

# Castings Manufacturer Finds Bargain: Orders More Of Same.

# **Customer:**

U.S. Foundry And Manufacturing Co., Miami, Florida — Manufacturers of Grey Iron highway castings.

# Problem:

To assure a continuous metered flow of sand and additives used in the manufacture of highway castings. The process recycles shakeout sand for combination with new sand, bentonite, sea coal, and various specialty additives in the makeup of molding sand. Previous handling methods relied on gravity discharge from storage bins and manual hand feed of the additives. Bins continually clogged and required manual prodding to induce flow. Hand feed required two full-time men and produced inaccurate feed rates.

# The Key:

One 1½ in. screw diameter Live Bin Screw Feeder One 2 in. screw diameter Live Bin Screw Feeder One 10 ft. diameter Bin Activator One 4 ft. diameter Bin Activator

# Solution:

U.S. Foundry installed Vibra Screw equipment after a rather convincing introduction to the company. Jack DeBogory, U.S. Foundry Vice President, noticed one day what turned out to be a Vibra Screw  $1\frac{1}{2}$ " Live Bin Screw Feeder covered with concrete on a scrap iron delivery truck. He bought it for \$5.00, replaced two small parts and gave it a try at feeding sea coal. It worked flawlessly, metering 3 lbs. per minute of material with feed accuracies of better than  $\pm$  1 to 2%.

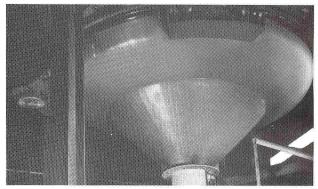
The feeder worked so well in cutting costs on this part of the sand handling line that U.S. Foundry came to Vibra Screw for additional equipment.

A 4 ft. diameter Bin Activator and 2 in. Live Bin Screw Feeder were purchased to handle the addition of bentonite to the process. The Activator discharges this difficult material from an 8 ft. diameter storage bin on demand to the feeder below. The 2 in. feeder accurately meters material at 7 lbs. per minute to a conveyor belt leading to a 120 ton storage tank.

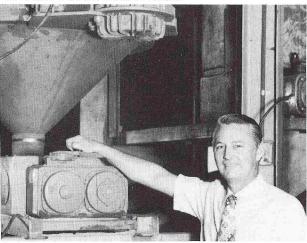
The tank is equipped with a 10 ft. diameter Bin Activator which provides discharge without blockage of up to 150 tons per hour of the material for conveying to a continuous muller.

### Results:

U.S. Foundry is completely satisfied with their Vibra Screw equipment. Besides paying for themselves in about 8 months time, the units have been virtually maintenance free. To quote Mr. DeBogory . . . "we have had many plant visitations, both foreign and domestic, and we are extremely proud to show the Bin Activators and feeders. They do an extraordinarily beautiful job . . .".



Sea coal and bentonite are metered flawlessly with Vibra Screw Bin Activators and Live Bin Screw Feeders.



Jack DeBogory, U.S. Foundry Vice President, gives testimony to the efficiency of his Vibra Screw installation.