

CASE STUDY—OR-TEC MICRO BAR SCREEN

Kingsland, Georgia WWTP



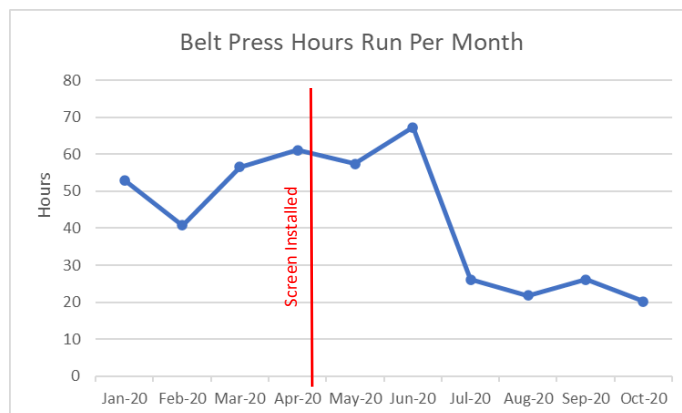
Or-Tec Micro Bar Screen and Swan Neck Compactor

Plant Size	4.4 MGD
Average Flow	2.2 MGD
Equipment	Or-Tec Micro Bar Screen
Screen Spacing	2 mm
Startup Date	April 17, 2020



This 2 mm screen will dramatically improve the downstream plant O&M.

In mid-April of 2020, the City of Kingsland, GA installed a (2mm) Or-Tec Micro Bar Screen at the head of their 8 MGD plant. They were replacing a 1/4 inch, in-channel band screen because they needed better screening to protect their plant equipment and process. They were expecting their new screen, having tighter spacing, to reduce the amount of rags and debris in their plant. Eliminating rags would protect their downstream equipment and reduce the maintenance required on that equipment. What they did not expect were some of the other positive changes that happened downstream as a result of this remarkable screening technology. They were soon noticing improvements in their mixed liquor suspended solids (MLSS), and the amount of sludge that was being produced at their plant. That there were other benefits to the Micro Bar Screen is an understatement! Kingsland’s sludge hauling costs have been cut by more than half, and so has the run-time on their belt press and the associated polymer costs.

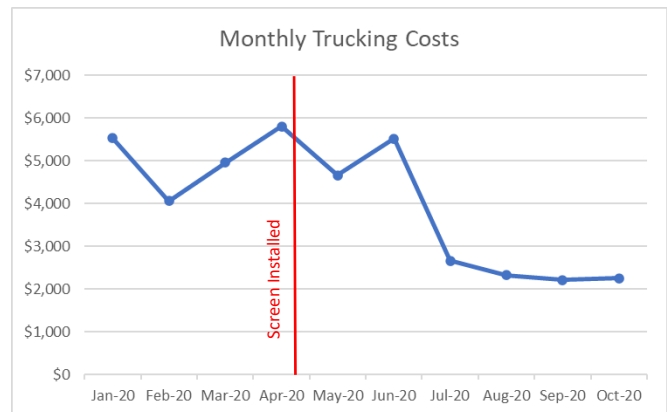
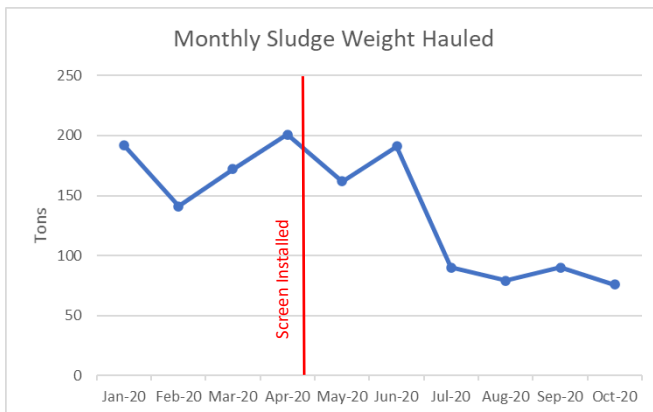


The Belt Press monthly run time has been cut in half, along with reducing their associated labor, maintenance and polymer costs.

Much more of the suspended solids are removed than with a typical screen. The picture to the right is the washed and compacted screenings. Much of this fibrous mass would have gone right past their previous screen, clogged pumps and aerators and caused maintenance problems.



“The Micro Bar Screen catches a majority of the smaller particles such as any grit or sand and excess build-up in the channel is seldom a problem.”
-Alan Drake, Plant Operator, Kingsland



By removing so much of the suspended and fibrous particles in the wastewater, Kingsland was able to reduce their sludge volume by about half and save around \$3,000 per month on trucking costs.



“You can see how fine and thorough the Micro Bar Screen is at catching inorganic material. Our experience with the new Micro Bar Screen has been very positive.”
-Alan Drake, Plant Operator, Kingsland