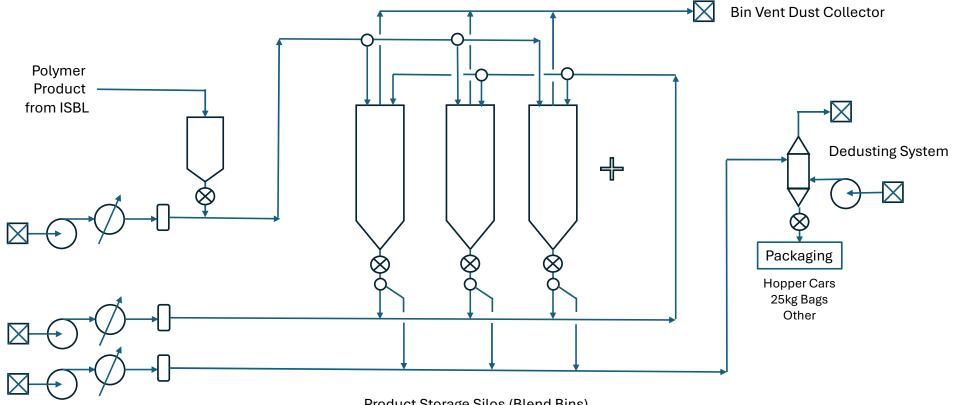


Preliminary Polymer Product Handling Scope Development

Polymer Product Handling Systems Overview



Pneumatic Conveying Systems

Product Storage Silos (Blend Bins)

Polymer Product Handling Systems Overview

Key Subsystems

- Pneumatic Conveying System to move product from ISBL to Product Storage Silos
- Some number of Product Storage Silos (typically 3 minimum)
- Pneumatic Conveying System(s)
 - ✓ To circulate product within a Product Storage Silo and to move product between Product Storage Silos
 - ✓ To move product from Product Storage Silos to Packaging Area
- Dedusting Systems (Elutriators)
- Ancillary Systems
- Packaging Systems
 - ✓ Rail Cars (North America only)
 - ✓ 25kg Bags (everywhere else in the world)
 - ✓ Other

PROCESS Can Help Develop the Scope of Your Polymer Product Handling System

- Preliminary Pneumatic Conveying System Sizing Calcs
 - ✓ Conveying Line Sizing
 - ✓ Conveying Air Blower/Compressor Duty (Head and Capacity)
 - ✓ Low-Pressure and High-Pressure Dilute Phase Conveying
- Preliminary Pneumatic Conveying System Performance Spec
 - \checkmark Including key design criteria and requirements for all critical components:
 - $\circ~\mbox{Conveying}$ Air Blowers/Compressors and Piping
 - $\circ\,$ Rotary Valves and Diverter Valves
 - \circ Bin Vent Dust Collectors
 - o Dedusting Systems (Elutriators)
 - o Ancillary Systems
 - $\circ\,$ PLC and control logic, operable from your DCS
 - \checkmark Complete and ready for Conveying System Vendor Package System quotation

PROCESS Can Help Develop the Scope of Your Polymer Product Handling System

- Preliminary Product Storage Silos (Blend Bins) Process Data Sheet
 - ✓ Recommended Size and Number Depending on Your Requirements
 - o Production Capacity
 - Product Shipping Container Type
 - Packaging System Availability
 - Production Management Strategy
 - ✓ Blending Requirements
 - ✓ Relieving Manway sizing
- Preliminary Packaging Systems Performance Spec
 - ✓ Hopper Cars
 - ✓25kg Bags
 - ✓Other

PROCESS Can Help Develop the Scope of Your Polymer Product Handling System

- Strategies for minimizing fines and streamer generation
- Preliminary investment and operating cost estimates
- Review and comment on proposed Product Handling System equipment arrangements and conveying line routings
- Evaluate Vendor Package proposals versus performance requirements

✓Pneumatic Conveying Systems

- ✓ Product Storage Silos
- ✓ Packaging Systems