



## Filter Manufacturer Doubles Production Capability with Vibra Screw Pan Feeders

### Customer

D.C. Filter & Chemical Company, Sandusky, Ohio. Manufacturer of filters for clarification and decolorization of solvents used in chemical industry and dry cleaning.

### Problem

After the stains, dirt, and odors in fabrics are removed by dry cleaning solvents, the solvents themselves have to be cleaned before reuse. This is generally accomplished in a continuous system in which the solvent circulates through the clothes, then through filters, then back to the clothes. Different types of filters for different cleaning problems are provided by replaceable filter cartridges which can be inserted into the system. The cartridge consists of an outer pleated paper medium wrapped around a center shell which is filled with from one to four materials, determined by the cleaning requirements. These materials are carbon (two grades, having bulk densities of 15 and 25 lbs. per cu. ft.), clay (bulk density 34 lbs. per cu. ft.), and magnesium silicate (bulk density 29 lbs. per cu. ft.). The cleaning agents in various combinations are fed by pan feeders from two static bins to a common chute which further mixes them as they move to the conveyor line where the cartridges are filled. The company originally used competitive vibrating feeders which were slow, noisy, and a constant maintenance problem.

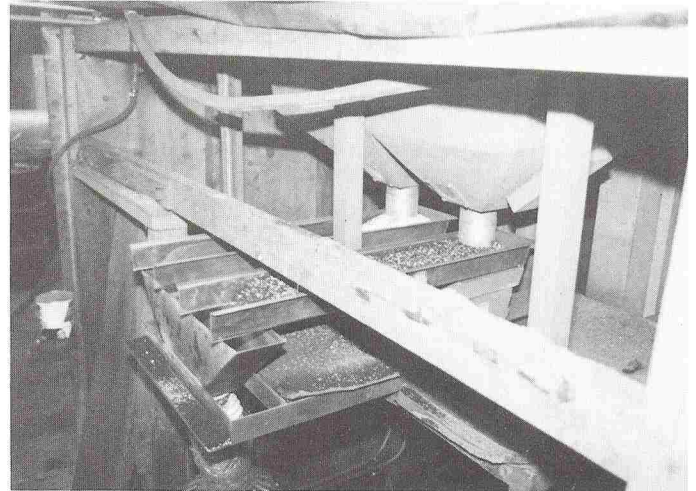
### Solution

2 Vibra Screw Vibrating Pan Feeders, stainless steel construction, electromagnetic drive, open trough. Out of his concern over unsatisfactory feeder performance, Gary Morey, president of D.C. Filter Company, began an investigation of competitive feeders, and as a result, decided to replace the old feeders with Vibra Screw Pan Feeders. These feeders employ a compact, patented AEG-Telefunken electromagnetic vibrator, built ruggedly for continuous operation. The electromagnetic drive has two fundamental advantages: 1) it permits uncomplicated and efficient rate adjustability, and 2) it requires virtually no maintenance. The feeder also features sub-resonant tuning (slightly below its natural frequency), which results in lower energy requirements and automatic compensation for changing headloads. As for noise, Mr. Morey

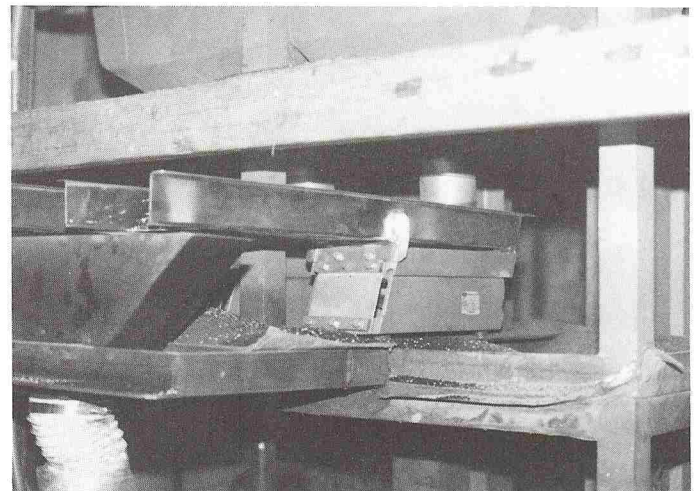
says that "the old feeders roared, and the new ones are so quiet you can't even tell they are operating."

### Results

The new Vibra Screw Pan Feeders provide greater accuracy and offer improved performance in terms of speed, quietness, and ease of maintenance. The company has found that the fill time for cartridges has been cut in half or even more. This means the capability of at least doubling production as the business grows.



Vibra Screw Vibrating Pan Feeders feed dry cleaning solvents from static bins to a common chute quickly and quietly.



The Vibra Screw Vibrating Pan Feeder features sub-resonant tuning which results in lower energy requirements and automatic compensation for changing headloads.