

## BEEF PROCESSING PLANT



### IPEC Replaces Failed Screen at Beef Processing Plant

#### APPLICATION:

A Midwest beef slaughter operation, which processes 550 head of cattle per day, had installed wedgewire screening ahead of their DAF to reduce the solids loading to the flotation unit. The effluent from the slaughter and processing area is combined with the holding pen washdown and flows to a sump. The effluent from the screen goes to DAF units and is then finally discharged to the local publicly owned treatment works (POTW).

#### PROBLEM:

The original screen, from another supplier, needed replacing after ten years of use, and when it was replaced the same brand was ordered. The original screen manufacturer had made design changes and within a short period of time the customer had experienced multiple failures of the wedgewire cylinder. A second problem that arose with the original screen design was the occasional overflow of the screen during flow upsets or partial screen blinding. This resulted in further problems for the beef processing plant.

#### SOLUTION:

The plant engineer searched for an externally fed screen that offered both a rugged design along with a built-in overflow system. The IPEC RSS externally fed screen met both criteria and the plant purchased and installed two RSS2596 units with 0.020" wedgewire drums. The combined flow from the processing area and the holding pen area goes to the sump where there are two trash pumps, each with a capacity of 300 gpm, and the operation is controlled by the level in the sump. The flow to the screens is either 300 gpm or 600 gpm depending on whether one or both pumps

are in use. The flow is normally split between the two screens but can be handled by one screen if the other is down for inspection or maintenance.

The screens remove solids generated from the processing area including miscellaneous trash from floor washdown and also the manure solids from the holding area. The screens protect the DAF units from large solids and heavy loading and allow the DAF units to produce an effluent that is then discharged to the POTW.

The plant has been very satisfied with the operation of the IPEC screens. The screens operate without overflow problems and plant personnel have found that using steam from the spray cleaning system, does a good job of reducing grease buildup on the drums. The life expectancy of an IPEC screen in this application is 20 plus years.

For information on how IPEC can help solve your screening problems please contact us with your application details.