

PLASTIC

Plastic Pellets



S O L U T I O N O V E R V I E W

Minors Accuracy

The plastic pellets that this company manufactures contain several minor ingredient additions that are supplied in atypical forms (blocks, chips, etc.). The Shick solution involved incorporating an indexing belt conveyor where precise amounts of ingredients can be added.

Homogeneous Batches

During the course of a given run, the characteristics of the batch change over time. However, the customer wanted a homogeneous final packaged product. Shick incorporated a 1,500 ft³ blending silo that stores, and subsequently mixes, each batch through a conveying loop. These multiple

conveying loops create a homogeneous batch. A Shick Tube Selector Valve in the loop diverts the pellets to packaging after blending is complete.

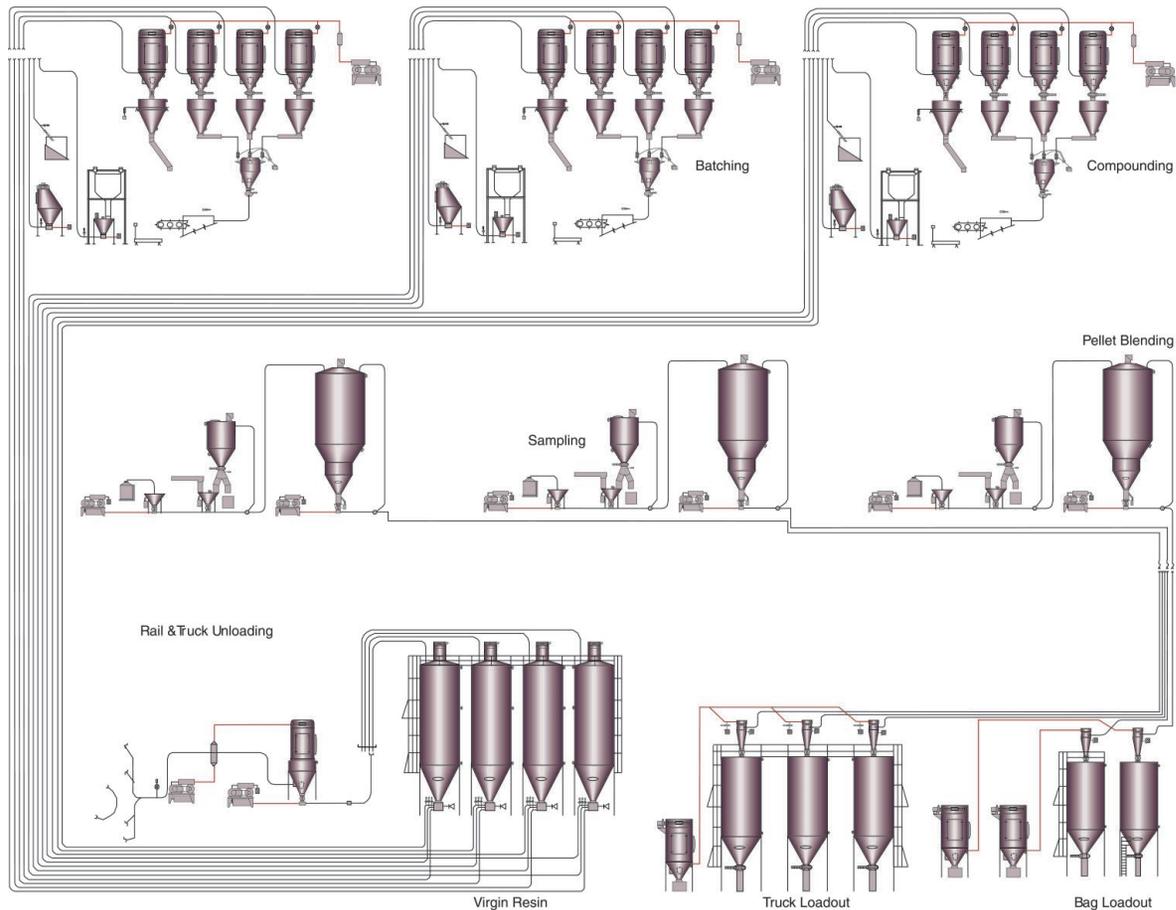
Dust Control

The plastic pellets are conveyed from the blending silo to truck loadout holding bins. The blending and conveying create a fine dust intermingled with the plastic pellets. In order to remove the dust from the product, elutriators were mounted on top of the holding bins, providing particle size segregation and efficient dust removal.

PLASTIC

Plastic Pellets

PROCESS DIAGRAM



Final Product: Plastic Pellets

Project Scope:

- Railcar Unloading
- Truck Unloading
- Supersack Unloading
- Bulk Storage (4) 6,300 Ft³
- Bulk Pneumatic Transfer and Scaling
- Three Complete Minor Ingredient Vacuum Scaling and Mixing Systems Including: 1) Supersack, Hand Dump, and Box Unloading of Minor Ingredients; 2) Solid Minor Ingredient Index Belt Conveyor; 3) Banbury Mixer and Pelletizer
- Product Verification and Blending System (3) 1,500 Ft³ Blending Silos
- Central Dust Collection System

- Elutriator Fine Dust Removal System
- Truck Loadout and Boxing System
- Computer Control Interface for Batching Recipe, Handling Mix Operation and Report Generation

Materials Handled:

- Virgin Plastic Resin
- Rubber Solids
- Calcium Carbonate Powder
- Industrial Talc
- Baramite
- Ethylene/Methyl Acrylate

Purchasing Rationale:

New Plant



SHICK TUBE-VEYOR CORPORATION

WORLD HEADQUARTERS

Shick Tube-Veyor Corporation
4346 Clary Blvd.
Kansas City, MO 64130 USA
Tel: (816) 861-7224
Fax: (816) 921-1901

ASIA PACIFIC

Shick Tube-Veyor Asia Pacific Pte Ltd
Blk 5000 Ang Mo Kio Ave 5 #05-07
Techplace II
Singapore 569870
Tel: (65) 4824600
Fax: (65) 4818255

www.shicktube.com