



DEC Isocharge

DEC Isotube

DEC Isodrop

**Containment
Solutions**

Powder Handling Excellence

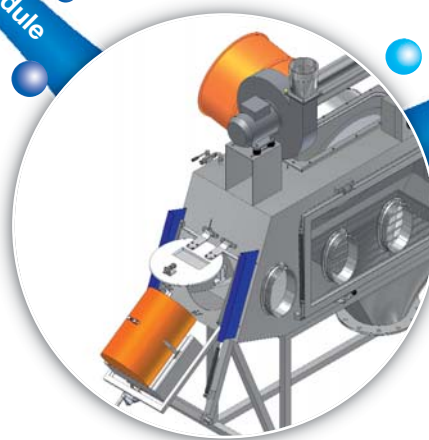
DEC Isocharge

For Rapid Powder Charging with Room Air



'Open Manway Charging' is no longer acceptable, but a new development being successfully used by Dec clients worldwide, is the **'DEC Isocharge'**. Combining the open aspects of a Laminar Flow Booth with a Glovebox Isolator to enable the 'Rapid and Safe Charging' of powder products.

Optional 'Drum Charge Adaptor', suitable for a range of drum sizes.



- Fast, Open Charging of Bags and/or Drums
- High Containment <1µg/m³ with HEPA filtration, allows 'Shirt Sleeve' Operation
- Automated or Manual Airflow Control options available
- Full CIP capability
- Charging Hopper options available for all powders, lumpy, sticky or wet
- Integrates seamlessly with the PTS

Can be easily adapted for 'Multiple Vessel Charging' via the proven Dec PTS (patented) Technology.

DEC Isotube

For Contained Powder Charging with Clean Air



The **'DEC Isotube'** provides a high level of containment together with control over environmental conditions. This 'Clean Air Transfer System' is equipped with a drum sealing system ensuring contained drum loading and powder charging.

We are able to offer a number of drum sealing options for a wide range of drum diameters.



**INERTION OPTIONS
FOR HAZARDOUS
PRODUCT HANDLING
OR STERILE
APPLICATIONS**

- Closed charging of drummed powder in a Clean Air Environment
- High containment <1µg/m³ with HEPA filtration, allows 'Shirt Sleeve' Operation
- Capable of supporting an inerted atmosphere for handling low MIE or degradable products
- Safe waste removal through Continuous Liner Port
- Gravity discharge or integration with PTS
- Operation under controlled atmospheric GMP conditions

DEC Isodrop

For Contained Product Emptying and Recovery



The single or multi chamber **'DEC Isodrop'** Containment Glovebox enables safe emptying, sampling and general handling of powder products. Suitable for integrating with filter dryers, ovens, centrifuges, etc. Options include: Glove Safety Barrier, Oxygen Monitors, RTP's, Continuous Liners and many more.



The 'DEC Isodrop' in conjunction with Dec's PTS Feeder system provides accurate target weight filling of IBC/Drums in a contained manner.

- High containment <1µg/m³ with HEPA filtration, allows 'Shirt Sleeve' Operation
- Venturi or Exhaust Fan options for venting the liner
- Full CIP capability
- Capable of supporting an inerted atmosphere for handling low MIE or Degradable Powder
- Suitable for a wide range of powder handling discharge arrangements
- Possible integration of supplier controls package (filter dryer as shown)

The alternative twin chamber 'DEC Isodrop' provides integral contained pack-off, for powder products with weighing options available.

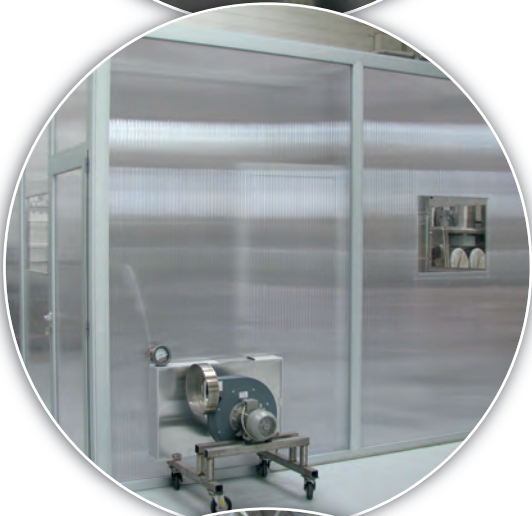
More simple Pack-off options include direct PTS transfer to a Continuous Liner with HEPA Filtration.





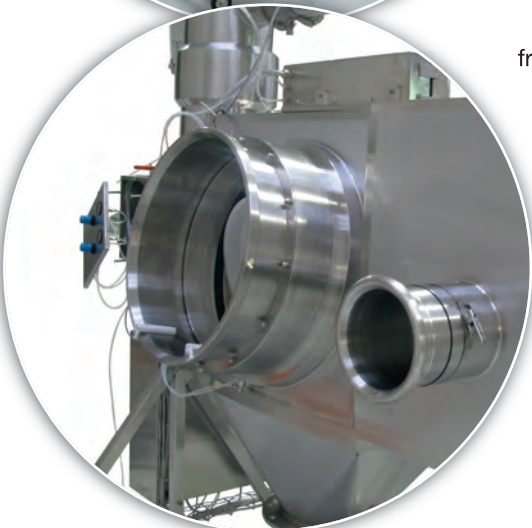
Internal view of the '**DEC Isocharge**' utilizing both Laminar Flow and Glovebox Technology to allow safe and rapid powder charging.

Our 'Clean Room Manufactured and Packed' for optimum cleanliness, **Continuous Pack-Off Liner** is folded 'Top to Bottom' to give a greatly increased capacity and high containment, $<1\mu\text{g}/\text{m}^3$.



Dec's own, purpose built, **SMEPAC** compliant facility for Containment Testing.

A twin chamber '**DEC Isodrop**' facilitates both the contained emptying and pack-off of product from a vessel, such as a filter dryer.



The '**DEC Isotube**' for fully contained and clean transfer of products in drums, in combination with Dec's dense phase **Powder Transfer System PTS** or by gravity.

Be it for operator or product protection, the Dec Group has a solution for all your powder handling requirements.





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