

## 180° Pneumatic Actuated Drum Discharger

### Application Details:

NBE CSO: E901790012  
Material: Various Pharmaceutical Powders  
Bulk Density: 30 - 40lbs/ft<sup>3</sup>  
Particle Size: Powder  
Flowability: Free Flowing when Fluidized  
Area Classification: CIID1  
Clean Procedure: Wipe Down  
2017 Project Value: \$96,318.00

### Application Overview:

A pharmaceutical customer needed a sanitary drum discharger to handle a multitude of drums ranging from 15.50" to 22.50" dia. X 28" to 36.63" tall. The customer requested no electrical components in the classified area, NBE provided a pneumatic control system to run the hydraulics and butterfly valves. The hydraulic unit was powered with an air motor. The drum rotates 180° and discharges through a magnet to ensure product quality into the downstream process.

**CUSTOM CONTAINER / DRUM DUMPER**

**Specifications:**  
 -Designed for 15.50" to 22.50" DIA. X 28" to 36.63" Tall Containers.

-Capacity : NBE's hydraulic container discharger is rated for a maximum capacity of 750 lbs with a discharge height of approx. 51" at a final rotation of 180°.

- Framework: The system is constructed of Stainless steel with Stainless steel cross members. The equipment includes fibreglide bearings and pivot pins.

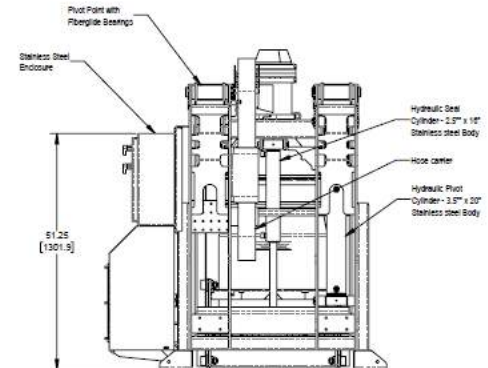
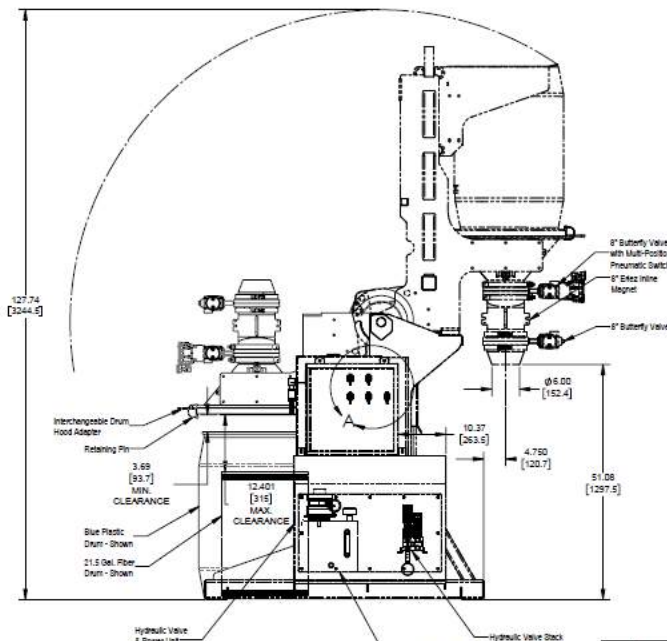
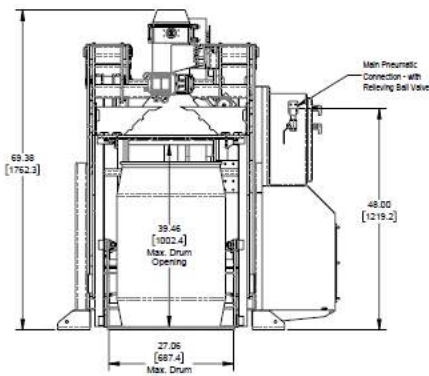
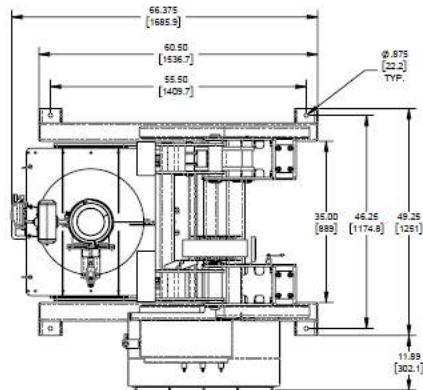
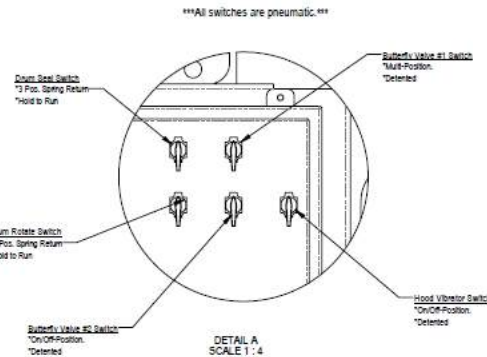
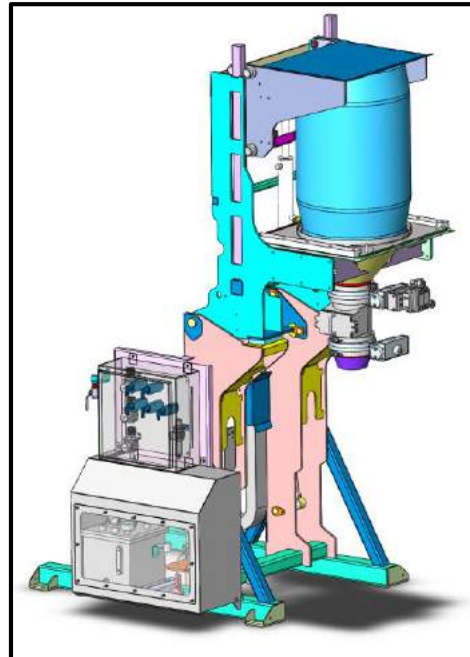
- Load Design: The container is manually loaded by the operator.

- Welding and Finish Specifications: All product contact surfaces are constructed of (316) stainless steel with a 2B finish, stainless steel thicker than 7 ga will be mill finish. The interior product contact surfaces are continuously welded and ground to remove irregularities. The framework, and all other non-product contact surfaces, are constructed of (304) stainless steel and continuously welded and ground to remove irregularities. Any non-stainless steel components (ie hydraulic valves, motor etc.) will have vendors stock finish.

- Hydraulic System: A 2.5" bore hydraulic cylinder is used to seal the drum to the hood interface. A 3.5" bore hydraulic cylinder is used to rotate the equipment carriage to a 180° total rotation. A GAST air motor powers the 2 gpm hydraulic power unit. FDA approved hydraulic oil.

- Pneumatic System: Air lines and hydraulic lines are stainless steel and only flexible where needed. All air exhaust needs to be collected to a single point for collection. Plumbing from this point to the outside room is by others.

- Electrical System: N/A  
 Area Class - Class II Div 1 Gr. F&G



APPROVED: PROCEED AS DRAWN	THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IS THE PROPERTY OF NATIONAL BULK EQUIPMENT, INC. THIS INFORMATION HAS BEEN SUPPLIED TO YOU ONLY FOR THE SPECIFIC PROJECT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF NATIONAL BULK EQUIPMENT, INC.
APPROVED WITH REVISIONS NOTED	
NOT APPROVED: REVISE AND RESUBMIT	
APPROVED BY: [Signature]	DATE: 10/16/2017
<b>National Bulk Equipment</b> 12000 STAINLESS DR. HOLLAND, MICHIGAN 48044 PHONE: (914) 366-2020 www.nbe-inc.com	
<b>Assembly: Lift &amp; Seal Drum Discharger</b>	
REVISED: ALL DIMENSIONS	REVISED: 1:12 2 OF 4 D A237150 C

