

Ventilated Balance Enclosure (VBE)



Ventilated Balance Enclosure (VBE-4ft)

Introduction

Ventilated Balance Enclosure (VBE) is designed specifically for stability and accuracy while maintaining a high level of operator protection by containing hazardous airborne powder. Using our aerodynamic design on sash and arm rest plus a sectionalized baffle, the airborne powders are well contained inside the enclosure and exhausted through a HEPA filter or direct to the lab exhaust.

Construction

The enclosure is made from powder-coated electro-galvanized sheet with polycarbonate sash and side panels. Also equipped with aerodynamic sash handle and arm rest to provide optimized airflow inside the enclosure.

The design of VBE is modular in terms of exhaust and filtration system. There are three basic modules: the Base Module, the Filter Module, and the Blower Module.

Key Features

- Negative Pressure application provides high level of operator's protection from hazardous airborne particles
- Disposal Port is equipped with O-Ring to provide a sealed Trash Bag for additional powder containment solution
- Modular Design using VBE modules the unit can be fully customized
- Filtration System VBE can be equipped with a Filter Module or a Portable Filter Module for added air flow control Blower Module can be added.

Control System Package

- RH / Temperature Sensor: 1 unit Vaisala HM120T sensor with LCD
- Fan Speed Control: 1 unit Jumo dTRON 304 controller

Filtration Package

- SINGLE Filtration System: Single Bag in Bag out Filter
 - Efficiency: 99.995% at 0.3 micron
 - Classification: H14
 - Media: Glass Fiber
 - Sealing Method: Gasket
- DUAL Filtration System: Two Bag in Bag out Filter installed on top of each other
 - Efficiency: 99.995% at 0.3 micron
 - Classification: H14
 - Media: Glass Fiber
 - Sealing Method: Knife-edge Gel sealed

Warranty

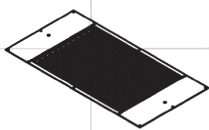
1 year warranty (excluding consumables). Consumables are ballast, fluorescent, and filters. The warranty will cover all other parts including the blower, fan switch, and electrical main board. During the period of warranty, any repair, modification, testing and commissioning performed by any unauthorized party other than the Esco Service Team, shall void the warranty of the unit.

EXHAUST MODULE

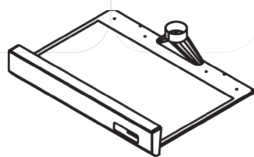
VBE have 3 options for Exhausting Filtered Air such as DUCTED, DUCTLESS, PORTABLE



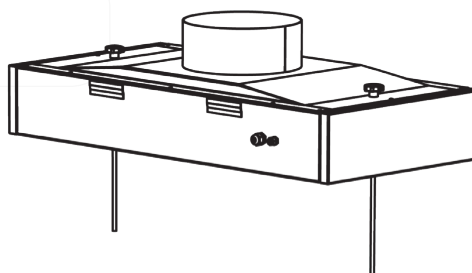
Ducted



Ductless

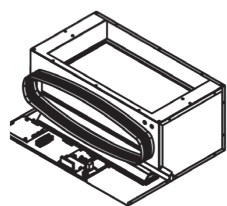


For Ducted or Portable

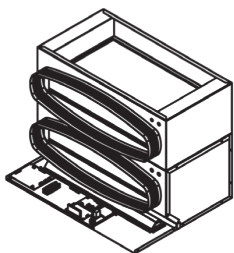


FILTER MODULE

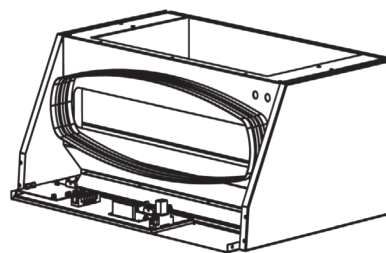
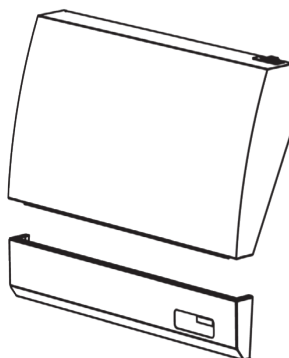
Filter Module be configured as Dual or Single Filter. Each module Section quantity may vary form 1 - 3 Depending on the Width of the Enclosure. Additional Carbon filter may be supplied for Odor Control



Single Filtration Module

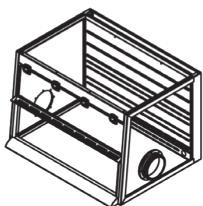


Dual Filtration Module

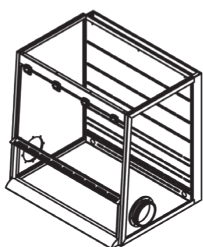


ENCLOSURE MODULE

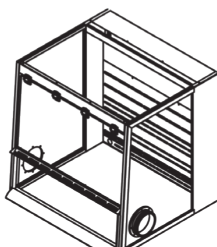
VBE Enclosure covers a wide range weighing and powder handling options and requirments. We have the SMALL, MEDIUM, LARGE models. Small Models, is perfet for small spaces, add portable filter options and the enduser will save much of the ceiling space. Medium Models, are perfect if you are using High Equipment for weight Powder. Large Model, are perfect for large scale powder handling, it can also be combined with our Worktop with Drum Access Options.



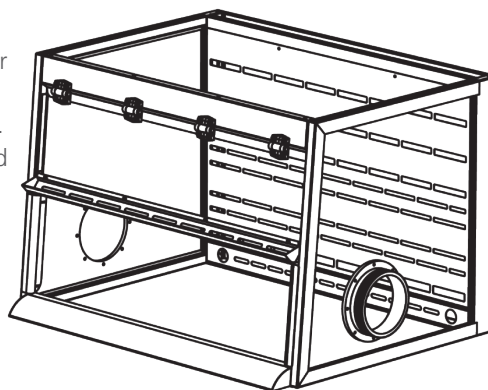
Small Model



Medium Model

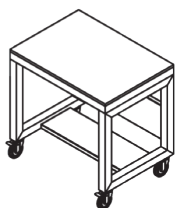


Large Model

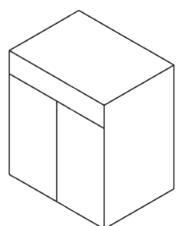


WORKTOP OPTION

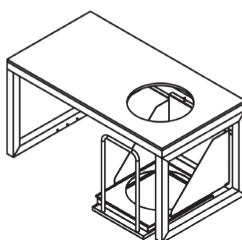
There are 3 types of Worktop Available, SOLID EPOXY, SS304, SS316, GRANITE. For the Base, SUPPORT STAND, CABINET, SUPPORTSTAND w/ DRUM ACCESS can be ordered. In addition to this Castor wheel or Leveling feet can be selected for Footing options.



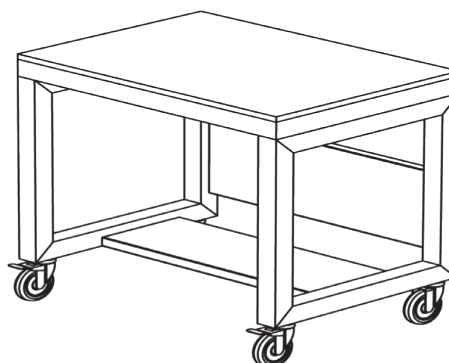
Standard Support Stand



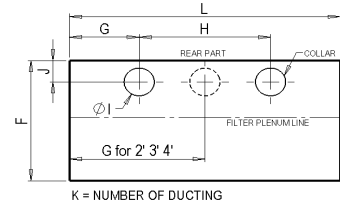
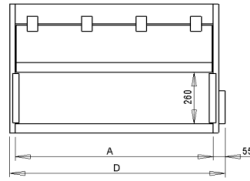
Cabinet Type



Drum Access



Ventilated Balance Enclosure



SERIES	CONFIG	SIZE	WORK SPACE			EXTERNAL			TOP LAYOUT					BASE SIZE		
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
01 Series	A	2	610	635	630	665	810	760	330	-	4"	50	1	660	650	700
		3	915	635	630	970	810	760	483	-	4"	50	1	965	650	700
		4	1220	635	630	1275	810	760	635	-	4"	50	1	1270	650	700
		5	1525	635	630	1580	810	760	483	610	4"	50	2	1575	650	700
		6	1830	635	630	1885	810	760	483	915	4"	50	2	1880	650	700
		7	2135	635	630	2190	810	760	483	915	4"	50	2	2185	650	700
		8	2440	635	630	2495	810	760	483	635	4"	50	2	2490	650	700
	B (TALL)	2	610	940	630	665	1115	760	330	-	4"	50	1	660	955	700
		3	915	940	630	970	1115	760	483	-	4"	50	1	965	955	700
		4	1220	940	630	1275	1115	760	635	-	4"	50	1	1270	955	700
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		8	2440	940	780	2495	1630	910	635	1220	10"	385	2	2490	955	850

CONTAINMENT SYSTEM

TOP COVER

Designed to be ducted or ductless

BIBO RING WITH BIBO BAG

to provide Hazard free Filter Change Procedure

SENTINEL MICROPROCESSOR

to provide control, visual monitoring and alarm system

SASH SWEEP - Incoming air from this area sweep airborne particle away from sash

SIDE AIRFOILS - designed to maximize the airflow to the enclosure by pulling air from sides

MAIN STREAM - The sash opening provides an airflow velocity of 0.3 m/s

Blower with low level noise

HEPA FILTER - to provide high level of Filtration

BAFFLE - Is tested to provide optimized airflow inside the enclosure

SASH HANDLE - Provide air from the top of the sash to the enclosure if the user is blocking a section of the sash during operation.

ARM REST - Provides air from bottom of the sash to the enclosures. Provides base sweep.

COMFORTABLE ERGONOMIC DESIGN

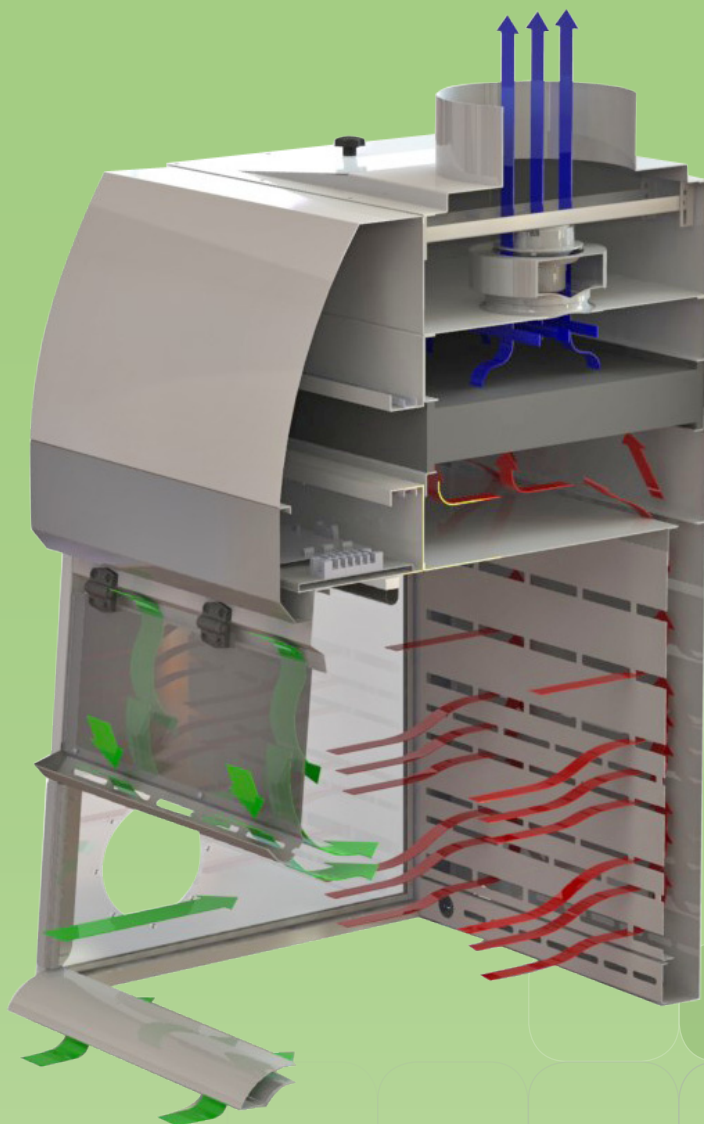
- The 5° angled front frame improves viewing on the workspace
- Lightweight sash with position hinge to provide easy access on equipment inside
- Instant start-up fluorescent lamp
- The arm rest is raised above the work zone to improve comfort and to ensure the user's arm is not blocking the airflow
- Optimized side panels provide more light inside

CABINET CONSTRUCTION

- The cabinet is fully assembled and ready to install and operate when shipped
- Jet black granite table top and optional support stand
- Easy to clean baffle due to pivoted design

ELECTRICAL SAFETY AND CERTIFICATION

- All components meet or exceed applicable safety requirements
- Each cabinet is individually tested at the factory for electrical safety
- Documentation specific to each cabinet serial number is maintained on file



- ULPA-filtered air
- Unfiltered / potentially contaminated air
- Room air / Inflow air

ESCO PHARMA[®] PLATFORM SPECIALIST.



ISOCIDE™

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