

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.



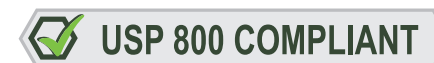
AC740C 48" PowderSafe Type B ductless balance enclosure

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



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

PowderSafe™ Type B Enclosure

220V



GENERAL SPECIFICATIONS		
Construction Material	Work Surface	Polypropylene - No Rust
	Walls	Polypropylene - No Rust
	Front Sash	Clear Polycarbonate
	Filtration Housing	Polypropylene - No Rust
	Initial HEPASafe™ Filters	Installed; 99.99% Efficient at 0.3 μm
Controls		AirSafe™ Automatic Safety Controller
Face Velocity - Variable		User-Defined; 0.2-0.6 (m/s)
Lighting		Vapor-Proof Fluorescent
Blowers		Variable-Speed; Brushless-Sparkless
Electrical Cord Pass-Through		Two; Right & Left Side Ports
Lab Event Timer		Adjustable Audible / Visible Timer
Low Airflow Alarm		Custom Audible / Visible Alarm
HEPA Filter Monitoring Package		Audible / Visible Alarm
Certifications		SafeBridge
Meets and exceeds USP <800> requirements for HD handling		

DIMENSIONS										
Product #	External Dimensions (mm)			Internal Dimensions (mm)			Sash Opening Dimensions (mm)			
	Width	Depth	Height	Width	Depth	Height	Width	Height		
								Opening	Sash Fold 1	Sash Fold 2
AC730C220	813	762	838	787	533	457	737	89	203	406
AC740C220	1219	762	838	1194	559	457	1143	89	203	406

TECHNICAL SPECIFICATIONS								
Product #	Electrical			Volume of Filtered Air	Prefilters	HEPASafe™ HD Powder Filtration		Unit Weight*
	Voltage	Amps	Power			Primary HEPA Filtration Layer	Redundant HEPA Filtration Layer	
AC730C220	220V	1.5 A	200 W	7.2 CMM	1	1 HEPA	1 HEPA	91 kg
AC740C220	220V	1.5 A	230 W	7.1 CMM	1	1 HEPA	1 HEPA	125 kg

*Unit weight is an approximation



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TSS-AC730-740-A01_220V



AC730C 32" PowderSafe Type B ductless balance enclosure

HEPASafe™

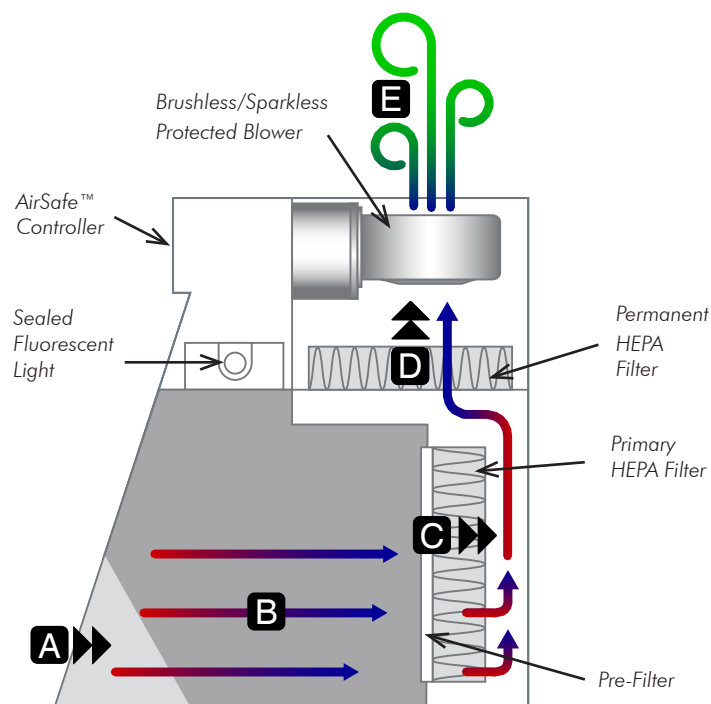
AirClean® Systems PowderSafe Type B enclosures utilize HEPASafe™ filter change-out, allowing the operator to safely and easily bag-out contaminated filters under negative pressure. The heart of this system is a secondary, permanent HEPA filter that protects the operator during primary HEPA filter change-out.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



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



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"

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.

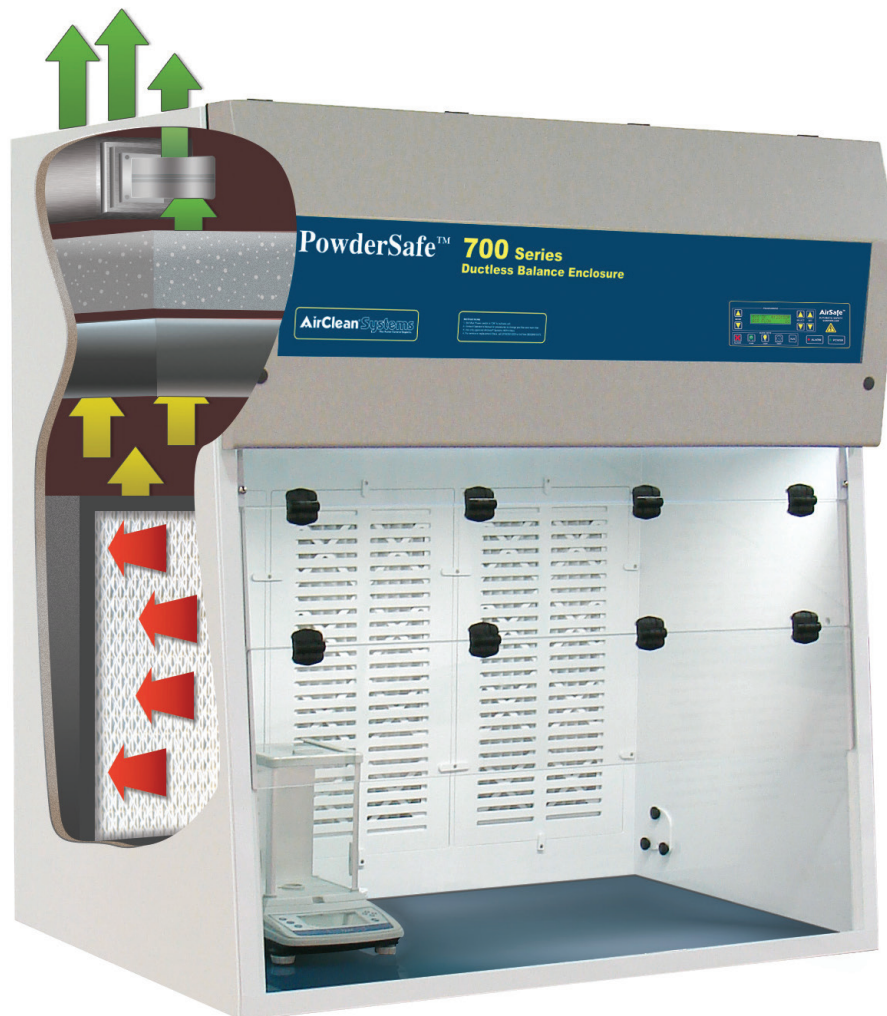
AirClean® Systems PowderSafe Type B, Type C and Bulk Handling Enclosures are designed with HEPASafe Filtration Technology.

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 located 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.