

Live Bottom Bins Assure Continuous Flow of Wood Chips to Refiners

Customer

Inland Empire Paper Company, Millwood, Washington, manufacturers of newsprint and fine papers.

Problem

Fresh-cut wood chips of white fir and spruce are difficult to move from bins because of their tendency to bridge over and mat. At Inland Empire Paper Company, the refiners (or chip grinders) were fed directly from a conveyor handling discharges from the main storage silos, but the flow volumes from the silos were erratic. Successful operation of the refiners depends on a uniform supply of chips. If the flow thins out suddenly or is interrupted, damage can occur, resulting in several hours of downtime.

Vibra Screw Equipment

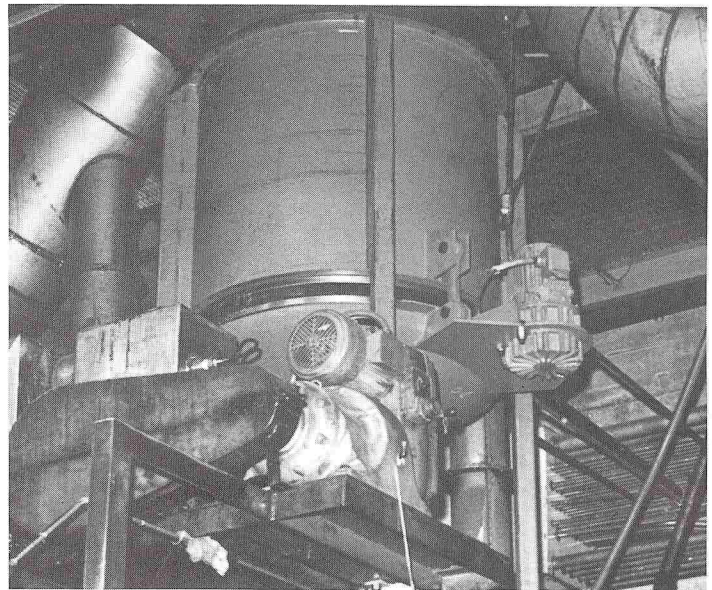
Two Live Bottom Bins, Model LBB 4-50, carbon steel construction.

Solution

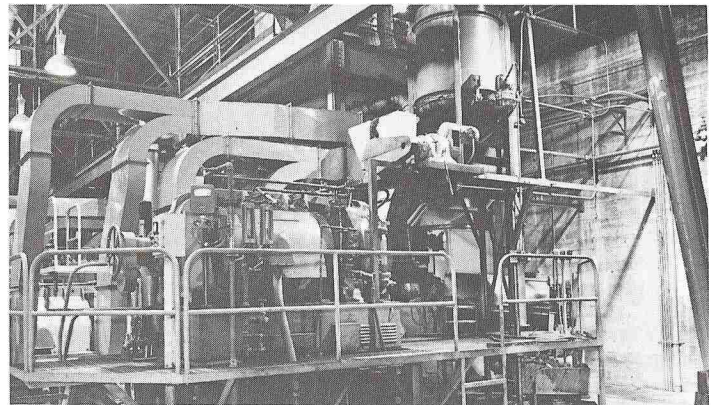
The company decided to install Vibra Screw Live Bottom Bins to function as assured-flow surge hoppers, discharging to screw take-away feeders above each of the two refiners. These controlled-vibration bins consist of a static bin with an attached vibrating Bin Activator. They provide positive discharge of the wood chips, which have a bulk density of 15 lbs. per cu.ft., and range in size from ¼" to 1".

Results

Flow of chips to each of the refiners is now uniform and constant, day-to-day, and around the clock. Refiner operation is substantially improved, and downtime for repairs is negligible.



Closeup at Inland Empire of Vibra Screw Live Bottom Bin showing its patented Gyrator, guaranteed for 20,000 hours.



One of two Live Bottom Bins (above right) which keep difficult-to-handle wood chips moving at Inland Empire Paper Company.