessor controls monitors UV bulb and HEPA filter effectiveness.



### Unique safety features

- **Clear polycarbonate construction reflects harmful 254nm ultraviolet light**
- **Safety switch prevents opening workstation when UV light is illuminated**
- **Overlapping continuous design prevents leakage of 254nm ultraviolet light**
- **Constant monitoring of UV light source for effectiveness**

### Standard features

- **UVtect™ microprocessor controller with HEPA filtration monitoring**
- **Class 100/ISO 5 vertical laminar flow air**
- **Polycarbonate and polypropylene design to reflect UV energy**
- **Full access folding sash with safety switch**
- **Unibody plastic design - no joints or gaps in construction**
- **Digital UV light timer (0-59 minutes)**
- **Lab event timer**
- **UV shelf with built-in pipettor holder**
- **Slip-hatch utility access port**
- **Available in 32" and 48" wide; nominal depth 24", 220AC**
- **Shipped fully assembled**

External Dimensions								
	SYN-32PWLF-E		SYN-32PWTLF-E		SYN-48PWLF-E		SYN-48PWTLF-E	
<b>Width</b>	32"	813mm	32"	813mm	48"	1219mm	48"	1219mm
<b>Depth</b>	24"	610mm	24"	610mm	24"	610mm	24"	610mm
<b>Height</b>	30"	762mm	39"	991mm	32"	813mm	42"	1067mm

## Dead Air Box

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 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.



### Unique safety features

- **UV and fluorescent lights**
- **No ductwork required**
- **No installation required - plugs directly into a standard 110V or 220V electrical outlet**
- **Seamless plastic design -no joints or gaps in construction**
- **UV shelf with built-in pipettor holder**
- **UVtect™ microprocessor controller**
- **Digital UV light timer: 01-59 minutes**
- **Lab event timer**
- **Access port for electrical cords**

### Standard features

- **Polycarbonate and polypropylene design reflects UV energy**
- **Shipped fully assembled**
- **Overlapping polycarbonate sash to prevent UV light exposure**
- **Sash safety switch automatically turns off UV light when sash is raised**
- **Electronics are located above the workspace, eliminating the chance of a chemical spill entering these sensitive areas**

External Dimensions				
	SYN-32DBC-E		SYN-48DBC-E	
<b>Width</b>	32"	813mm	48"	1219mm
<b>Depth</b>	24"	610mm	24"	610mm
<b>Height</b>	30"	762mm	30"	762mm
Internal Dimensions				
<b>Width</b>	31"	787mm	47"	1194mm
<b>Depth</b>	23"	584mm	23"	584mm
<b>Height</b>	18"	457mm	23"	584mm

## Vertical Laminar Flow Workstation

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 Class 100/ ISO 5 air throughout the workstation and sash opening, keeping airborne particulate away from sensitive applications.



### Unique safety features

- **Filter safety lockout to ensure correct filter replacement**
- **Filter and electronics are located above the workspace, eliminating the chance of a chemical spill entering these sensitive areas**
- **Shipped fully assembled**
- **Tested to UL 61010-1, CSA C22.2 No. 61010-1, and EN 61326-1**
- **ISO 5 tested**
- **Real time monitoring of installed filtration bed**

### Standard Features

- **Clear 360° visibility**
- **Class 100/ISO5 or better air quality**
- **Microprocessor-based controller with HEPA filtration monitoring**
- **Available in 34" or 48" wide 220AC version**
- **Lab event timer**
- **Unibody plastic design - no joints or gaps in construction**
- **Shipped fully assembled**

#### External Dimensions

	SYN-32DWASH-E		SYN-32DWASHU-E	
Width	32"	813mm	32"	813mm
Depth	24"	610mm	24"	610mm
Height	30"	762mm	39"	991mm



## Microscope Enclosure

AirClean® Systems ductless microscope enclosures provide a Class 100/ISO5 work environment. The microscope ocular port allows for easy access of eyepiece and viewing platform.



### Standard features

- **Process protection enclosure provides vertical Class 100/ISO 5 clean air with timed UV irradiation**
- **Microprocessor controlled with HEPA filtration monitoring**
- **Clear, 360° visibility**
- **Lab event timer**
- **Shipped fully assembled**

External Dimensions				
Product Number	SYN-AC632TLFUVMIC		SYN-AC648TLFUVMIC	
Width	32"	813mm	47"	1219mm
Depth	24"	610mm	24"	610mm
Height	40"	1016mm	42"	1067mm
Internal Dimensions				
Width	31"	787mm	47"	1194mm
Depth	23"	584mm	23"	584mm
Height	28"	711mm	30"	762mm

## PowderSafe Bulk Handling Enclosure

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 maximise containment while minimising sample loss and balance instability.



### Standard features

- **Dark blue base for ease of cleaning**
- **Disposal part for weighing vessels**
- **HEPASafe™ filter change out**
- **AirSafe™ automatic safety controller**
- **Bulk container access port cover**
- **Available in 36", 48", 72" widths**
- **Vapour-proof fluorescent light**
- **No installation required**
- **White epoxy coated stand with leveling feet**
- **Available in 110V and 220V AC**
- **ASHRAE110 Tested**
- **UL and CSA compliant**
- **USP800 Compliant**

### Options

- **Gas phase carbon filtration**
- **Hydraulic lift**

External Dimensions						
	SYN-AC794BE		SYN-AC795BE		SYN-AC796BE	
<b>Width</b>	48"	1219mm	60"	1524mm	72"	1778mm
<b>Depth</b>	36"	914mm	36"	914mm	36"	914mm
<b>Height</b>	54"	1372mm	54"	1372mm	54"	1372mm
Internal Dimensions						
<b>Width</b>	47"	1194mm	59"	1499mm	71"	1803mm
<b>Depth</b>	29"	737mm	29"	737mm	29"	737mm
<b>Height</b>	35"	889mm	35"	889mm	35"	889mm

## PowderSafe Type A Enclosure

The 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 balancing stability. These compact, ductless enclosures are factory leak tested, certified and shipped fully assembled for simple installation on any countertop.



### Unique safety features

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

### Standard features

- AirSafe™ automatic safety controller
- Audible/visible filter and airflow alarms
- Portable HEPA filtration – NO DUCTWORK REQUIRED
- SafeChange™ technology for pre-filter changeout
- Electrical chord 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 charges pre-filter prevents 'particle rain'
- Available in 110V and 220V AC

#### External Dimensions

	SYN-AC705*		SYN-AC710C		SYN-AC710CT		SYN-AC10CTS		SYN-AC720C		SYN-AC720CT		SYN-AC720CTS	
<b>Width</b>	24"	610mm	32"	813mm	32"	813mm	32"	819mm	48"	1219mm	48"	1219mm	48"	1219mm
<b>Depth</b>	24"	610mm	24"	610mm	24"	610mm	25"	635mm	24"	610mm	24"	610mm	25"	635mm
<b>Height</b>	30"	762mm	30"	762mm	40"	1016mm	40"	1016mm	31"	787mm	41"	1041mm	41"	1041mm

#### Internal Dimensions

<b>Width</b>	23"	584mm	31"	787mm	31"	787mm	31"	787mm	47"	1194mm	47"	1194mm	47"	1194mm
<b>Depth</b>	23"	584mm	23"	584mm	23"	584mm	23"	584mm	23"	584mm	23"	584mm	23"	584mm
<b>Height</b>	19"	483mm	19"	483mm	26"	660mm	29"	737mm	19"	483mm	26"	660mm	29"	737mm

\*SYN-AC705 is not available with AirSafe controller

## PowderSafe Type B Enclosure

Syngene's PowderSafe Type B enclosures utilise 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.



### Standard 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 of HEPA filter**
- **Fluorescent light - one touch operation**
- **Portable; no installation cost**
- **Electrical cord access ports**
- **Available in 110V and 220V AC**
- **USP 800 Compliant**
- **UL and CSA Compliant**

### Options

- **Contrasting base colour**
- **Waste port for weighing vessels**

#### External Dimensions

	SYN-AC730C		SYN-AC740C	
<b>Width</b>	32"	813mm	48"	1219mm
<b>Depth</b>	30"	726mm	30"	726mm
<b>Height</b>	33"	834mm	33"	834mm
Internal Dimensions				
<b>Width</b>	31"	783mm	47"	1194mm
<b>Depth</b>	21"	533mm	21"	533mm
<b>Height</b>	18"	457mm	18"	457mm



## PowderSafe Type C Enclosure

Syngene's 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 a ductless fume hood. Thermally-fused polypropylene construction makes the PowderSafe Type C enclosure perfect for weighing powders and solvents.



### Standard features

- **AirSafe™ automatic safety controller**
- **Horizontal laminar airflow pattern**
- **Chemically impervious construction**
- **HEPASafe filter change-out**
- **High mass - solid polypropylene construction**
- **Vapour-proof fluorescent light**
- **Ductless - no installation required**
- **Available in 110V and 220v AC**
- **ASHRAE110 Tested**
- **UL and CSA Compliant**

### Unique safety features

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

#### External Dimensions

	SYN-AC760C		SYN-AC65CC		SYN-AC770C		SYN-AC775C		SYN-780C		SYN-AC785C	
<b>Width</b>	36"	914mm	36"	914mm	48"	1219mm	48"	1219mm	72"	1829mm	72"	1829mm
<b>Depth</b>	30"	762mm	30"	762mm	30"	762mm	30"	762mm	30"	762mm	30"	762mm
<b>Height</b>	44"	1118mm	54"	1372mm	44"	1118mm	54"	1372mm	44"	1118mm	54"	1372mm

#### Internal Dimensions

<b>Width</b>	35"	889mm	35"	889mm	47"	1194mm	47"	1194mm	71"	1803mm	71"	1803mm
<b>Depth</b>	22"	559mm	22"	559mm	22"	559mm	22"	559mm	22"	559mm	22"	559mm
<b>Height</b>	25"	635mm	35"	889mm	25"	889mm	35"	889mm	25"	635mm	35"	889mm

## Accessories

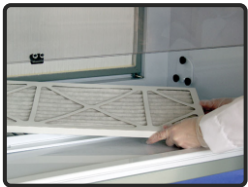


Our white, epoxy-coated carts are engineered and designed to support AirClean® AC600 Series Ductless Workstations. The stands are constructed of 1.5 tube stock 14-gauge cold-rolled steel with locking casters. All carts feature a two-position moveable base bar for wheelchair or lab chair compatibility. Standard height of 34" meets ADA requirements.



AirClean® Systems UVTect™ microprocessor controller, standard on all laminar flow hoods, workstations, and enclosures, provides user-friendly monitoring and control features. The UVTect™ controller constantly monitors the HEPA filter to ensure proper airflow. Proper airflow is critical in maintaining a clean working environment. If the workstation is equipped with an ultraviolet energy source, the UVTect™ controller monitors the effectiveness of the bulb and alerts the operator when replacement is necessary.

## Mechanical Filtration



The particulate pre-filter is an electrostatically charged fiber filter which effectively removes submicron particulates. It is designed to protect the absorption filter from contaminants such as smoke, acid mists, and other submicron particulates. All units are initially supplied with a pre-filter.

Ultra Low Particulate Air (ULPA) Filters are available in various configurations for the containment of particles. This filter has a 99.999% efficiency rating for collecting 0.125 micron particles.



High Efficiency Particulate Air (HEPA) Filters are available in various configurations for the containment of particles. The filter has a 99.997% efficiency rating for collecting 0.3 micron particles

SYN-32TRW	Trolley for 32" wide models, 2 locking and 2 free flow wheels	SYN-49FHEPA	HEPA filter, 99.997% efficient at 0.3 microns
SYN-32TRF	Trolley for 32" wide models, 4 leveling feet	SYN-49FHEPA18	HEPA filter, 99.997% efficient at 0.3 microns
SYN-48TRW	Trolley for 48" wide models, 2 locking and 2 free flow wheels	SYN-49FLFPRE	Pack of 12, prefilters
SYN-48TRF	Trolley for 48" wide models, 4 leveling feet	SYN-49FLFPRE7	Pack of 12, prefilters
SYN-49AUVBL4	Replacement UV Bulbs, Pack of 4	SYN-49FULPA	ULPA filter, 99.99% efficient at .125 microns

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