

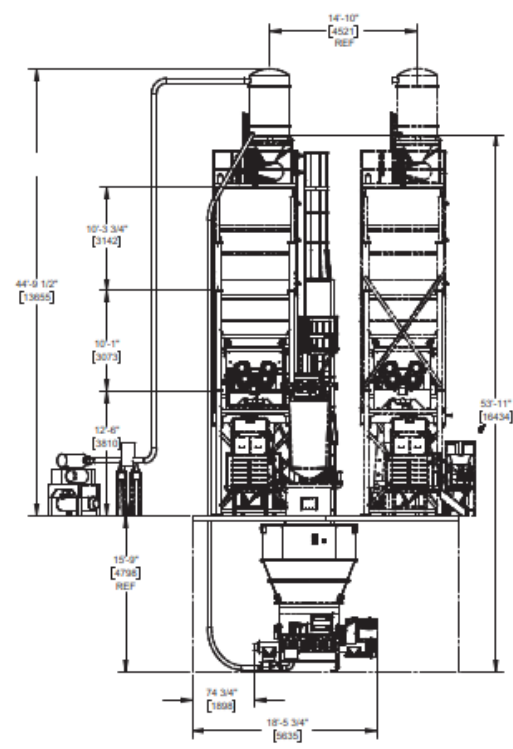
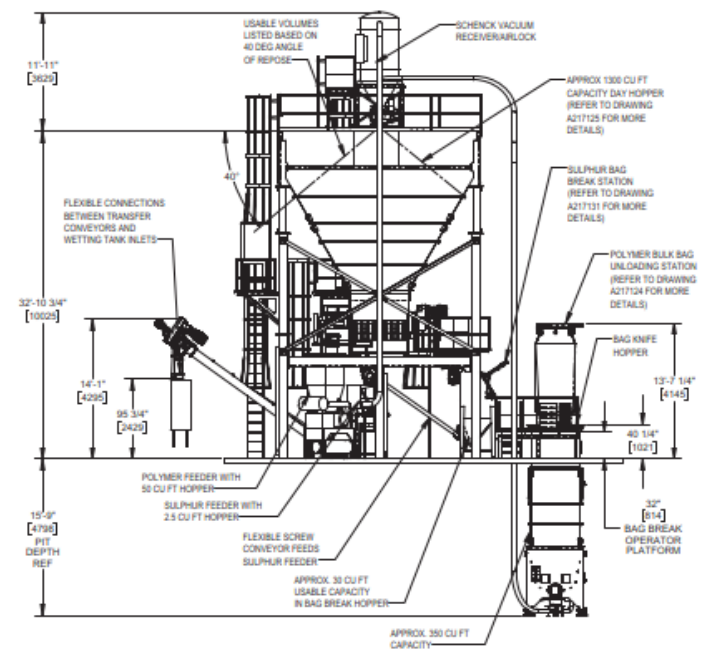
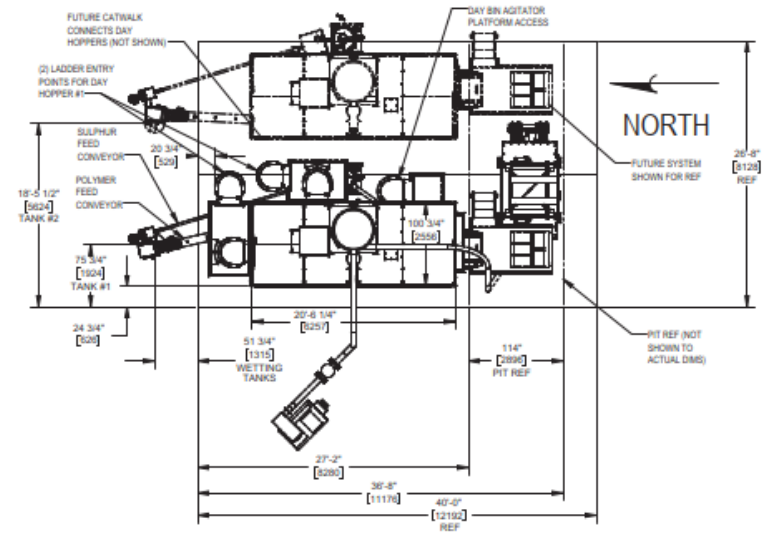
Ingredient Discharging and Feeding System

Application Details:

- NBE CSO: E951795010
- Material: Kraton Polymer Pellets and Customer Additive
- Bulk Density: 24-26 lbs/cubic feet
- Particle Size: ¼" Pellets
- Flowability: Poor Flowing
- Area Classification: General Purpose
- Discharge Rate: 2,000 – 4,000 kg/hour

Application Overview: NBE has a wide range of experience in handling the various grades of Kraton available in the marketplace. In fact, Kraton often refers their customers to NBE to assist with their material handling needs. In this application the customer was developing a new project related to the production of asphalt. The customer was receiving the polymer in supersacks and would charge a bulk surge bin with enough capacity to cover a full 24 hr day. The supersacks were received without spouts and discharged using a piercing hopper. The bulk Kraton was stored in custom surge bins with integrated agitator hoppers. The additive ingredient was discharged from a small bag dump station. Both ingredients were refilled into weigh feeders which metered the material into transfer augers supplying the customer's wetting tank. NBE designed the platforms and supports so that the system can be expanded into multiple duplicate stations serving additional lines in the future.

REVISIONS		NAME	DATE
A	ISSUED FOR CONCEPTUAL REVIEW	TJB	12/01/2017
B	UPDATED FOR MECHANICAL APPROVAL	TJB	1/9/2018
C	UPDATED PER CUSTOMER COMMENTS	TJB	4/5/2018
D	ROTATED LADDER TO DAY BIN AGITATOR PLATFORM	TJB	5/9/2018
E	ADDED IN-LINE FILTER STAND	TJB	3/27/2019
F	AS BUILT	TJB	5/14/2019



- Application info:**
- Material #1: Kraton polymer pellet
 - 24-26 lbs/cubic foot
 - Approx. 114" pellets
 - Rate (to wetting tank): 2,000-4,000 kg/hr
 - Rate (pneu. convey): 10,000 kg/hr
 - Material #2: Sulphur pellet
 - 76-85 lbs/cubic foot
 - Rate (to wetting tank): 50-200 kg/hr
 - BBU Hopper Capacity (approx): 350 cubic feet (10 cubic meters)
 - Day Hopper Capacity (approx): 1,300 cubic feet (37 cubic meters)
 - Sulphur BBS Capacity (approx): 30 cubic feet (0.85 cubic meters)
 - Bulk bag: 48" x 48" x 82" (2205 lbs)
 - Designed and built for use in general industrial (non-hazardous) area
- Construction:**
- 304 SS product contact, welded continuous and welds ground smooth but not necessarily flush
 - Carbon steel, continuously welded, welds ground to remove irregularities
 - Paint: Macropoxy Primer, Acrolon top coat; structural to be painted Gun Metal Grey, ladders/cages/walkways to be painted Safety Yellow
- Controls:**
- Controls by others
 - 600/3/60 power voltage, 24VDC control voltage
- Utilities:**
- Compressed air: 28 SCFM @ 20 PSI (47 m³/hr @ 138 kPa) & 20 SCFM @ 80-100 PSI (34 m³/hr @ 690 kPa) required (approximately)
 - Dust collection (recommended): Approx. 1350 CFM @ 5" w.c. (2300 m³/hr @ 1.25 kPa) required (approximately)
- Drawings/Tag Numbers Reference List:**
- A217047 - System Layout/General Arrangement
 - A217124 - Bulk Bag Unloading Hopper (M-917)
 - A217125 - Polymer Day Hopper
 - Vacuum Receiver (B-916)
 - Day Hopper (M-914)
 - Polymer Metering Feeder (M-913)
 - Polymer Transfer conveyor (M-9133)
 - A217131 - Sulphur Feed/Metering system
 - Bag Break Hopper (M-919)
 - Sulphur Metering Feeder (M-912)
 - Sulphur Transfer conveyor (M-9123)

GENERAL ARRANGEMENT

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SYSTEM LAYOUT NOTE: NOT ALL ITEMS SHOWN TO SCALE 1:72 2 OF 4 D A217047 F	

