



Engineered solutions providing total containment for your applications

# Extract Technology... providing Engineered Containment Solutions

Extract Technology are a leading supplier of containment systems for the pharmaceutical, chemical and biotech markets. Our well established product range includes Containment Booths for operator protection from respirable dusts, Dispensing and Sampling Facilities as custom solutions designed and supplied by one company, Rigid and Flexible Isolators for containment of potent compounds and processes, and a full range of Pack-Off systems to safely offload powdered or wet cake product into drums or IBC's.

- Head office and manufacturing facility in Huddersfield, UK.
- Sales offices, engineering and maintenance support in the USA.
- Leading the market over the last 25 years in the design and manufacture of innovative, high quality dust containment systems.
- Delivering optimum operator protection from hazardous dusts particularly in the pharmaceutical industry.
- Satisfying the most demanding applications with our high quality and leading edge products.
- Successful projects completed with major pharmaceutical companies globally.

## Downflow Containment Booths

Extract Technology Booths have been used extensively in the pharmaceutical industry for over twenty years, protecting operators from the harmful dusts generated during manual powder handling operations such as dispensing, sampling and charging.

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. The high velocity exhaust grilles direct the dust into the on-board filtration system which then recirculates the clean air back into the ceiling plenum. A small amount of air is exhausted after the filters to ensure containment in the Booth.

Containment Booths housing glassware rigs are also available, and designed to protect operators from dusts, vapours and aerosols during reactions and distillation work in Kilo Labs.

### Features:

- Guaranteed operator exposure levels of  $100\mu\text{g}/\text{m}^3$  TWA. The use of flexible or rigid screens can improve this to  $<10\mu\text{g}/\text{m}^3$ .
- Available in epoxy coated zintec steel, 304/316L stainless steel or a combination of both.
- Various heights, widths and safe working depths available.
- Custom filtration systems with optional Safe Change (Bag-in, Bag-out) filter housings.
- Recirculatory or single pass (once through) airflow, depending on the products being handled.



Weighing and Sieving Operations  
inside a Downflow Booth



Custom design QC Sampling Facility



Dispensing Booth with Integrated  
Vacuum Lifter and Post Hoist

## Dispensing And Sampling Facilities

In certain dispensing and sampling applications, the requirement is not just for containment of the dusts which can be achieved with an Extract Containment booth, but for a cGMP facility incorporating airlocks, changing rooms and a range of allied equipment such as vacuum manipulators, roller conveyor track, turntables and rapid roller doors from approved vendors.

Extract Technology have experience of many such installations, with the client benefiting from a custom designed solution from a single contact point.

### Features:

- Customised design to suit the client's specific application.
- The whole package is designed and managed by Extract Technology.
- The design can incorporate an HVAC supply and exhaust, alleviating the need to link in with the customers system.
- Full validation services available including IQ/OQ and dust in air/containment testing.

## Pack-Off Systems

The Extract Pack-Off Heads are designed to offer a basic form of primary dust containment when off-loading and packing-off product.

A variety of Sealing Heads (outward inflating, inward inflating, downward inflating, moulded and compressible seals) are available, together with many optional features such as screw feeders, cone mills and weighing and dosing systems

Through the incorporation of a secondary containment system such as a Laminar Flow Booth, X-Flow Booth or Isolator, containment levels can be improved to  $<1\mu\text{g}/\text{m}^3$  TWA.

### Features:

- Dust free offload to cGMP standard.
- Pharmaceutical grade 316L stainless steel construction.
- FDA validatable seal that is quickly and easily replaced.
- Extraction control via a pneumatically operated balance valve.
- Designed for single or continuous liners.

## Rigid and Flexible Isolators

We manufacture a wide variety of Containment Isolators for handling potent compounds that can offer levels of operator protection as low as  $10\text{ng}/\text{m}^3$  TWA (guaranteed). These include designs for Sampling, Dispensing and Sub-Division, Mixing, Milling and Vessel Charging. Standard solutions which include many special features and design advantages are available. However, should your application require a custom designed unit, then we work closely with you to design the isolator specifically to meet your needs.

### Rigid Isolator Features

- Positive pressure and turbulent or unidirectional airflow.
- Ergonomically designed "Pharmaport" oval gloveports.
- Fully welded 316L stainless steel construction with radiused corners.
- PLC based control systems available.
- Single or multiple chamber arrangements.

### Flexible Isolator Features

- Guaranteed containment performance in the range of  $10\mu\text{g}/\text{m}^3$  to  $1\mu\text{g}/\text{m}^3$ , dependent upon the designs and SOP's.
- Rapid installation and start up.
- Self contained air movement and negative pressure filtration system
- Ergonomical design to maximize operator comfort.
- Low cost of replacement at product changeover or campaign end.

## Servicing and Aftermarket Support

Extract Technology also offers installation, commissioning and IQ/OQ validation by our fully trained engineers to ensure the system fully conforms to your requirements.

A Planned Maintenance Package will provide a scheduled visit to undertake tests and inspection of equipment, together with necessary repairs and adjustments to minimise disruption to production schedules. To complete the package, our dedicated Spares Department will supply total aftermarket support worldwide.



Process Pack-Off System with Inward Inflating Seal, Screw Feeder and Cone Mill



Twin Chamber, Multi Product Dispensing Isolator



Flexible Isolator to House a Weighing and Blending Machine



**extract** TECHNOLOGY LTD.

Bradley Junction Industrial Estate  
Leeds Road  
Huddersfield HD2 1UR  
United Kingdom

Tel: **+44 1484 432 727**  
Fax: **+44 1484 432 659**  
Web: [www.extract-technology.com](http://www.extract-technology.com)