VIBRA SCREW

CASE HISTORY

C-258

Cone Shaped Discharger Fails. Customer turns to Vibra Screw.

Customer

Aeroquip Corporation's Industrial Connectors Division, headquartered in Van Wert, Ohio is a large manufacturer of hose's, couplings and fittings for fluid conveying applications.

Problem

Aeroquip is a major user of brass stock and, in its manufacturing process, returns as much as 60% of the valuable metal as scrap. The manufacturer needs to assure a steady flow of brass reclaim back to refiners for recovery and credit, but the material offers unique handling problems.

The scrap includes several types depending upon cutting tools utilized. One is as fine as hair, and mats up as hair would. A second type is made up of fines and small particles, while other scrap may be needle-like splinters of varying sizes. In 1983 Aeroquip had a conveyor/storage system installed at an outdoor transport area.

The system included a pneumatic conveyor and storage tank. The 10 ft. diameter, 26 ft. straight side tank was supposed to discharge into trailer trucks below through one of the cone shaped bin dischargers sold as a substitute for the Vibra Screw dished head Bin Activator.

The cone shaped discharger failed to perform, and the manufacturer's service man left the site without solving the problem. Despite an ample 24" discharge opening, the customer had to regularly probe the outlet to induce even minimal flow. From a production and safety standpoint, this was unacceptable.

Solution

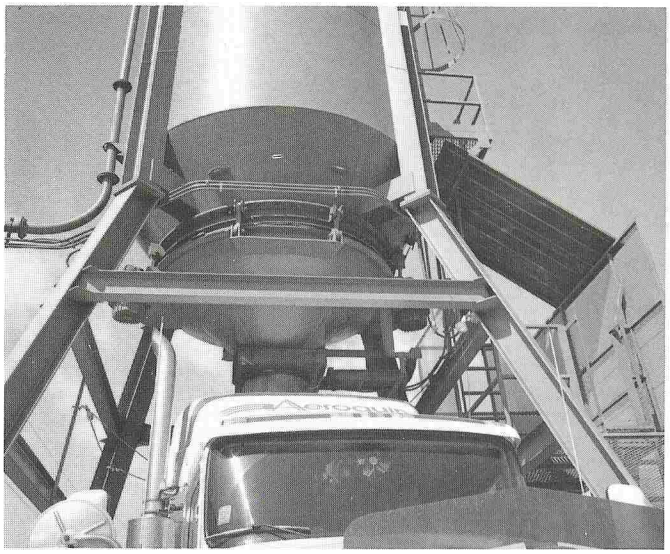
Vibra Screw 8 ft. Bin Activator, 24 in. diameter outlet.

Aeroquip replaced the original cone shaped discharger with a Vibra Screw dished head Bin Activator. This exclusive Vibra Screw design eliminated the compaction and flow stoppage found in the conical unit and produced higher on-demand flow rates.

After initial tuning, the Bin Activator has worked without unusual maintenance and without fail since 1983.

Result

The brass scrap recovery system has operated successfully since 1983 discharging scrap regularly three times per week. In operation, drivers move their scrap trailers slowly under the Bin Activator outlet until each trailer is full. Aeroquip personnel operate the Bin Activator by opening a pneumatic knife gate and turning on the gyrators. The largest trailer used in scrap removal is capable of accepting 40,000 pounds, and it can be loaded in about two minutes.



Vibra Screw Bin Activators solved a scrap flow problem for Aeroquip.

The Bin Activator can fill a trailer with 40,000 pounds of matted brass scrap in about two minutes.