Headworks® INTERNATIONAL

CASE STUDY: Sussex, Wisconsin WWTP

The wastewater facility in Sussex, Wisconsin serves as a regional plant for the Villages of Sussex and Lannon, Lisbon Sanitary District #1, and a portion of the Village of Menomonee Falls. Wastewater is conveyed to the facility by gravity and 9 lift stations.

Their existing screen was a coarse screen with rakes that passed through a trap door in the bottom of the channel. The coarse openings allowed large solids and rags into the downstream processes and the trap door allowed rocks to pass the screen. The old screen was made of mild steel and required frequent maintenance.

After careful consideration, water authorities and plant planners decided to purchase a grit removal system and a mechanical bar screen in addition to other equipment. Jim Thalke, the plant superintendent, and his two operators visited several sites to see different screens in operation. The three unanimously agreed the best solution was the Headworks® MS Bar™ Screen.

The MS Bar™ Screen was a perfect fit for their screening needs. Manufactured of all stainless steel, it's resistant to corrosion and abrasion. The small bar space openings of ¼" allows removal of rags and other debris that used to clog the dissolved oxygen probes.

Additionally, the front cleaned front return rake system removes rocks rather than allowing them to pass.

The Headworks® MS Bar™ Screen has been a successful installation in the Sussex Regional WWTP. The screen's overall length is 25 feet. It sits in a channel 3' wide and has a capacity of up to 12 MGD at a water depth of 4'. Since its installation the MS Bar™ Screen has been virtually maintenance free. According to Jim Talke, "Maintenance on the screen has been cut dramatically. The clear covers on the screen along with the bagger on the compactor really cut odors".