

CASE STUDY

Rotoshear®
William Bolthouse Farms, Inc.



Rotoshear® screens update overloaded treatment plant

Problem

William Bolthouse Farms, Inc., a California carrot processor, had an antiquated waste treatment system. As their business and processing capabilities increased, so did the effluent discharge.

A slotted belt conveyor removed coarse solids from plant wastewater prior to their ponds. This conveyor was maintenance intensive, inefficient and undersized. The BOD loading going to the pond system was beginning to create intolerable odors.

Vibrating screens were considered, but other plants in the area indicated this type of screen blinded and could not handle the high flow required by Bolthouse Farms.

Solution

The slotted conveyor was replaced with two Rotoshear® screens, Model HRS60120 with .040" openings. These two large units were squeezed into the allotted area with only minor concrete changes.

Rotoshear® screens have a low headloss requirement, so the gravity flow system was maintained.

Results

The two Rotoshear® units have handled a combined peak flow of 12,000 GPM, a full 2,000 GPM over the anticipated peak flow.

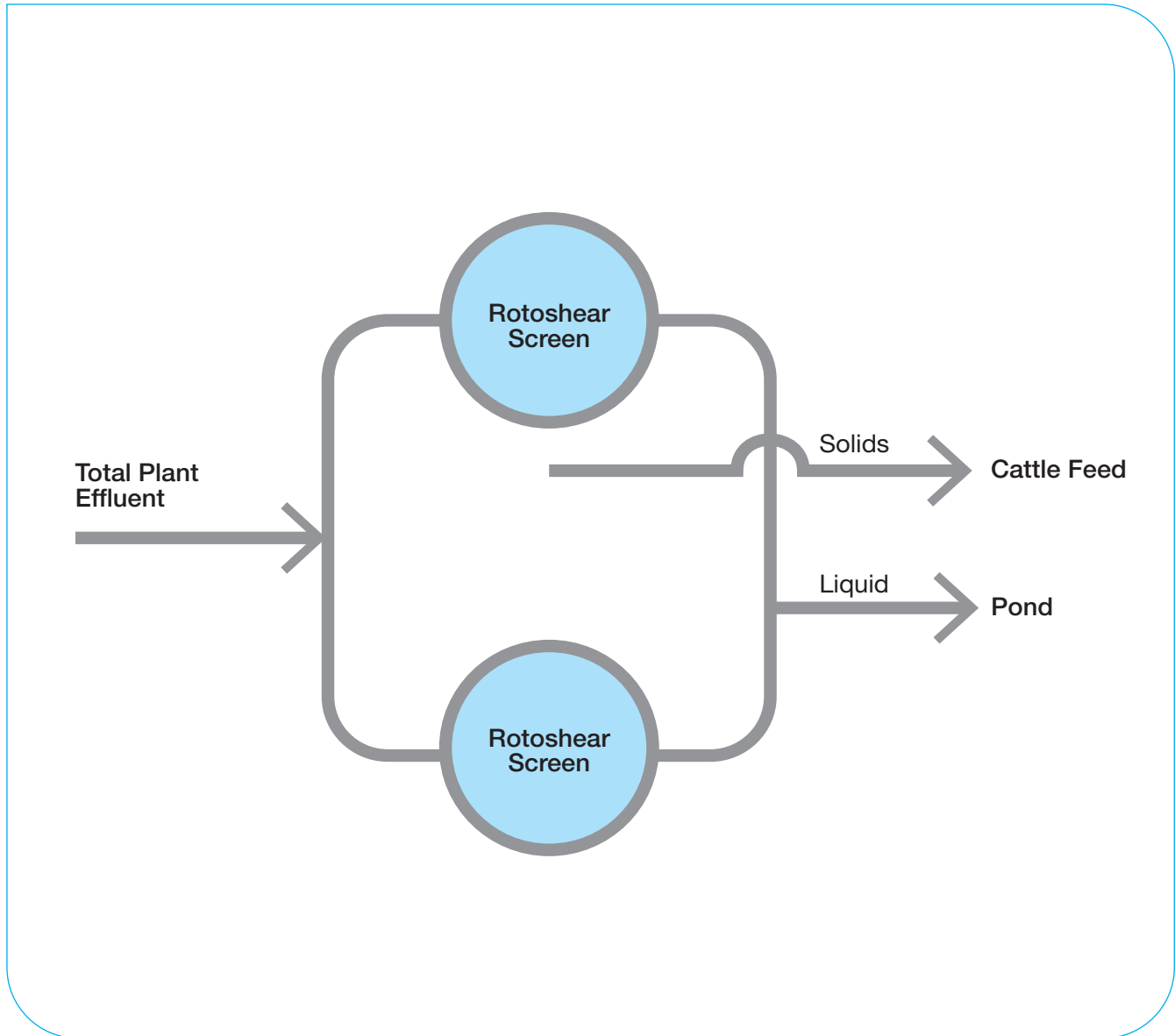
Carrot tops, pieces, seed stems, and grit are removed and sold as cattle feed. Screening has also reduced the amount of organics in the ponds, and has significantly reduced odors.

Flow rates, inlet consistencies and characteristics of solids to be screened vary widely, depending upon the carrots that are processed.

The Rotoshear® unit capably handles these fluctuations and the screen's simple design and minimal number of moving parts has made this low-maintenance, trouble-free equipment. ■

DESIGN DATA

Application	Total plant effluent, carrot processing
Equipment	Two Rotoshear® units, Model HRS60120 x .040" (1.0 mm)
Flow Rate	Variable up to 6,150 GPM (1,395 M3/H) each



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