OVERVIEW

The ILC Dover Bag In/Bag Out (BIBO) system is a family of contained transfer designs for multiple processes. The primary components for this validated operation consist of multiple groove canisters, docking interface hardware, and softgoods in either continuous liner form or discreet liners. This system can be applied to both rigid and flexible isolators. The use of multiple size canisters allows a broad range of needs to be met, systems can be retrofit to existing assets, and the BIBO system requires a low capital outlay.

OPERATION

By utilizing the patented multi o-ring and flexible containment techniques developed by ILC Dover, this system complements other ILC Dover containment components. The hardware is docked to the containment enclosure either by using the existing alpha/beta port hardware or bolting directly to the wall of the rigid isolator. The liner is then extended over the item to be introduced or removed from the enclosure and then crimped off to complete the contained transfer.
Bag In/Bag Out System

Applications  Current and Potential

Current applications: tool pass through on 22 rigid isolators at one international Pharma manufacturer’s site, trash bag out, sample bottle transfer, tablet transfer for testing/analysis, pre-packaged seed/API processing after tare weight process.

Other potential applications: document transfer, gamma irradiated for sterile transfer operation, wall mounted in process suite for contained pass thurs.

Containment Level

Nanogram containment levels demonstrated during task based operations – see data below.

<table>
<thead>
<tr>
<th>Sample*</th>
<th>Location</th>
<th>Duration of Operation (mins.)</th>
<th>Measured Airborne Concentration (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Sample (AS-0BH)</td>
<td>At Bagout Port</td>
<td>31</td>
<td>&lt;0.017</td>
</tr>
<tr>
<td>Operator #1 (PSBZ)</td>
<td>On Shoulder</td>
<td>31</td>
<td>0.017</td>
</tr>
<tr>
<td>Operator #1 (PSBZ)</td>
<td>On Shoulder</td>
<td>30</td>
<td>&lt;0.017</td>
</tr>
<tr>
<td>Operator #2 (PSBZ)</td>
<td>On Shoulder</td>
<td>30</td>
<td>&lt;0.018</td>
</tr>
<tr>
<td>Source Sample (AS-0BZ)</td>
<td>At Bagout Port</td>
<td>30</td>
<td>&lt;0.017</td>
</tr>
</tbody>
</table>

* Finished Product, raw materials, cleaning materials, waste materials

FEATURES

- Validated system
- Proven and tested softgoods
- Disposable
- Bolt on or Rapid Transfer Poly Interfaces available

BENEFITS

- Minimizes risk during operation
- ArmorFlex® films are regulatory compliant
- Eliminates concern of cross contamination due to “pneumatic” effect of low end films leaking
- Reduced cleaning and cleaning validation costs
- Reduced process time and cost by eliminating multiple RTP canisters
- Eliminates RTP seal maintenance

*ArmorFlex is a registered trademark of ILC Dover LP.