



Where People & Product Protection isn't a Question, it's the Answer.

Aseptic | Containment | Nuclear



Extract Technology DOWNFLOW BOOTH



... IN STAINLESS STEEL PRODUCT FABRICATION ...

Downflow Containment Booths

Extract Technology, UK designers and manufacturers of Downflow Booths for over 25 years, announced in October 2007 that manufacturing of their Booths for the North American market would now be handled from the manufacturing plant in New Libson, WI of its sister company Walker Barrier Systems.

Walker Barrier Systems has been producing high quality stainless steel Isolators for both containment and aseptic applications for over 20 years. Their manufacturing facility has been expanded to produce the same high quality Extract Technology products, thus giving North American customers the benefit of local manufacturing and service.

The Extract Technology Booths are used extensively in the pharmaceutical industry to safeguard operators against harmful dusts generated during many manual powder handling operations. Clean air from the ceiling plenum is distributed evenly across the whole of the work area pushing any respirable dust generated downward and away from the operators breathing zone.

As the dust moves down to a low level, the high velocity exhaust grilles direct the dust into the filters. The onboard filtration system comprising of a minimum of fine dust filters and HEPA filters, removes the dust before returning the clean air into the ceiling plenum. A small amount of air is exhausted after the filters thereby creating a slight negative environment. Inward air movement into the Booth at low level ensures containment.

A new high efficiency fan/drive system reduces noise levels, while providing automatic fan volume control to overcome the pressure drop as the filter dust burden increases, without the need of a frequency inverter. Magnehelic pressure gauges provide an instant visual indication of the filter condition and the electrical control panel is located at the rear of the Booth to control the lights, motor, power sockets and stop/start station. The customer needs only supply three-phase, neutral and earth to the panel to enable start up.

DESIGN ADVANTAGES

- Guaranteed operator exposure levels of $100\mu\text{g}/\text{m}^3$ (task duration), which can be improved with the use of flexible or rigid screens to $10\mu\text{g}/\text{m}^3$ (task duration)
- Available in epoxy coated zintec steel, 304/316L stainless steel or a combination of both
- Various heights and widths (up to 6m) are available
- Safe working depths to 2.2m are available to suit all applications
- Custom filtration designs with a minimum of fine dust and then Hepa filters in either the technical stack or the ceiling plenum
- Low noise levels (<70 dBA) on the smaller PharmAir Booth range
- Single pass/once through airflow systems used in applications where solvent vapors are present

OPTIONAL FEATURES

If required, a comprehensive list of options is available to customize the Booth to your requirements.

- Cooling systems to offset heat gains inside the Booth
- Audible and visual alarm packages
- Downdraft workbench in various widths
- Safe change (Bag-in, Bag-out) filter housings
- Cut-outs and drawers for the integration of a computerized dispensary management system
- Photo sensitive lighting
- High level exhaust grills
- Door and window systems
- Pallet bumper rails
- Base plinth to enable coving by client
- Upgrade to suit explosive dust and gas environments
- Incorporation of lifting and tipping systems
- Materials and personnel airlocks
- Roller conveyors, rapid roller doors and turntables can be incorporated
- Independently validated to $<10\mu\text{g}/\text{m}^3$ (task duration)
- Mobile flexible workstation
- Rigid and flexible screens together with stainless workstations are available depending upon the application and number of operations to be undertaken



Mobile Flexible Workstation

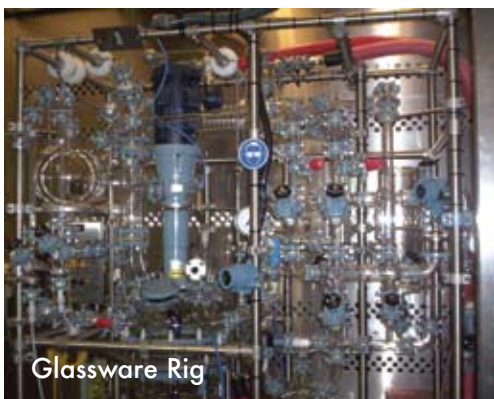
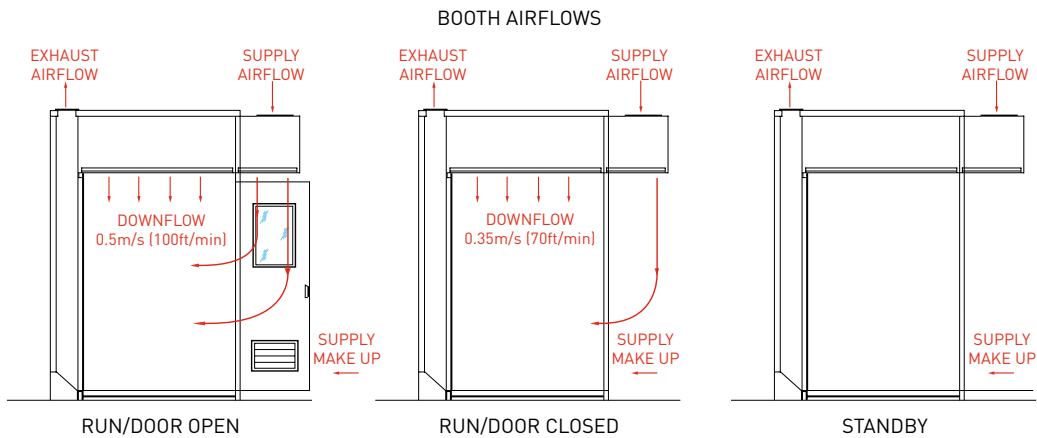
... FOR THE CHEMICAL, PHARMACEUTICAL, AND NUCLEAR MARKETS ...

Glassware Containment Booths

The Extract Technology Glassware Containment Booth has been developed to protect personnel from hazardous dusts, vapors and aerosols during reactions, distillation and general experimental work, normally undertaken in Kilo Labs.

Modular construction offers the ultimate in design flexibility, with three operating widths available. Operator access to the glassware rig is provided by robust hinge open doors with safety glass vision panels. An air transfer grille mounted in the base of each door permits movement of the fresh air supply from the operator zone through to the equipment zone.

The airflow method ensures that the glassware equipment enclosure is maintained under negative pressure and that all vapors are effectively drawn into the exhaust plenum. Unlike traditional walk-in fume hoods, Glassware Containment Booths offer operator protection to levels as low as $10\mu\text{g}/\text{m}^3$ (task duration) with 100% fresh air supply.



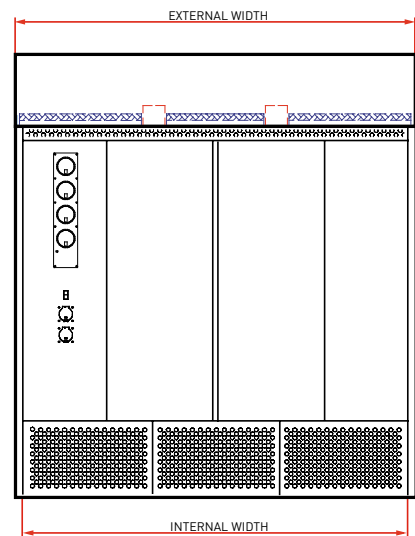
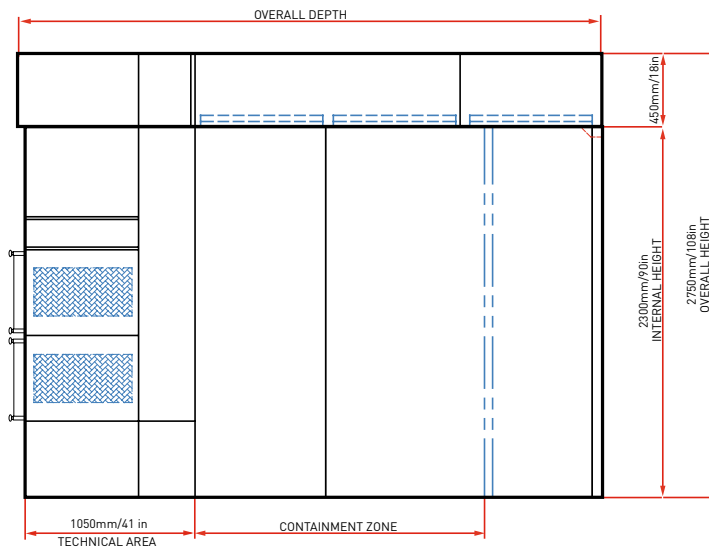
DESIGN ADVANTAGES

- Modular construction offers the ultimate in design flexibility
- Operator exposure levels of $<10\mu\text{g}/\text{m}^3$ (task duration) are attainable
- Most operations are carried out from outside the Booth structure
- Integrated with customers own HVAC system, or supplied as part of the Booth package
- Hazardous area plenum mounted lighting
- Reduced airflow settings for stand-by or night operation
- "Stay open" hinged doors to assist equipment loading

...FOR QUALITY-ASSURED PRODUCTION.

Booth size	External width (mm/in)	Internal width (mm/in)	Overall depth (mm)			Chilled water flow rate l/sec (gpm)	Fused supply (Amps)
			"L" model (containment depth 1200mm/47in)	"LS" model (containment depth 1800mm/71in)	"LX" model (containment depth 2300mm/90in)		
1.5m	1500/59"	1400/55"	2750/108"	3630/143"	4425/174"	0.13 (2)	25
2.0m	2100/83"	2000/79"	2750/108"	3630/143"	4425/174"	0.13 (2)	25
2.5m	2500/98"	2400/94"	2750/108"	3630/143"	4425/174"	0.13/0.26 (2/4) (LX)	25
3.0m	3000/118"	2900/114"	2750/108"	3630/143"	4425/174"	0.13/0.26 (2/4) (LS & LX)	25
3.5m	3600/142"	3500/138"	2750/108"	3630/143"	4425/174"	0.26 (4)	25
4.0m	4200/165"	4100/161"	2750/108"	3630/143"	4425/174"	0.26 (4)	25
4.5m	4600/181"	4500/177"	2750/108"	3630/143"	4425/174"	0.26 (4)	32
5.0m	5000/197"	4900/193"	2750/108"	3630/143"	4425/174"	0.26/0.39 (4/6) (LX)	32

Standard Internal Height on all Booths: 2300mm/90" – Standard Overall Height on all Booths: 2750mm/108" – Standard Technical Area Depth: 1050mm/41".
US dimensions are approximate.



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A division of Walker Stainless Equipment Company LLC

Extract Technology products for
North America manufactured
by Walker Barrier Systems

