

# VIBRA SCREW CASE HISTORY



C-218

## 27 Bin Activators Essential Equipment at Computerized Plant

### Customer

OMYA Inc., Florence, Vermont. Major manufacturer of calcium carbonate used mainly in the plastics, paint, and paper industries as a filler, extender and coating.

### Problem

The Verpol plant of OMYA Inc. is the newest, most modern plant of its kind in the world. It processes both crushed and finely ground calcium carbonate through its completely computerized operation. Bulk densities of the materials range from 25 to 70 lbs. per cu. ft. To meet process and excess storage requirements, the company has 27 bins ranging from 8 ft. to 26 ft. in diameter, of both concrete and steel construction. The bins are filled either pneumatically or by belt conveyor. Some of the bins are discharged through rotary valves to belt feeders or pan feeders, and some to bagging machines filling 50 lb. bags. Discharge rate varies from 4 tons per hour up to 40, depending on the stage of the process. However, calcium carbonate, especially the finely ground product, can be difficult to discharge from storage because it tends to bridge and clog.

### Solution

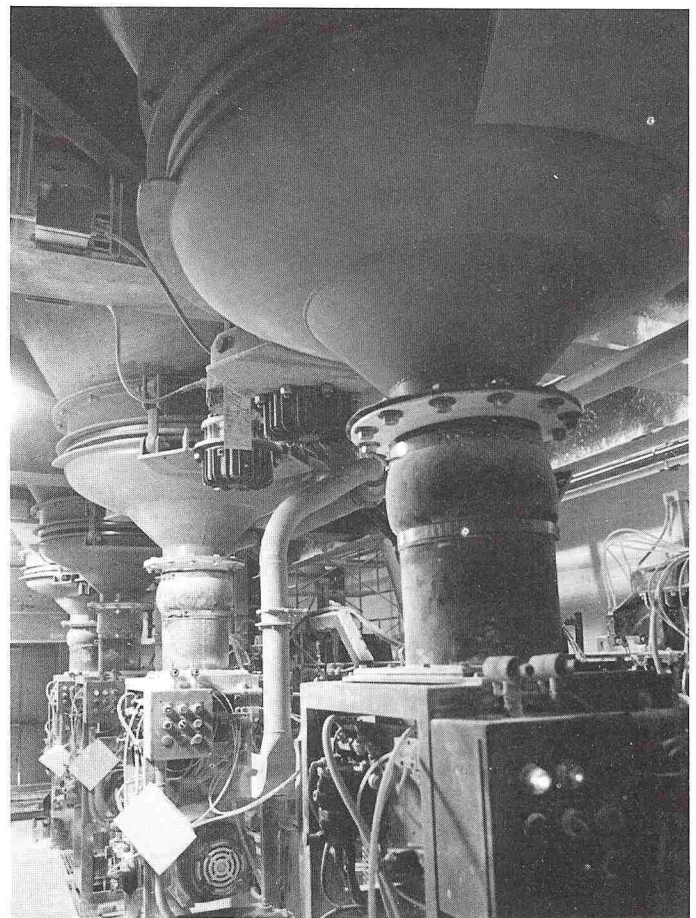
27 Vibra Screw Bin Activators of 3 different diameters (4 ft., 6 ft., and 12 ft.), carbon steel construction, most of which have an epoxy coated interior.

To assure reliable flow of material in its computerized operation, where such reliability is critical, the company decided to install Vibra Screw Bin Activators under all its storage bins. This was possible because the Bin Activators work equally well on both concrete and steel bins. Flexibly mounted to the bottom of the bin, the Bin Activator, but not the bin, is subjected to controlled vibration. An integral baffle located just above the discharge outlet directs vibrations high up into the bin, keeping the material free flowing. An important factor in the handling of calcium carbonate, this action rids the

material of entrained air, conditioning it to a uniform bulk density, which helps speed conveying and bagging operations.

### Results

OMYA Inc. relies on its Bin Activators to help it produce an uninterrupted flow of high quality product. In the words of a company official, "It would be difficult to operate the plant without our Bin Activators."



Four of the 27 Bin Activators OMYA Inc. relies on to produce an uninterrupted flow of high quality product. According to a company official, "It would be difficult to operate the plant without our Bin Activators."