



# Industrial Duty Bulk Bag Unloaders

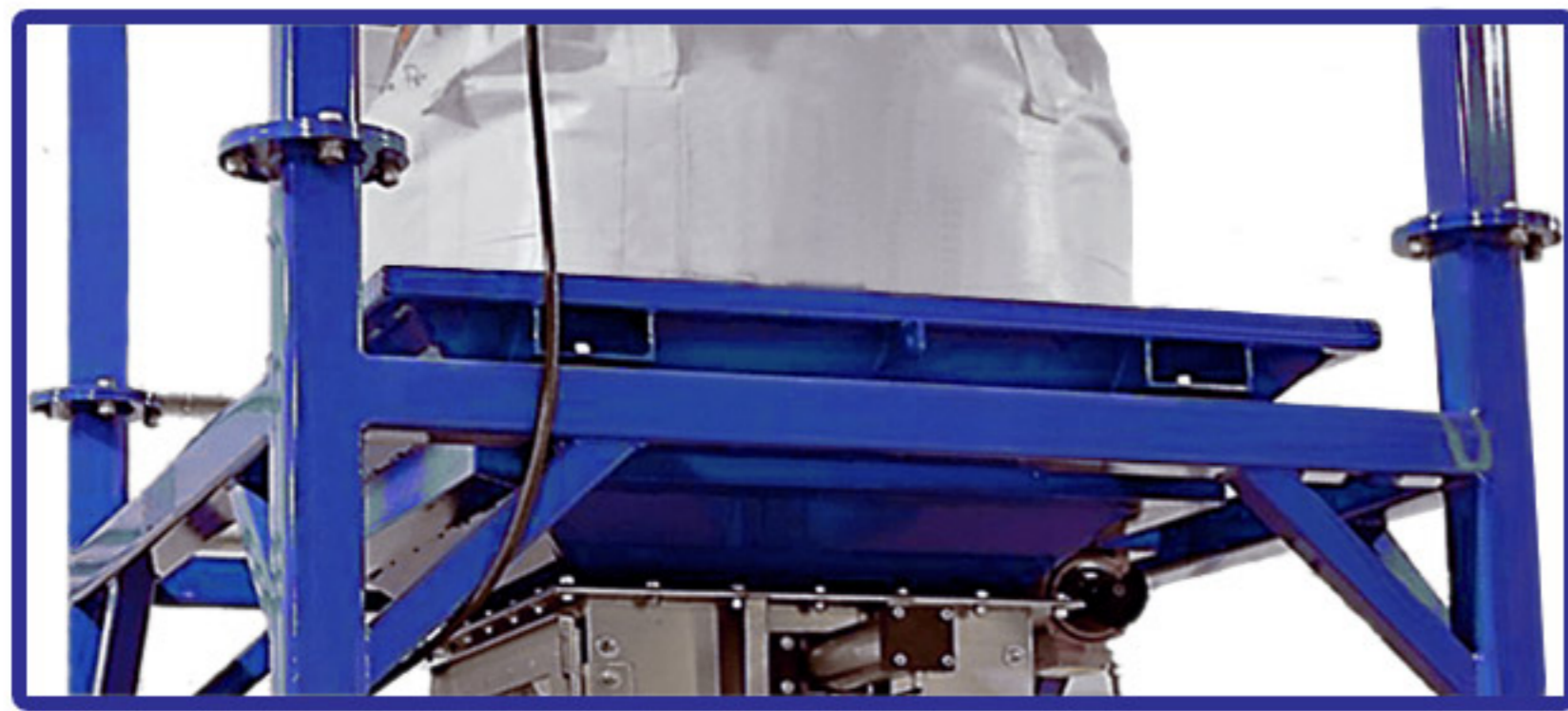


# BAG AGITATION METHODS

Proper bag agitation is crucial in discharging your product. 3Sigma offers three methods of agitation, recommending the proper bag agitation system for your products, all with a guarantee of product discharge.

## Shape-It™ Discharging System

The compacted bulk bag is set into the bag shaping platform. Vertical Vibration is then used to properly shape the bulk bag to the steep sloped platform prior to opening the bag. Once set the bag spout is easily accessed and the vertical vibration is used periodically, if needed, to discharge product. All with no moving parts.



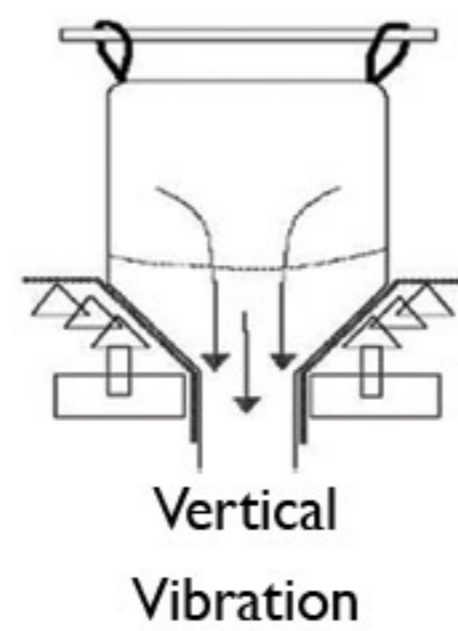
Fully Welded Bag Shaping Support Platform

### SHAPE-IT™ VERTICAL VIBRATION

- Vertical Vibration shapes the Bulk Bag to the Steep Sloped Platform prior to opening the bag
- Cycled as necessary for discharge
- No Moving Parts

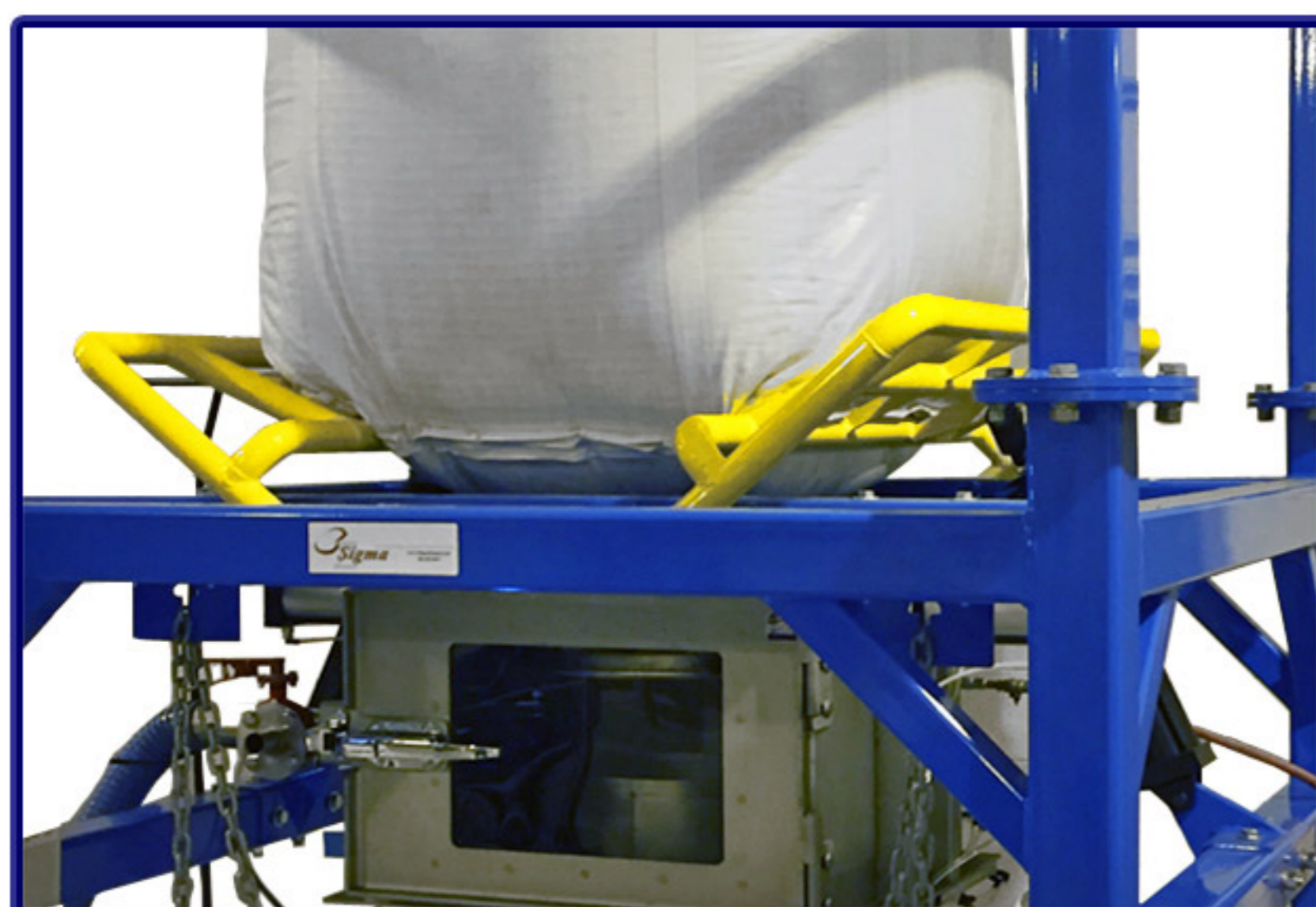
### CONTAIN-IT™ BAG ACCESS CHAMBER

- Extra Large Chamber
- Sealed Bag access
- Contain all leaks and spills



## Massage-It™ Agitation System

Dual agitators are used with the most difficult to discharge products. Heavy duty pipe agitators are used to ensure product discharge, with Massage-It agitators pivoting a full 90 degrees.



Mid Bag Agitation

### Massage-It™ Dual Agitators

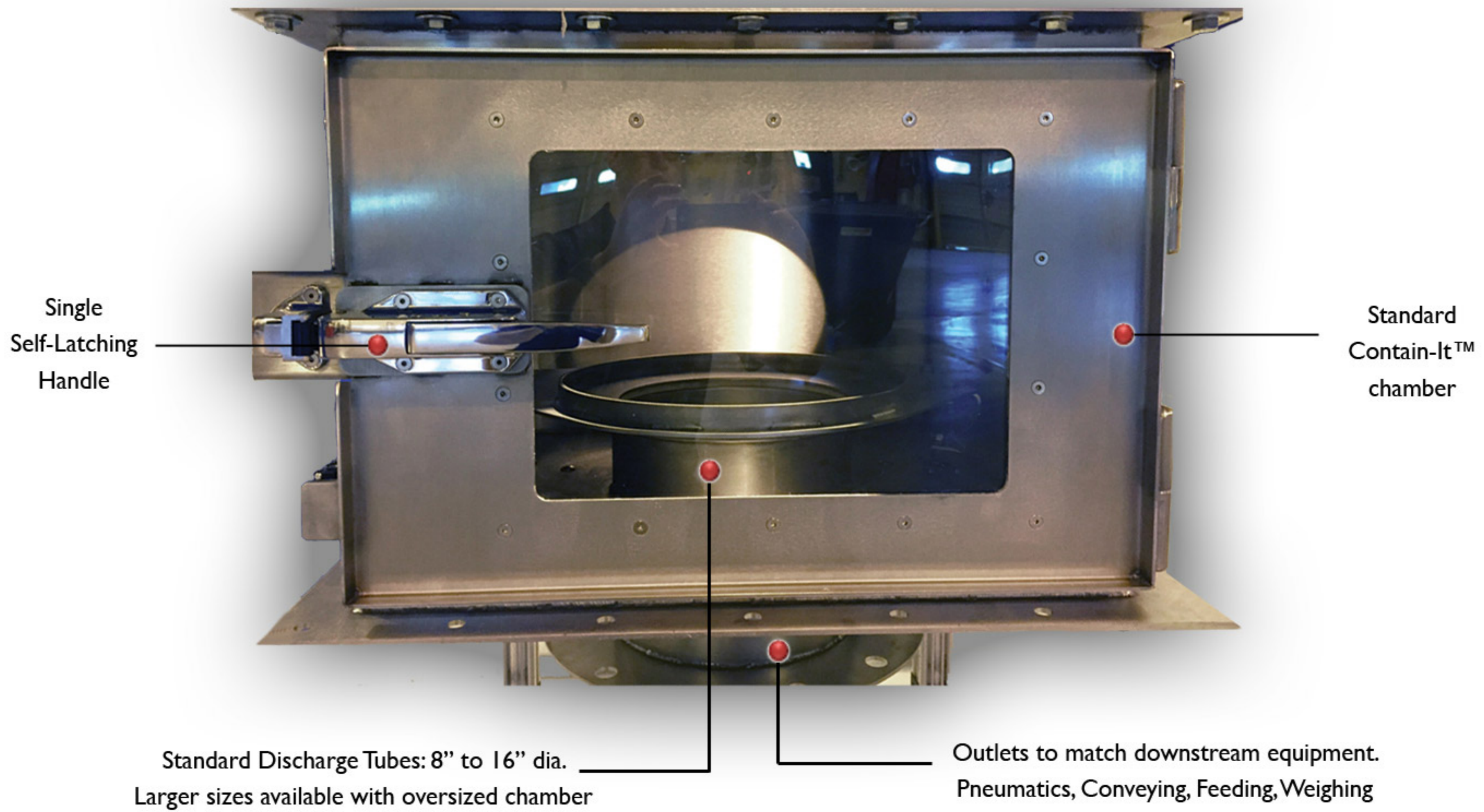


Pushes material from the edge of the bag to the outlet flow channel while breaking compacted material.

# CONTAIN-IT™ SYSTEM

Designed with the operator in mind, the Industrial Duty Contain-It™ System provides the most spacious, most user friendly access chamber available while providing an extremely high degree of mechanical dust control and flexibility.

Shaped Bag Seals Top of Chamber



Single Self-Latching Handle

Standard Contain-It™ chamber

Standard Discharge Tubes: 8" to 16" dia. Larger sizes available with oversized chamber

Outlets to match downstream equipment. Pneumatics, Conveying, Feeding, Weighing

Total Bag Access - Real Clearance



Up to 9" Clearance. Compare this to 3" to 4". Clamp cylinders are placed in the rear, out of the way. True ease of operation with no more knuckle busting

Contain Spills



Oversized chamber keeps product from escaping into the plant environment. Spills will occur - Contain-It™

# Contain-It™ System Options

Dust containment is key in most bulk bag unloading applications. Mechanical containment is properly addressed before looking at an external dust collection system. Six Levels of Dust Control to meet your specific application and plant needs.

- Sealed bag bottom on support shaping platform
- Tube-it™ Discharge Tube
- Clamp-It™ Bag Spout Clamp
- Close-It™ Bag Spout Valve
- Extract-It™ Dust Collection
- Collapse-It™ Bag Evacuation System

## Tube-It™

Base offering. The bag spout is placed into a discharge tube which is designed with a smaller diameter than your bag spout. A seal is created both against and within the discharge tube once material begins to discharge.



Very simplistic, No moving parts and a very good seal all within the Contain-It™ chamber. Can be used with Close-It™ system for added dust control.

## Clamp-It™

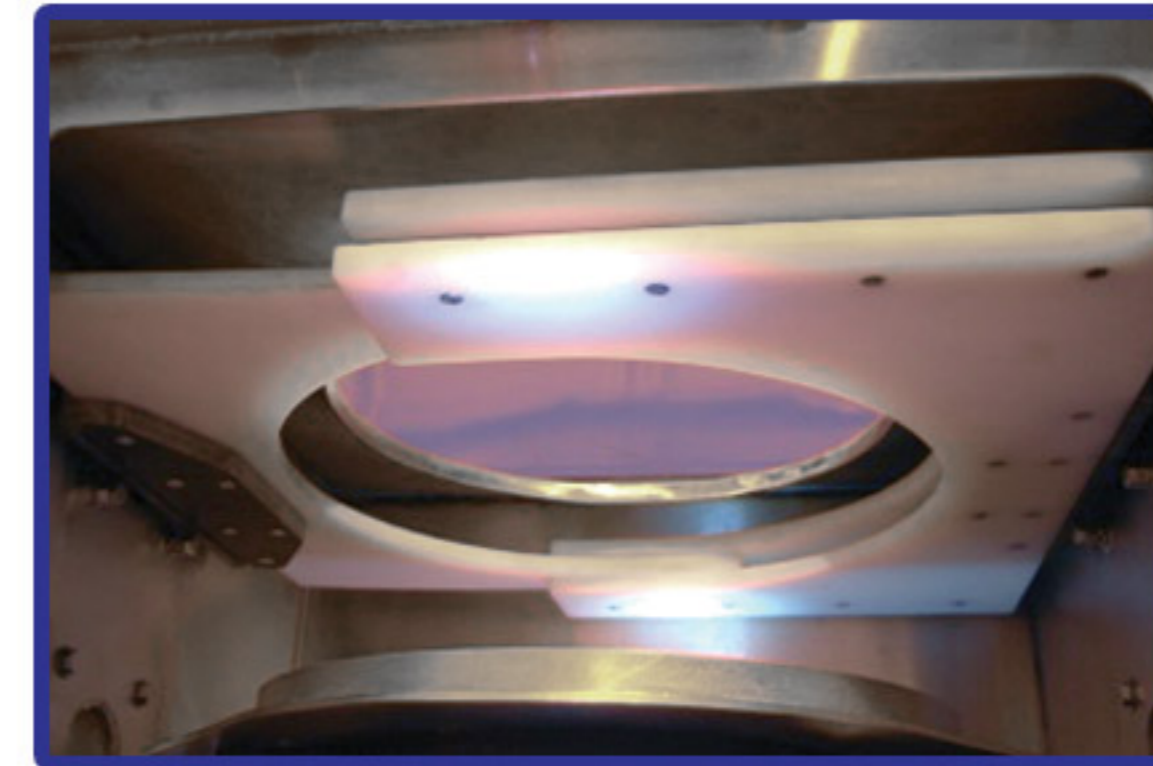
Pneumatically operated clamp ensures total containment by positively sealing the bag spout to the Tube-It™ discharge tube.



Product discharges to the process below.  
Spout length, diameter and tie point must be evaluated.

## Close-It™

The Close-It™ pneumatically actuated valve utilizes a UHMW plate within a plate to concentrically close off the entire bulk bag outlet spout on demand



Fully Open



Partially Closed



Fully Closed

The valve can be positioned anywhere from fully open to fully closed to offer a degree of flow rate control.

# Dust Collection System Options

The Extract-it™ System is used in conjunction with the Contain-It™ system and dust collection to provide further dust control by utilizing either an in plant dust collector or a collector provided with a new system to pull any dust that may be present due to leakage in unloading or at the bag seams or stitching, which is especially prevalent with fine powders in unlined bags.

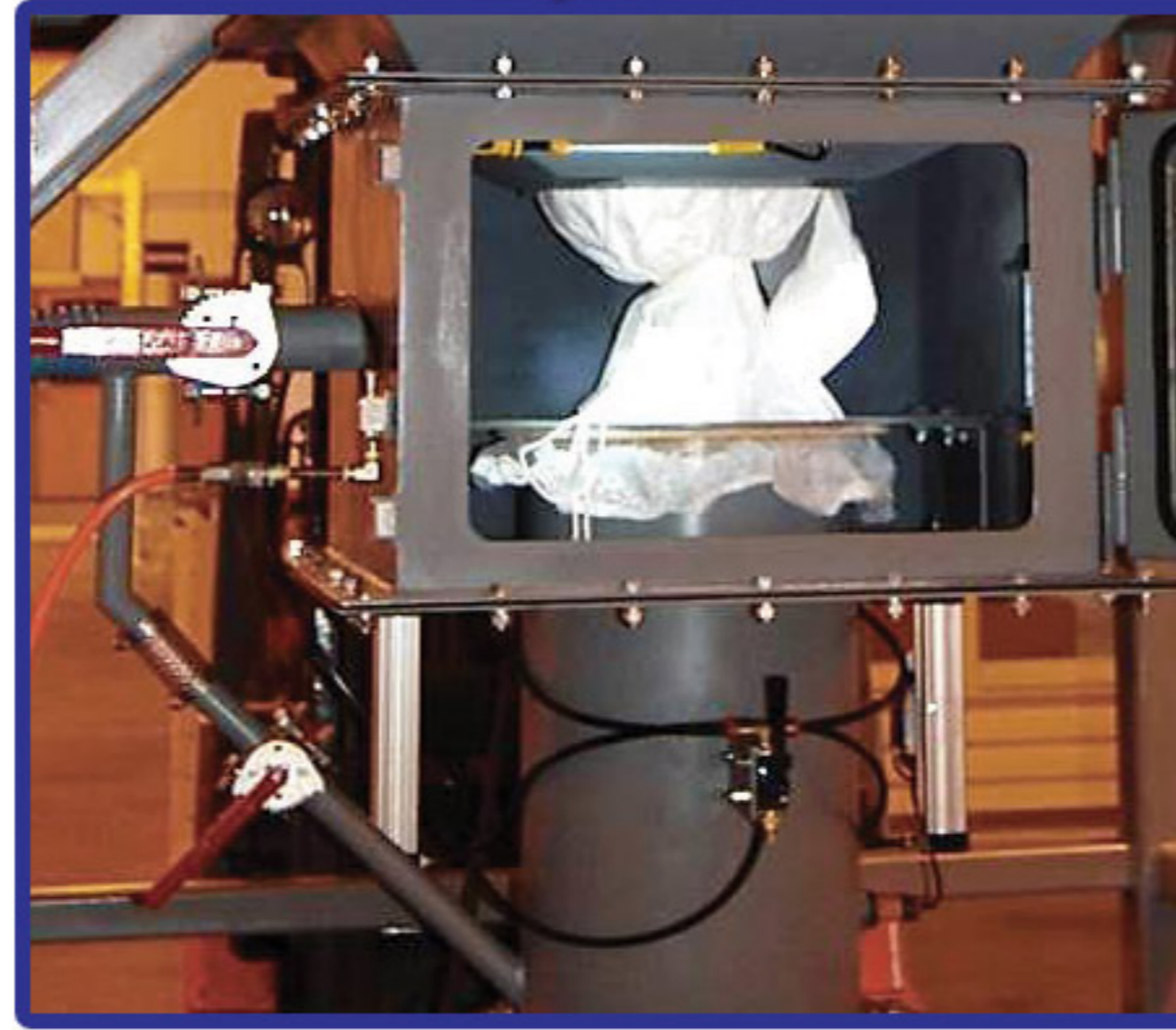
New collectors can be mounted to the bulk bag frame or can be stand-alone.

**Extract-It™**



Dust Collection - 350 CFM for proper Dust Collection on Contain-It™ chamber

**Collapse-It™**



Special Valving provided to evacuate and collapse the empty bulk bag. The Clamp-It™ system is required with this option

**Collapsed Bag**



## Contain-It™ Outlet Options



AMC Conveyor



Weigh Hopper



LIW Feeders



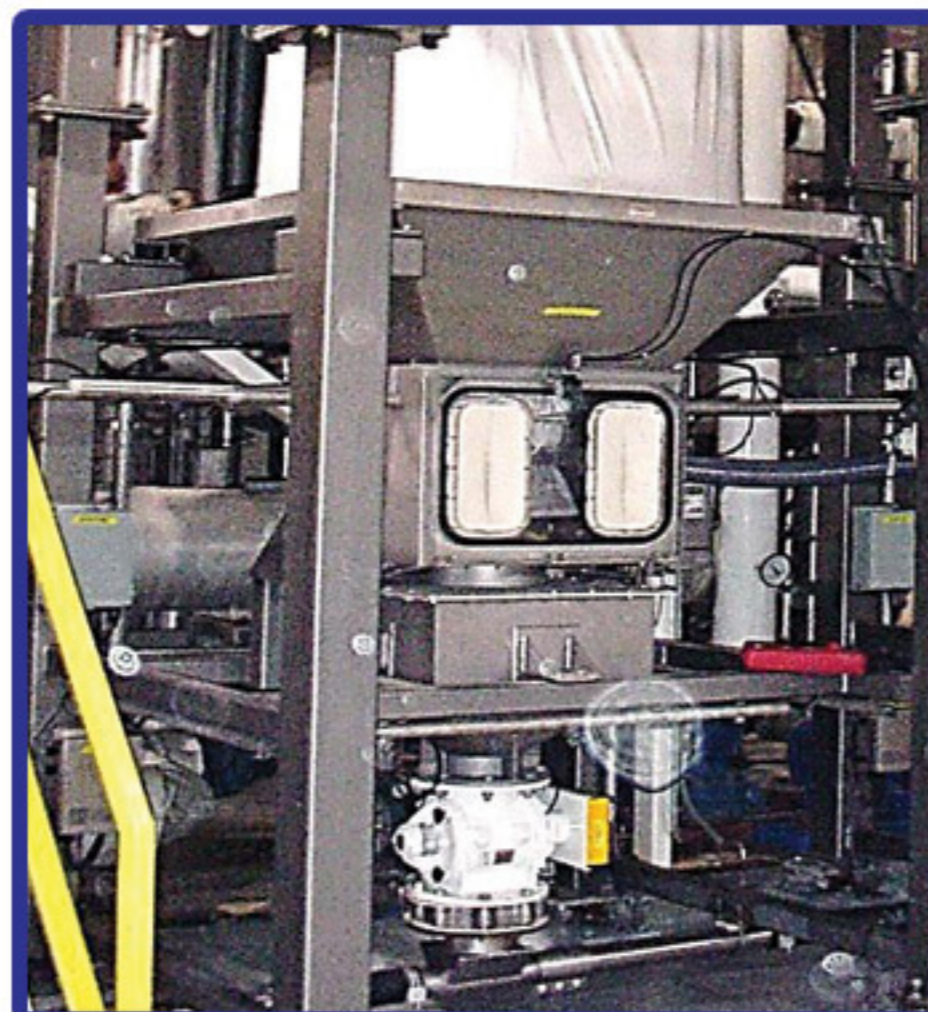
Flex Screw



Batch Weigh Feeder



Combination Bag Dump Station



Pneumatic System



Industrial Screw Conveyor



Venturi Eductor

# Industrial Duty

3Sigma Bulk Bag Unloaders are industrial duty by all standards, incorporating 70% more steel than many competitive units.

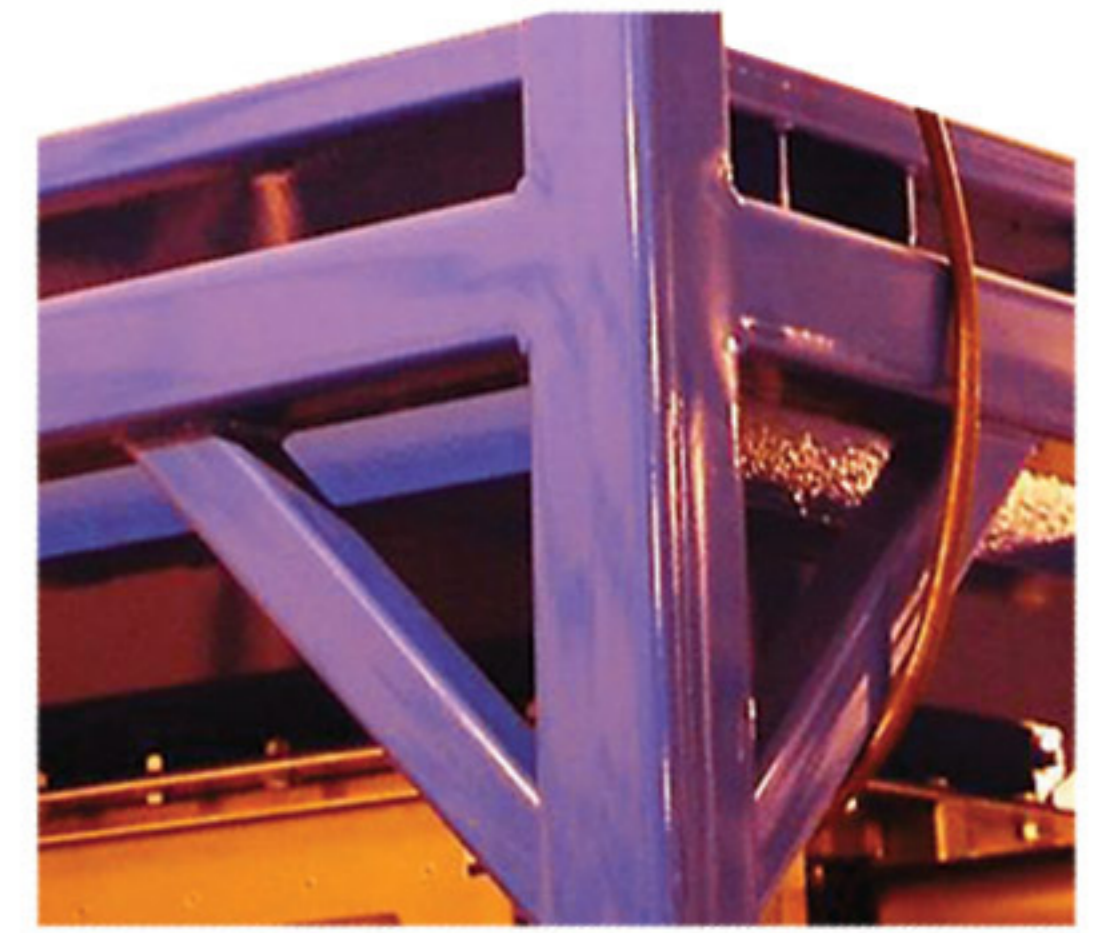
- Fully Welded Frame
- Fully Welded Cross Supports
- Structural Tubing
- Bag Platform - Fully Welded
- Bag Platform – Manufactured from Plate Steel
- Dual I-Beams to Support Trolley I-Beam



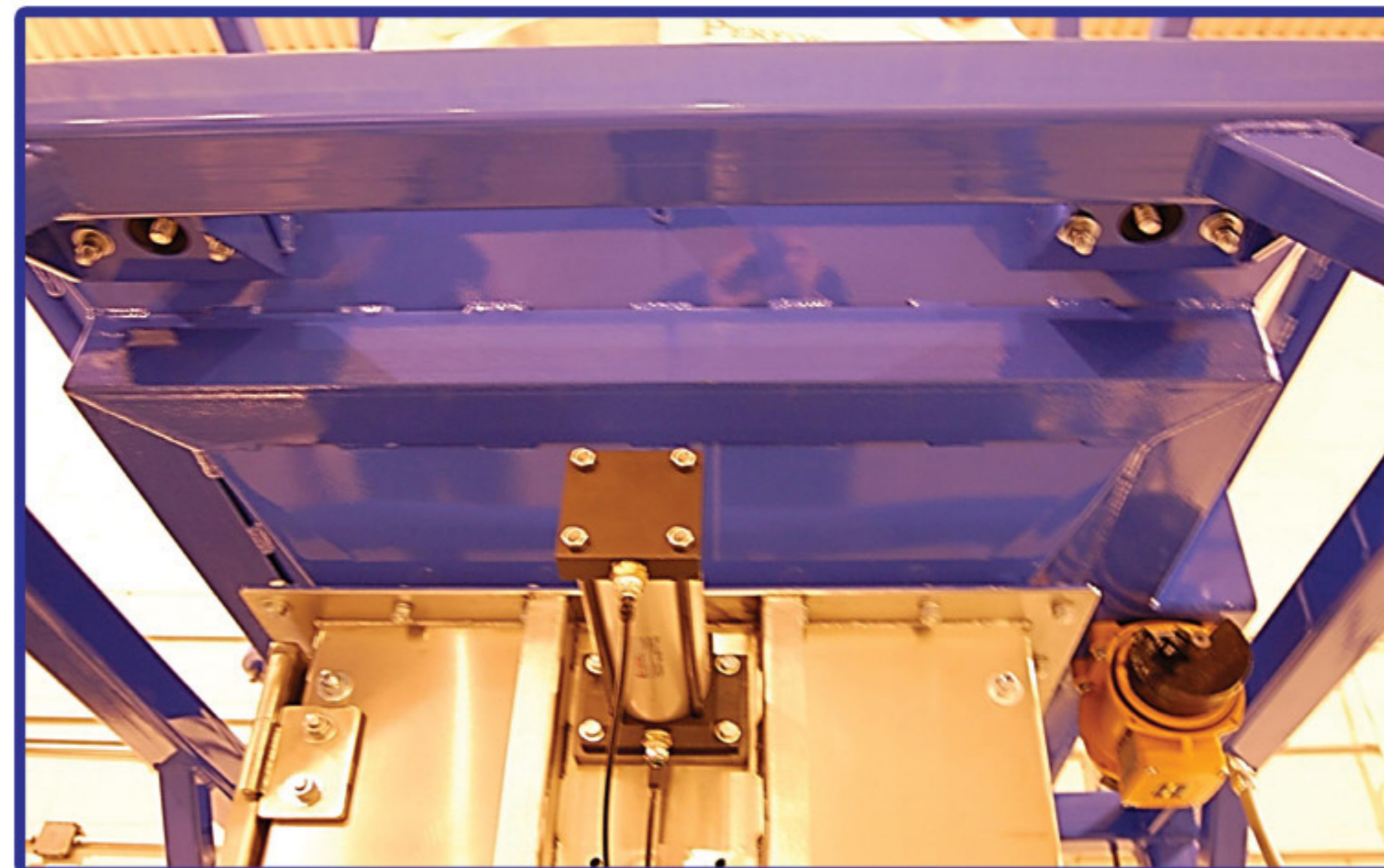
8" I-Beam Top Supports and Trolley Rail



Fully Welded Supports



Fully Welded Supports



Heavy Duty Platform Fabricated From Plate Steel With Angle Iron Stiffeners

## Testing Facility

3Sigma maintains a testing facility in Charlotte, NC for your use. Please contact us to take advantage of our no obligation testing.



704-846-1617  
[www.3SigmaSystems.com](http://www.3SigmaSystems.com)

