

Bag Break Station

Application Details:

NBE CSO: E402040043

Material: Calcium Stearate

Bulk Density: 64.3 lbs/ft³

Particle Size: Fine Powder

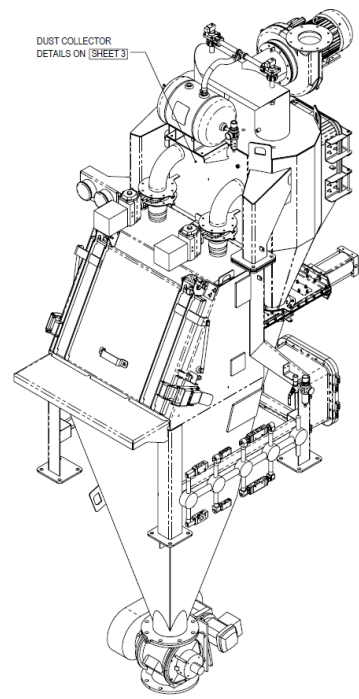
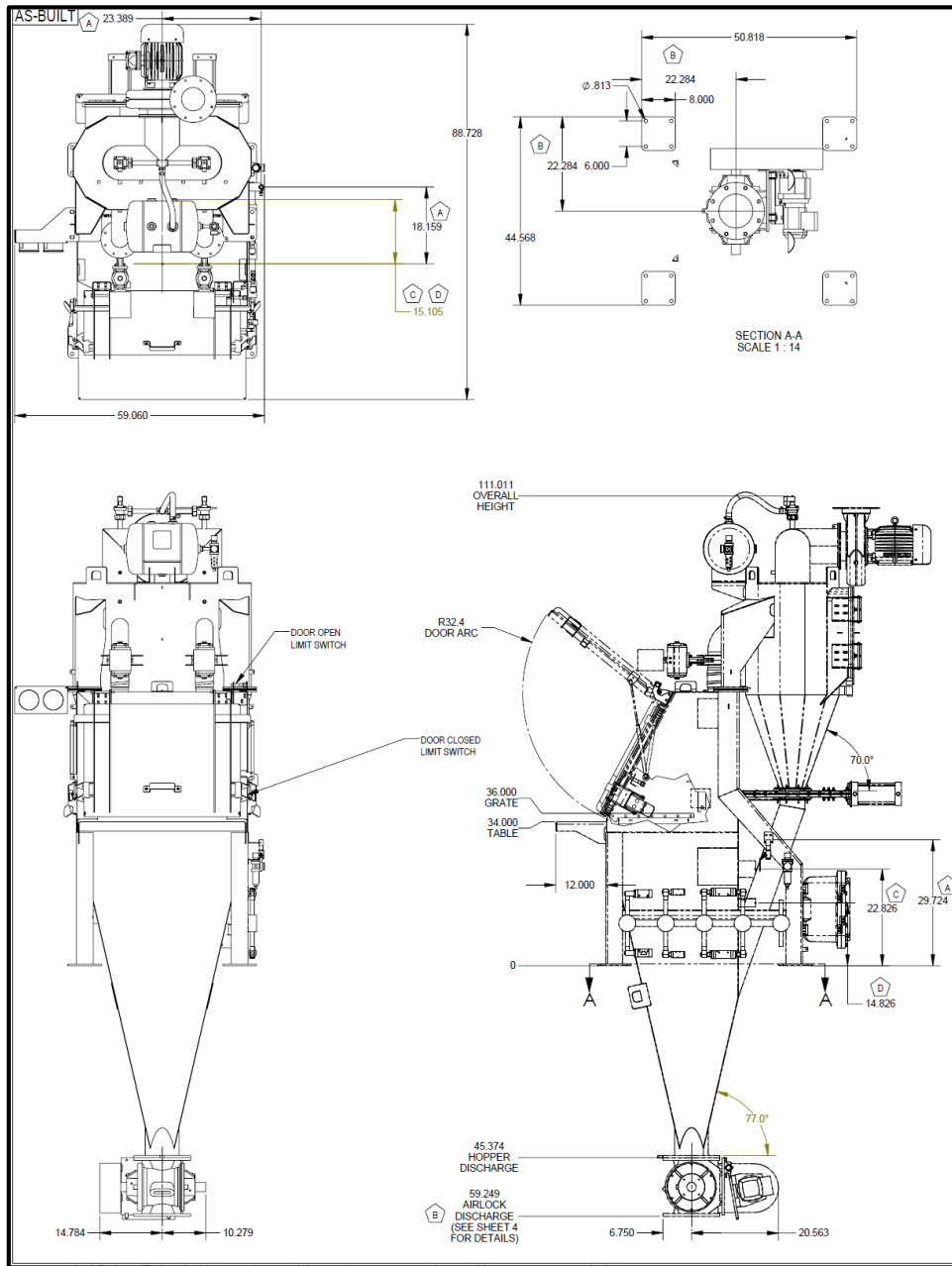
Flowability: Non-free flowing

Area Classification: CID2 and CIID1

Discharge Rate: 10,000 lbs/hour

Application Overview:

NBE provided a bag break station with rotary air-lock and remote dust collector. The rotary air-lock discharged into an existing hopper that fed a pneumatic conveying system. The equipment was designed to meet a CID2 and CIID1 area classification. To assist and promote product discharge, all material contact parts are electropolished, the hopper included 77 °sloping walls and a dust collector to pulse clean the filters and discharge all material out of the Bag Break Station. Customer had height constraints and a section of the bag break station hopper went through a mezzanine to keep the grate height at operator level.



NOZZLE SCHEDULE			
ITEM	DESCRIPTION	SIZE	RATE
A	SYSTEM AIR	3/8" NPT	10 CFM @ 70 PSI
B	DISCHARGE	SCHENCK MTA30 AIRLOCK (SHEET 4)	N/A
C	VENT	φ 4" STUB	N/A
D	VENT	φ 2" STUB	N/A

REVISIONS			
LET	REVISION NOTES	NAME	DATE
A	APPROVAL CREATED	KJM	9/15/20
B	ADDED BONDING LUGS, LIFTING LUGS, AND EQUIPMENT INFO	KJM	10/14/20
C	REDUCED DUST COLLECTOR VOLUME TO 8 FT ³	KJM	11/12/20
D	ADDED SHIPPING BRACKETS	KJM	01/26/21
E	CHANGED ENCLOSURE, ADDED P321721-01S & -02S	KJM	04/19/21

CUSTOMER PO: 4502190018
 NBE CSO: E402040043
 NBE JOB: J38411

APPLICATION INFO:

- MATERIAL: CALCIUM STEARATE, 64.3 PCF, POOR FLOWABILITY, TACKY POWDER

CONSTRUCTION:

- ALL *PRODUCT CONTACT* SURFACES ARE CONSTRUCTED FROM 316 STAINLESS STEEL ELECTROPOLISHED
- ALL STAINLESS STEEL MATERIAL 7GA AND THINNER WILL BE 2B FINISH
- ALL STAINLESS STEEL MATERIAL THICKER THAN 7GA WILL BE MILL FINISH
- ALL STAINLESS STEEL MATERIALS TUBING AND PIPE WILL BE MILL FINISH
- ALL *PRODUCT CONTACT* WELDS FOR DUST COLLECTOR CONE, RETURN PIPES, AND BAG BREAK BELOW GRATE ARE GROUND SMOOTH AND FLUSH TO 120 GRIT. REMAINING INTERIOR IS GROUND SMOOTH NOT NECESSARILY FLUSH.
- ALL *NON-PRODUCT CONTACT* SURFACES ARE CONSTRUCTED FROM 316 STAINLESS STEEL
- ALL *NON-PRODUCT CONTACT* WELDS ARE CONTINUOUS, GROUND TO REMOVE IRREGULARITIES, AND PASSIVATED
- PURCHASED PARTS ARE PROVIDED WITH STANDARD CONSTRUCTION FINISH/PAINT.

BAG BREAK STATION DETAILS:

- 25 FT³ HOPPER CAPACITY
- 8 FT³ DUST COLLECTOR AIR CAPACITY (EA)
- 77° HOPPER CONE
- DUST COLLECTOR AND RETURN LINES AT 70°
- TRANSITION TO SCHENCK MTA30 ROTARY AIRLOCK
- AIRLOCK PRODUCT CONTACT IS 316SS WITH POLISHED ROTOR TO CG120 GRIT FINISH
- PLEATED PTFE FILTER CARTRIDGES, ANTI-STATIC

CONTROLS:

- POWER SUPPLY: 480VAC/3 φ /60HZ
- CONTROL VOLTAGE: 24 VDC
- AREA CLASSIFICATION: DUAL RATED CLASS II DIV I GROUP G; CLASS I DIV II, GROUPS C & D
- ENCLOSURES: NEMA 4X SS
- X-PURGE KIT
- VFD FOR ROTARY AIRLOCK, CONTROL FOR AIRLOCK BY OTHERS
- LIGHT TO INDICATE DOOR OPEN/CLOSED
- SCHENCK MTA30 ROTARY AIRLOCK CONTROL VOLTAGE 120VAC

MACHINE WEIGHT (EMPTY): 1450 LBS

APPROVED: PROCDED AS DRAWN	THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND IS THE PROPERTY OF NATIONAL BULK EQUIPMENT, INC. THIS INFORMATION HAS BEEN DETERMINED TO BE CONFIDENTIAL AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN WHOLE OR IN PART FOR THE MANUFACTURE OF A SIZE OF ANY PART OR PRODUCT BY YOU OR ANY OTHER PARTY TO WHOM THE INFORMATION MAY BE SUPPLIED WITHOUT THE WRITTEN CONSENT OF NATIONAL BULK EQUIPMENT, INC.	MODEL CREATOR: KJM 11/20/20	DATE: 06/15/2020
APPROVED WITH REVISIONS NOTED			
NOT APPROVED: REVISE AND RESUBMIT			
APPROVED BY: _____	DATE: _____	National Bulk Equipment 12838 STAINLESS DR., HOLLAND, MICHIGAN 49424 PHONE: (616) 399-2220 www.nbe-inc.com	BAG BREAK HOPPER SCALE: 1:13 SHEET: 2 OF 5 DRAWING NUMBER: A309149

