

# VIBRA SCREW CASE HISTORY



## CH-248

### Bin Activator Delivers Crackling Good Performance

#### Customer

Ohio Pet Foods, Inc., Lisbon, Ohio. Manufacturers of high quality pet foods.

#### Problem

In making its extruded dog food, Ohio Pet Foods uses a blend of meat and bone meal called "cracklings" in the trade. Its particle size is 30-100 mesh, and bulk density is 45 lbs. per cu. ft. The product contains animal fat, and with a moisture content of 5-10% is very sticky, resulting in storage hang-up, ratholing and bridging.

In the past, the company used a flail device in the bin to agitate the material when it bridged. Huge lumps would form and "snap the flail off like a pretzel". A final resort was beating on the tank. The greatest concern was the possibility of upsetting the tank due to a sudden weight shift of a coagulated mass of 1000 to 2000 lbs. from one side of the bin to the other.

#### Solution

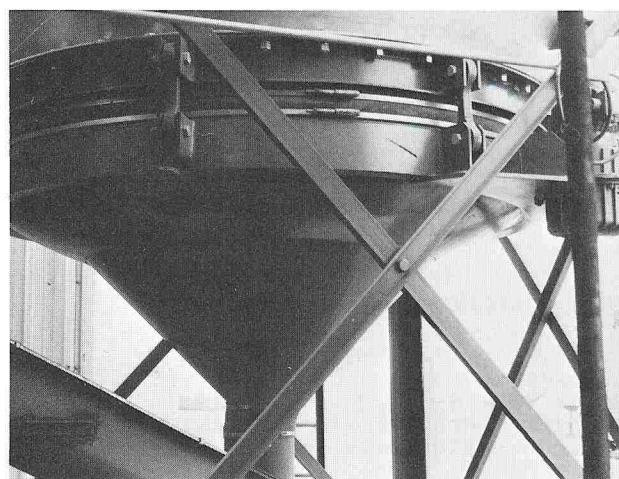
Vibra Screw Bin Activator, 8 ft. diameter, carbon steel and sanitary construction.

As business grew, the company needed a larger bin than the former one, which was 35 ft. high. The new bin is 51 ft. high and 12 ft. in diameter, which is reduced to 8 ft. diameter at the bottom by a 60° cone. The bin provided a perfect opportunity to correct the flow problem. After investigating available options, the company selected a Vibra Screw Bin Activator to do the job. It is flexibly mounted to the bottom of the storage bin, so that its powerful gyrator vibrates the Bin Activator, its integral baffle and the material in the bin, but not the bin. The baffle, which is mounted directly above the discharge outlet, resolves the controlled horizontal

thrusts of the gyrator into vertical impulses which extend far up into the material in the bin. This insures flow, enabling the company to achieve its desired production rate of 8000 lbs. per hour. Material flows from the Bin Activator to a mixing system, then to extrusion, and finally into packaging, where it is packed in 10-, 25-, and 50-lb. bags.

#### Results

Mr. Jim Golladay, Plant Manager, says, "Flow is now excellent. The Bin Activator has eliminated ratholing and bridging. It's the first piece of equipment I've ever put in here which started the minute we pushed the button." The company is pleased at having had no startup problems and is impressed with the low noise level of the gyrator ("it runs as effortlessly as a pump!").



"Cracklings", which are very sticky and cause hang-ups, ratholing and bridging, flow effortlessly into process, thanks to an 8 foot Vibra Screw Bin Activator.