



PLANT SYSTEMS ENGINEERING

PVC BLENDING SYSTEM: VINYL WINDOW PLANT

Project Requirements: A Pennsylvania producer of vinyl windows wanted to accurately blend PVC regrind with virgin. After considering several options, we determined that a screw conveyor with mixing flights would provide the right blend at the right price. The blending ratio was established on a volumetric basis

The system was completed design-build.

Project Features:

- Work with equipment vendors to select equipment. Produce all system engineering and construction drawings.
- Engineer and design structural steel for supporting equipment
- Variable frequency drives used for speed control of screw feeders to enable volumetric proportioning
- Custom PLC controls for controlling and monitoring vacuum loading system, hopper levels and screw speeds



Two vacuum receivers mounted in a steel structure



Mixing flights blend PVC virgin and regrind (screw trough cover removed)



View of vacuum receivers and blending screw

THE PLANT SYSTEMS GROUP, INC.

507 N. York St., Suite 2A
Mechanicsburg, PA 17055

717-795-9122 Ext. 11 717-795-9525 Fax www.plantsys.com