

Tremco processes nine different materials with nine dependable Bin Activators

Company

Tremco Manufacturing Co., Barbourville, Kentucky. Producers of protective coatings, sealants, and weather-proofing products for building construction and maintenance.

Problem

In its new Barbourville plant, Tremco employs a sophisticated processing system in which many materials have to be handled. The system incorporates a railroad car and bag dump unloading operation, a complex batch weighing system, and a control section for a variety of materials used in making customized sealants for business and industry. Among the design requirements at the Tremco plant were: to provide maximum efficiency in handling a large and variable number of raw materials, to provide good inventory control, and to keep difficult materials moving without flow problems. An additional objective of the design requirements was to keep energy consumption to a minimum.

The various materials used at Tremco, including calcium carbonate, hydrated lime, asbestos, and various clays, are bulk stored in nine different silos. These materials all have poor flow characteristics. They can hang up and bridge in static silos or sometimes flush uncontrollably through the outlet. Without the right kind of flow-aid device, the entire operation would be hindered.

Solution

Vibra Screw Equipment:
Three 5-ft. Bin Activators
Six 4-ft. Bin Activators

To provide positive discharge of all these materials, Tremco installed a total of nine Vibra Screw Bin Activators. Flexibly attached to the enlarged opening of the storage bin, the Bin Activator employs controlled vibration to provide an uninterrupted flow of material from storage. An oil-lubricated gyrator vibrates the unit and the contained material but not the bin. An internal baffle directs vibrations high up into the bin to discourage overhead bridging while relieving headload from the outlet. The Bin Activator's unique dished-head design avoids wedging of material and provides positive discharge with a

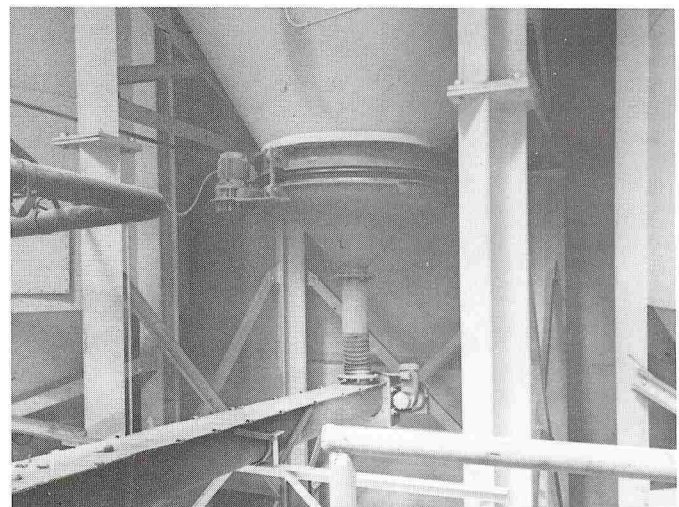
minimum of energy consumption. The Bin Activators discharge stored material to screw conveyors which in turn deliver to a scale hopper.

Results

Tremco has been able to operate its new system with a high degree of efficiency. The Vibra Screw equipment has helped keep production at maximum rates with a minimum of downtime. Product quality is exceptional and the energy requirements of the system are among the lowest in the industry.



The sophisticated materials handling system at Tremco includes Bin Activators to assure positive discharge of stored materials.



A close-up of a Bin Activator flexibly attached to the storage bin and discharging to a screw conveyor below.