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**Massage-It™ Bulk Bag Unloader
Close-It™, Tube-It™, Dust Valve
Product – Flour
Case History 3S-1224**

Background:

Due to an expansion Texamerican needed a bulk bag unloading system to unload flour into their process. The rate of discharge required was quite high, more than a standard hoist and trolley unloader could reasonably accomplish. Dust tight, guaranteed discharge and a solution to meet their production/unloading needs were the main factors in partnering with 3Sigma.

Customer Needs:

- Dust tight system. Minimize any product in the atmosphere.
- Food grade
- Proper and complete discharge of each bag.
- Ability to unload bags quickly, with less than a 5 minute bag change out.
- Ability to completely stop material flow upon demand.
- 304 SS contact surfaces

Solution:

- As the headroom was limited, we could not provide a hopper under our unloader for storage. Instead we provided a dual loading/dual hoist system. This allows our client to pick up one bag while the empty bag is being removed, saving valuable minutes.
- 3Sigma provided its Massage-It™ bulk bag unloader that moves the most stubborn products. The heavy-duty pipe paddles agitate to a full 90 degrees, when actuated, pushing material into the crucial flow pathway for guaranteed discharge.
- The bag platform, Contain-It™ Chamber, Tube-It™ are all fabricated from 304SS.
- The client connected his dust collector to the Contain-It™ chamber. When the access door is opened, our dust valve opens, using the required CFM only when needed. When the door is closed, the dust valve closes.
- The Close-It™ system, located at the top of the Contain-It™ chamber, allows the operator to either untie new bags or retie partially empty bulk bags. In addition, when closed, product flow stops instantly.



CONTAIN-IT™ CHAMBER WITH TUBE-IT™ DISCHARGE TUBE & CLOSE-IT™ VALVING SYSTEM



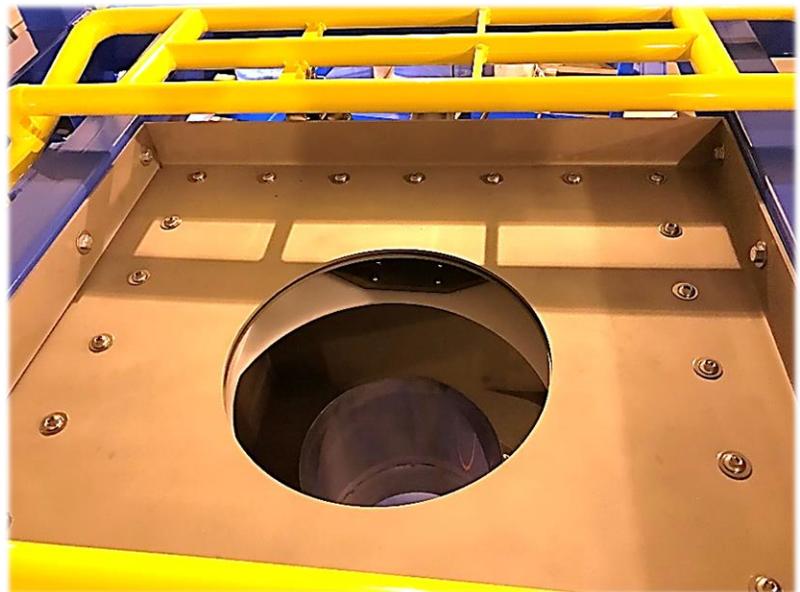
- The extra-large Contain-It™ chamber contains any and all spills. Competitive designs utilize the containment chamber as both the bag spout access and the material storage hopper, leading to environmental spills and dangerous operator exposure issues. This is not the case with our unit.

- The Tube-It™ creates one seamless system by connecting to the bulk bag on the inside of the Contain-It™ chamber and extends through the chamber to the downstream equipment.

The bag spout is placed inside the Tube-It™ discharge tube, which directs product to the process below.

HEAVY-DUTY PIPE MASASGE-IT™ SYSTEM

- Heavy-duty pipe massagers will not bend nor break like plate designed paddles.
- SS bag platform with Close-It™ Valve and Tube-It™ below in Contain-It™ chamber
- Connections: The systems comes completely wired and plumbed with the control panel mounted. Our client only needed to wire to the Hoist & Trolley (460V), 110V to control panel and one air line.



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