Bulk Bag Unloading

...a world of experience in powder handling
IEDCO Custom Bulk Bag Unloading Systems

If you manufacture products using powders, it may mean that one or more of your ingredients comes to you in large bulk bags [big bags, super sacks, FIBC’s] of varying sizes. This means that you are faced with having to address the following challenges:

- The safety issues associated with the lifting, handling, manipulating large heavy bags.
- Containment issues associated with the opening and closing of the bags so the operator and surrounding environment are protected from dust and exposure to the product.
- How to best induce and control flow of the product out of the bag.
- How to best transfer the product from the bag to your process.
- How to most economically handle multiple ingredients received in bulk bags.

IEDCO designs and manufactures custom Bulk Bag Unloading Systems to meet your application specific needs. Systems may be supplied with integral hoists, load cells, bag agitation, various discharging valves and incorporate a range of feeding capabilities.

**Bulk Bag Unloading System Features**

At IEDCO we have developed a wide range of custom designs to provide reliable flow of your product from bulk bags to your process and doing so in a safe & contained manner.

Our bulk bag unloaders are designed to fit your specific requirements, and our systems can be designed to handle all types and sizes of bulk bags.

These systems can consist of some or all of the following main components:

- Bag Lift Frame with Liner Clamp
- Bulk Bag Vibration Pan or Pneumatic Agitation Paddles
- Pneumatic Bag Spout Choker
- Enclosed or Open Spout Access and Sealing System
- Sanitary Butterfly or Rotary Valve
- Central Control Panel
- Cable or Chain Lift Hoist with Trolley
- Adjustable Support Frame to Accommodate Different Sizes of Bulk Bags
- Construction Materials Ranging from Mild Steel to 316 Stainless Steel
- Bulk Bag Deflation System
- Dust Collection System or Integration
Bag Spout Access & Seal Enclosure

Our Bag Spout Access & Seal Enclosure provides easy and safe access to the discharge spout of the bulk bag. This allows the operator to connect the spout to the discharge inlet, and safely seal and untie it.

The operator pulls the spout through our specially designed choker mechanism and internal flange ring (with a compressible seal), and places it over the discharge chute.

The flange ring is lowered onto the inlet via pneumatic cylinders controlled by the nearby panel.

Once lowered, a dust-tight seal is created by compressing the flange ring’s seal tightly against the inlet rim. The operator is now able to untie the bag spout and the system is ready for dust-free discharging.

Pneumatic Controls

The controls for the Bag Spout Access & Seal Enclosure are located just below the enclosure doors. To keep operator hands in a safe position during operation, two-handed control is necessary for the operation of each function.

These functions include:

- Bag Choker Open/Close
- Flange Ring Raise/Lower

Bulk Bag Deflation System

We can provide a Bulk Bag Deflation System that will allow an operator to compact an empty bulk bag while connected to an in-house dust collection system. This eliminates the pluming of dust when bags are typically manually crushed after emptying.

The system is controlled by two pneumatically controlled valves, which allow the diverting of the dust collection suction to be used either for the Spout Access & Seal Enclosure or the Bag Deflation System.

The Bulk Bag Deflation System is a highly recommended addition to any IEDCO Bulk Bag Unloader.
Getting Powder & Tablets From Point “A” To Point “B” Is Our Only Business