

# Jacksonville, Florida selects Headworks® Eliminator™ Bandscreen to Protect MBR System



JEA (Jacksonville Electric Authority) is responsible for the largest municipal operation, including the second largest water and sewer system in Florida. JEA provides electric, water and sewer services to more than one million people on Florida's Northeast Coast.

At the onset of the planning for their Nassau County nutrient removal facility JEA decision makers decided to use membrane bioreactors (MBRs) and Kubota Systems was the selected MBR provider. Once this decision was made, Headworks Inc. was chosen to provide the screens to protect the MBR process. The Headworks Inc. Eliminator™ Screen was a truly perfect fit. Its very fine 2mm screen openings ensures the protection of Membrane Systems.

Headworks Inc. was the preferred screening provider over other bidders because it has all stainless steel sieve elements and all stainless steel, heavy duty, roller chains. In addition, Headworks offers spe-

cial step shaped screen elements that eliminate lifting teeth, shelves or carry trays.

The Eliminator™ is commonly referred to as a "Bandscreen" or "Centerflow" screen. Its internal elements form a continuous band which travels parallel with the channel. The water enters through the center of the screen, then turns 90 degrees and passes through the stainless steel sieve elements and exits through the sides of the unit. Screenings are captured by the elements and are carried up to the discharge point. The collected screenings are removed by gravity and additional screenings removal is aided through a dual header spray system. The material is discharged into a sluice trough and conveyed for collection and disposal to an X-Tractor screenings washing and dewatering system also supplied by Headworks.

The precise process and design of the Eliminator™ screen helps prevent unwanted straggling pieces,

such as hair flowing to the MBR systems and causing a malfunction in the plant. The two Eliminator™ screens installed at JEA Nassau were each supplied in a stainless steel Black Box™ in order to keep construction costs down. Each Black Box™ is fed by a 16" diameter pipe and measures 4' wide by 5'-6" deep and approximately 7' long. Each unit is capable of treating a peak flow of 6 MGD of wastewater.

***"The screens give us the effluent quality that we wanted to protect the membranes. We're pleased with the robust quality and all stainless steel construction."***

Ken Snyder of United Water, the Lead Operator at Nassau County Operation.



## Information:

- JEA (Jacksonville Electric Authority) Nassau County Plant
- Year: 2005
- Two Eliminator™ Screens
- 0.080" (2 mm) openings
- 6 MGD per screen
- One X-tractor™ Washer/Compactor



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