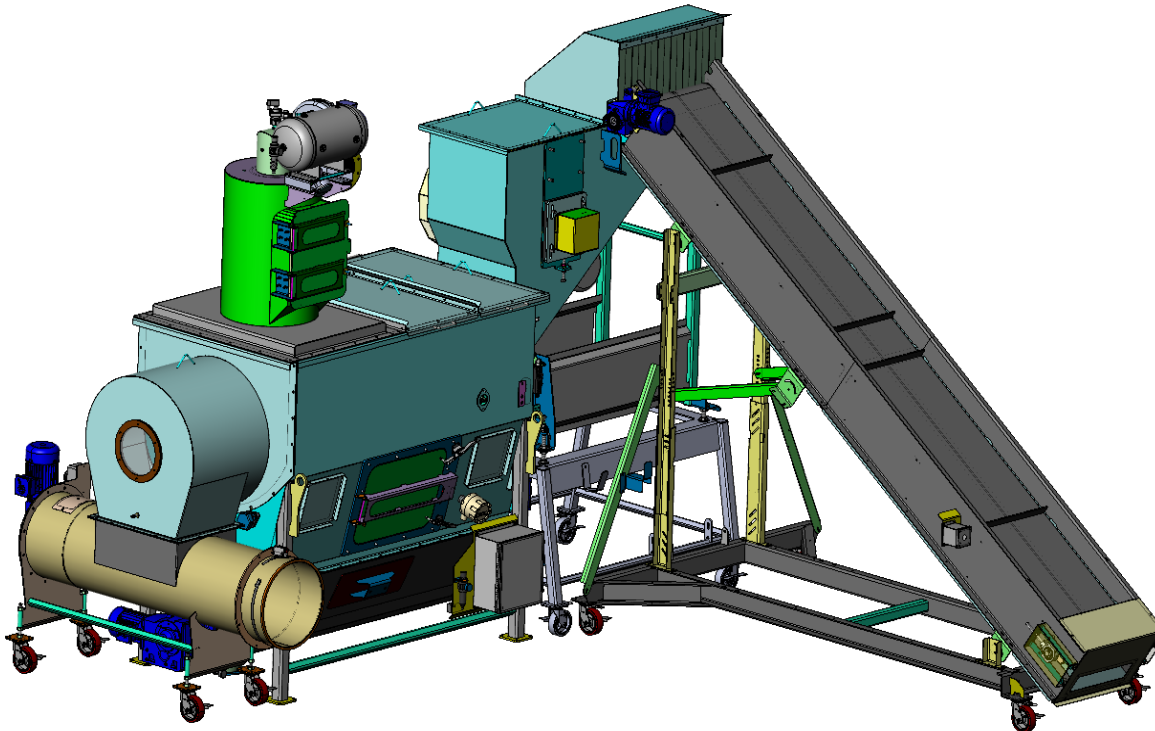


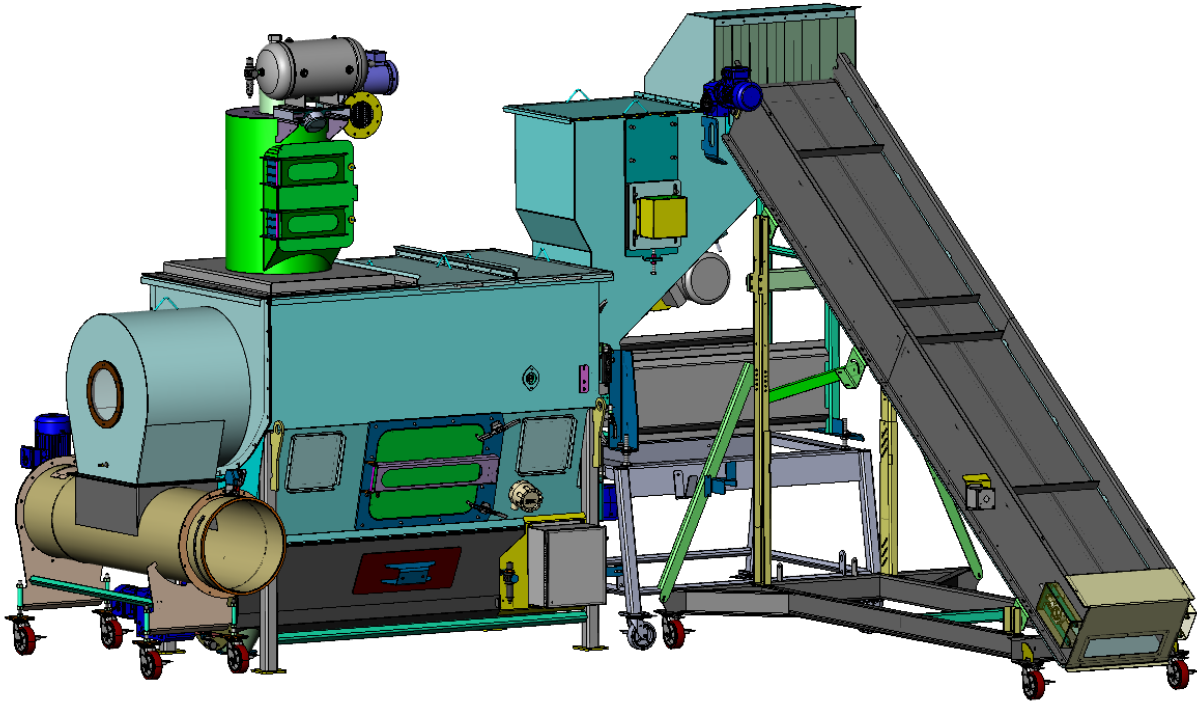
## Product Saver Bag Opening System

### Application / Equipment Details:

- NBE CSO: E342334025
- Material: ADCA Powder
- Bulk Density: 40 PCF
- Particle Size: Fine Powder



**Application Overview:** A large plastics compounder needed an automated bag opener for one of their additives for making automobile parts. The product being run on the bag opener is difficult to handle manually and is very dusty causing housekeeping issues within the plant. Customer needed automation that would eliminate the operator performing the bag opening process, and a sealed system that would contain dust and emissions. In addition, NBE had to customize the design allowing the system to fit into a designated area with numerous dimensional constraints. Sealed bags are placed on an infeed conveyor belt and conveyed to the bag opening system. From this point forward the process is completely automated. Bags are opened precisely by the cutting head, product separated and screened by the rotary drum, allowing the product to be conveyed to the process and the empty bags compacted within a screw compactor. Flexible screw conveyors were utilized to convey the product from the bag opener. The screw conveyors were also designed for total product containment and overall product metering to the process. System controls were also provided with this project.



REVISIONS		
A	ISSUED FOR APPROVAL	DPK 5/24/2023
B	AS APPROVED	LDI 6/25/2023
C	AS-BUILT	RES 11/20/2023

**SPECIFICATIONS / MATERIAL:**

- MATERIAL NAME: ADCA POWDER
- BULK DENSITY: 40 PCF
- PARTICLE SIZE: FINE POWDER
- FLOWABILITY: SLUGGISH
- CHARACTERISTICS: DRY POWDER, PACKS EASILY

**BAG SPECIFICATIONS:**

- WEIGHT: 50 LBS.
- DIMENSIONS: TO BE PROVIDED
- MATERIAL: POLY BAG

**DESIGN SPECIFICATIONS:**

- ALL **PRODUCT CONTACT SURFACES** ARE CONSTRUCTED FROM 304 STAINLESS STEEL
  - ALL STAINLESS STEEL MATERIAL TGA, AND THINNER IS 2B FINISH
  - ALL STAINLESS STEEL MATERIAL TGA, AND THICKER IS MILL FINISH
  - ALL STAINLESS STEEL MATERIALS TUBING AND PIPE WILL BE MILL FINISH
- ALL **NON-PRODUCT CONTACT SURFACES** ARE CONSTRUCTED USING CARBON STEEL PAINTED WITH NBE GRAPHITE

- PRODUCT CONTACT WELD FINISH: CONTINUOUS WELDS, GROUND SMOOTH AND FLUSH, PASSIVATED
- NON-PRODUCT CONTACT WELD FINISH: INTERMITTENT WELDS, GROUND TO REMOVE IRREGULARITIES
- ROTARY SEPARATION DRUM SCREEN IS INTERMITTENTLY WELDED
- PURCHASE PARTS ARE PROVIDED WITH STANDARD FINISH / PAINT

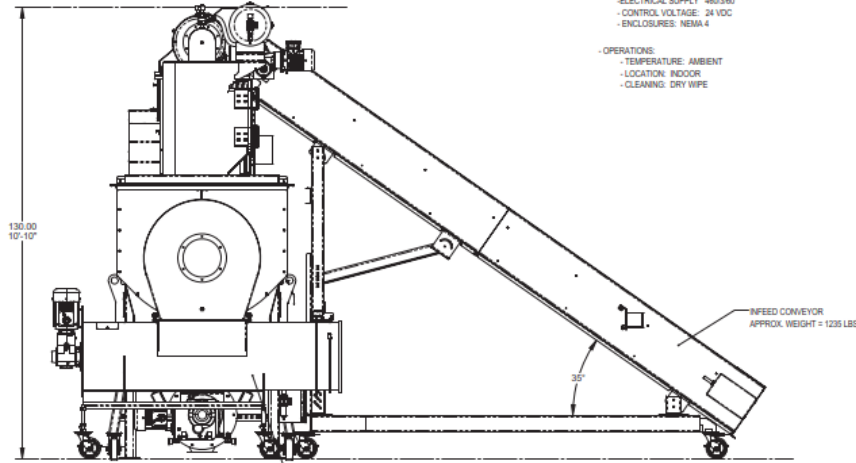
**ELECTRICAL CONTROLS:**

- ELECTRICAL SUPPLY: 480/3/Ø
- CONTROL VOLTAGE: 24 VDC
- ENCLOSURES: NEMA 4

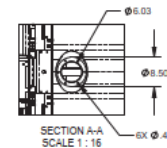
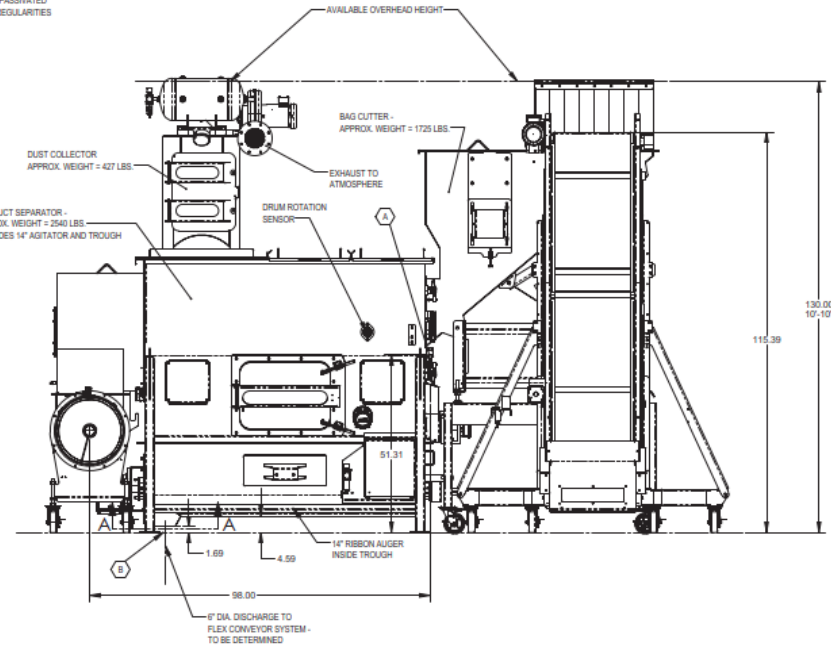
**OPERATIONS:**

- TEMPERATURE: AMBIENT
- LOCATION: INDOOR
- CLEANING: DRY WIPE

NOZZLE SCHEDULE			
ITEM	CONNECTION	DESCRIPTION	CONSUMPTION
A	1/2" NPT	COMPRESSED AIR	30 CFM @ 80 PSI
B	SEE SECTION "A-A"	DISCHARGE TO FLEX CONVEYORS	N/A



APPROXIMATE TOTAL WEIGHT = 6465 LBS



GENERAL ARRANGEMENT - ELEVATION VIEWS

APPROVED: PROCEED AS DRAWN	DATE: 5/24/2023
APPROVED WITH REVISIONS NOTED	DATE: 6/25/2023
NOT APPROVED: REVISE AND RESUBMIT	DATE: 11/20/2023

**National Bulk Equipment**  
12838 STAINLESS DR., HOLLAND, MICHIGAN 49424  
PHONE: (616) 369-2220 www.nbe-inc.com

MODEL CREATOR: DPK 5/27/23	DRAWN BY: DPK	DATE: 5/27/2023
BAG OPENING, SEPARATOR, AND FCS		
NOTES: SEE DRAWING	SHEET: 1 OF 1	DATE: 5/27/2023
SCALE: 1:8	2 OF 9	D
A376783 C		

