

VIBRA SCREW CASE HISTORY



C-239

Bin Activators Help Benco Increase Production, Improve Product, Increase Sales

Customer

Benco Pet Foods, Zanesville, Ohio. Manufacturer of private label pet food and "Moist and Meaty" dog food and "Moist and Tender" cat food sold in 30 major markets.

Problem

Benco makes 49 different varieties of soft, moist pet food, all of which are formulated to appeal to pets, but which are, by the same token, hard to handle in production. The products consist of two segments, one a meat-based slurry, the other a dry mix having a bulk density of about 35 lbs, per cu. ft. The cat food is especially difficult to handle, since it contains poultry meal (with 15% fat content, and 6-8% moisture), and fine flours of soy and corn. The combination causes the dry mix to bridge and hang up in the holding bins. This caused serious disruptions to production, requiring workers to beat on the bins or prod them to manipulate the material out of the bins. The company tried vibrators and even a device they invented themselves, but neither device worked.

Solution

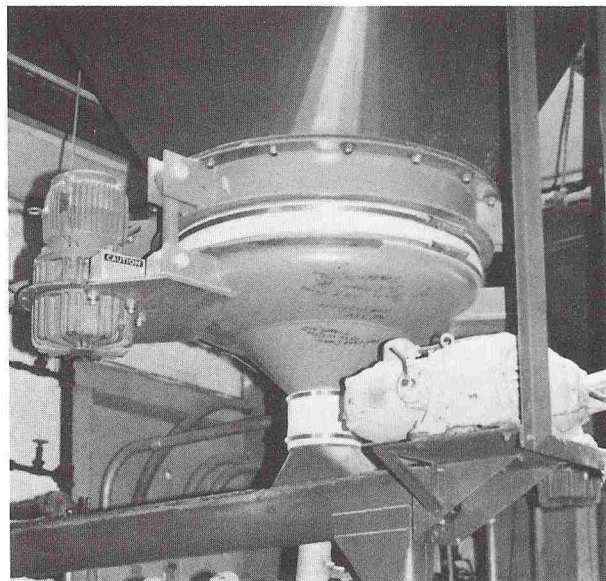
2 Vibra Screw Bin Activators, 3 ft. diam., carbon steel food grade epoxy coated construction, pre-assembled mounting rings, food grade Nordel sleeve.

The dry ingredients go from a ribbon blender to the holding bins where they were hanging up. As soon as the company installed Bin Activators, production capacity jumped. The Bin Activators are flexibly mounted to the bottom of the bins, and controlled vibration of a patented gyrator provides the powerful horizontal thrusts necessary to disengage material. An integral baffle, mounted directly above the discharge outlet, keeps the headload from packing down into the outlet, and it also transmits vibrations up into the material in the bin. In addition to providing a steady flow of material, the Bin Activators eliminated variances in ingredients which caused great wastage of material. Now material flows uniformly from the holding bins through an auger to a cooking cylinder which mixes and cooks the material. From there, it goes to extruders, and then it is graded and packaged into retail units of 6 oz. pouches, packed in cartons.

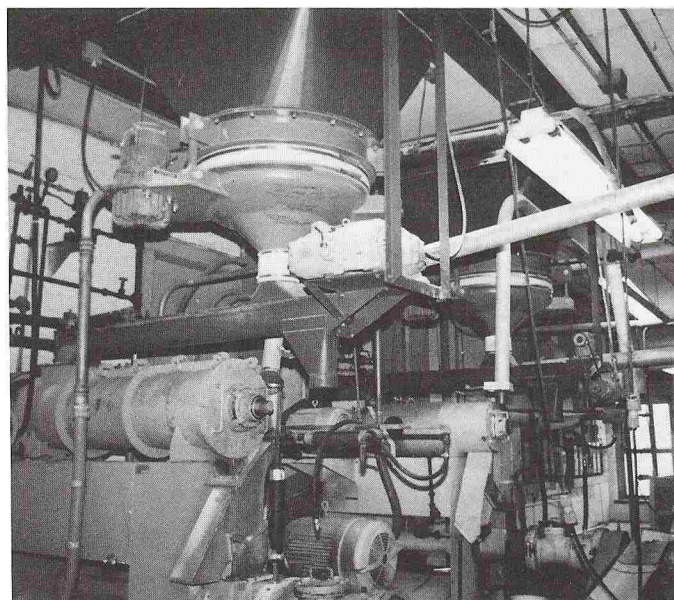
Results

The company has been able to improve the formulation of cat food by using more poultry

meal, which cats love. Sales have jumped substantially in three months. Even the dog food, which was a far lesser production problem, has shown production and sales gains. Collateral benefits: better product mix, more consistent quality, and elimination of wastage.



The Bin Activator discharges a steady flow of slurry and dry mix product, eliminating variances in ingredients and wastage of material.



Benco Pet Food uses the Vibra Screw Bin Activator to achieve improved product, increased production and increased sales.