



TECHNICAL BULLETIN

TF-112

TUMBLING WASTE

A TUMBLE IN THE RIGHT DIRECTION

For years the filtration of tumbling waste has been considered a marginal application.

Normally a quantity of small parts is rotated in a drum along with an abrasive media such as aluminum oxide and water. Periodically the entire drum is dumped including the contaminated water loaded with fine abrasive and metal particles.

A good portion of this sludge is usually in the one to five micron range. Because of this any attempt at filtering usually resulted in a combination of short filtering cycles and only partially clean water.

A BETTER WAY

We recently visited a customer who has a good many tumbling drums (around 60) going full blast all day long. He tumbles zinc die cast parts for the most part and his effluent goes into a nearby stream after

It drops from the tumbling drums into a holding tank. Here it is treated with a polyelectrolyte. Suddenly all those troublesome little particles agglomerate into nice manageable clumps. The sludge settles in the tank and is pumped out with a Sandpiper sludge pump into

The Automatic Gravity Filter, Model DF-15-S, with a 3 foot ramp extension for drying. The filter indexes about six inches every fifteen minutes and has a radiant electric heater mounted over the drying ramp. The DF handles over 20 cubic feet of sludge per eight hour day. About a 3 inch thick cake is achieved on the filter.

WE ZINC ANOTHER PROBLEM

The sludge is now dry enough for disposal and the customer's effluent is more than clean enough to satisfy state inspectors.