## High Containment Pack-Off





- Safe packing of toxic API products
- Controlled atmosphere
- Allows handling of OEB 5 materials  $(0.1-1 \mu g/m^3)$
- Protection from product exposure
- Prevents product contamination
- No clean room requirement
- Easy cleaning CIP
- Suitable for ATEX zone 1/21











rator Safety

## High Containment Pack-Off



Dec proposes a revolutionary solution when it comes to packing toxic API products. Final API powders must be packed under a controlled atmosphere and at the same time operators must be protected from product exposure.

Usually the packing system is installed in a clean room and contained by an enclosure. The aim of this system is to enable the final packing of APIs in a contained and GMP manner without the requirement of a clean room around the filling area.

The system prevents product contamination from the outside atmosphere as well as operator exposure at all times. This concept, validated by competent authorities, allows to handle OEB 5 materials (0.1-1  $\mu$ g/m³) as it comprises primary and secondary containment with an additional level of safety.

The plant consists of a compact glove box including an integrated CLS Continuous Liner System. The cabin includes a laminar flow system and a lifting system to seal the drum to liner head. The glove box includes an inlet and an outlet HEPA filter and can be set under positive or negative pressure according to process requirements.

The drums are brought into the pack-off cabin and are then sealed by the pneumatic lifting system. An external liner is used to connect/disconnect the drums in a contained manner. The area below the glove box is closed from three sides. The rear panel is provided with an outward air flow preventing contamination of this area from external impurities or an inward air flow during the filling of the drum when handling highly toxic powders.

The continuous liner cartridge can also be changed in a contained manner and in order to facilitate the installation of the liner, two operators can work together from each side of the unit.

This system can be installed directly under the process equipment to be discharged or the powder can be transferred by using PTS Powder Transfer System® when installed in a remote area.

The whole system can be fully cleaned in place and is suitable for ATEX zone 1/21.

## **Features**

- Accurate to 1 g
- Containment up to nanogram level
- Toxic and sterile product application
- Fills bags, continuous liners, aluminum canisters and containers
- Controlled product feeding with automatic weighing
- Manual or automated sampling
- CIP/SIP system

## **Options**

- Load cells for precise dosing when using PTS with DosiValve®
- Integrated and automated mill or sieve
- Sampling out of the system with MPTS Sampling Device



