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# HUBER Technology, UK



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# HUBER's EscaMax® Gives Greenville a Clean Start at the Headworks



HUBER's Belt Screen EscaMax® improves reliability and process efficiency at Greenville's WWTP

The City of Greenville's Wastewater Reclamation Center had been operating in a "vintage 1953" facility and – despite a couple of upgrades – it was still behind peer facilities in the modernization of its equipment and processes.

Just a few years ago, a new facility was built beside the existing facility. The old plant was demolished upon the new facility's completion. Updates driven by new technologies and equipment greatly improved Greenville's operations.

# Making fact-based choices

Greenville researched industry standards in all areas and brought in those that best fit its operations. Screening technology for the facility headworks was one area where Plant Supervisor Bill Erwin felt the facility could get big bang for their buck with a smart selection.

"Many of these technologies are similar," said Erwin of the product selection process. "I mean, it's a pretty simple concept. For that reason, you have to look at other qualifiers to make the best choice. The EscaMax® was, by far, the preferred fine screen because of its reputation of durability and reliability. It works and keeps working."

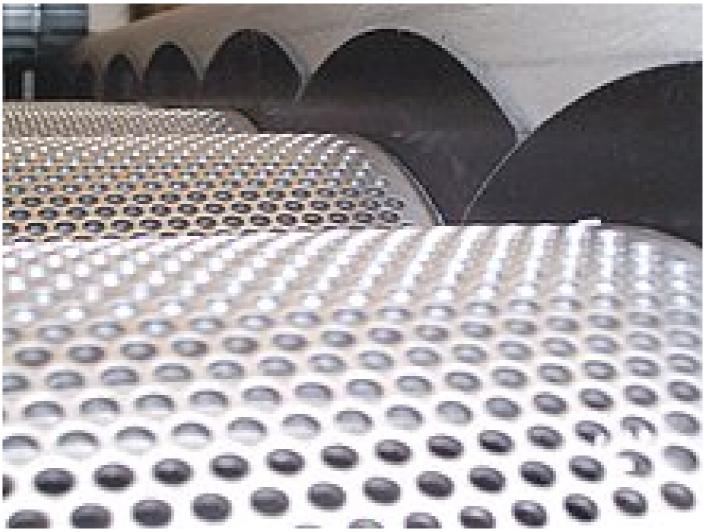
Greenville was searching for a screen solution that would:

- Clean rags and other solids from headworks flow
- Provide durability and reliability
- Operate without significant management and maintenance
- Capture and separate waste for haul-off

#### Opportunity

A new facility gave Greenville a clean slate on which they could implement the best of the plant technologies that they had researched. According to Erwin, "Seeing what works and what doesn't was an effective way to clearly envision how we should tool our plant and set up our processes. We asked lots of direct questions and got honest answers from the people who live with these products every day."

Greenville quickly identified fine screens as their headworks screening choice. Fine screens produce a much cleaner flow than other types of screens such as bar screens and it was clear that most operators preferred the fine screens. In fact, most of Erwin's peers preferred HUBER's EscaMax® fine screen.



Excellent separation efficiency due travelling perforated plates

### Solution:

The Greenville Wastewater Reclamation Center had one goal: To make the flow of water coming into its treatment process rag and debris free.

And now - to reach that goal - the team would look to the HUBER Belt Screen EscaMax® to do the job.

In the old facility, Erwin's team was constantly fighting rag balls so they could try to keep debris from damaging downstream equipment. In the new facility, EscaMax® gives them the freedom to focus on more than the rag balls – and still have confidence that their downstream equipment is not in harm's way. Instead of constantly fighting rag balls, they do three or four walk-by checks to make sure that rags aren't hanging up or bridging and failing to move into the compactor. If they find a hang-up, they just wash it down without a problem.

The EscaMax® gives them control over what gets in the stream whereas their previous process gave them no way to prevent rag balls from flowing into pumps and mixers and causing slowdowns and clogs. "Everyone dreaded their turn at deragging the pump or cleaning the rags out of the mixers," said Erwin about the effects of the rags on his team's processes. "The impact to the equipment is tremendously reduced because the bulky rags are just not there to cause the problems."

### Getting the rags out at the start

The concept of headworks fine screens is just common sense. After all, doesn't it make sense to separate out and discard undesirables from ever getting into your system?

The benefits of fine screens:

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- You control what comes into the headworks.
- You start with a cleaner flow
- You reduce stress on downstream machines
- You reduce amount of management required for equipment
- You reduce debris within the facility
- You give your team time to focus on other operational needs

According to Erwin, the EscaMax® keeps his team from dealing with the hassles, problems, repairs and slowdowns caused by rags and debris moving through the stream. The debris causes a chain-reaction that works its way through the process, wreaking havoc by causing clean-up and often downtime from breakdowns and repairs. These issues carry with them their own associated costs in man hours, lost production and consumption of repair budget.

## Bonus effects of fine screening

Consider the new screens downstream protection. Taking the debris out at the beginning ensures that wear and tear is minimized to pumps, mixers – actually anything that beyond the headworks.

Helping to reduce loading in the plant. Practically eliminating solids and pushing a cleaner stream through the facility, reduces loading levels that are monitored for regulatory compliance.

Enjoying excellence in quality. Because of the HUBER Belt Screen EscaMax®'s simplicity and strength in its design and manufacturing materials it is incredibly durable and reliable. Greenville's team has watched as the EscaMax® has been a workhorse for more than 16 months without a hitch. Making a smelly process less smelly. Greenville's new facility wish list included odor reduction. Because the screen removes some of the odor culprits (rags and debris) at the headworks, the task of creating less offensive odors is less daunting.

Erwin said, "You could smell the evidence of the old plant a half mile away! The new facility has put low odor processes in place and you can tell it. We will never be odor-free. This process is just inherently odiferous. But we have been successful in bringing that odor level down significantly."

"The EscaMax® has definitely met our expectations. It is a simple machine that does a good job. I'm glad we got it," said Erwin of his experience.

This flawless operation also means that Greenville's team has had:

- No downtime from issues or repairs
- No need to make service requests
- No additional repair costs

The initial fine screen requirements that Greenville Wastewater Reclamation Center identified have been met by the HUBER Belt Screen EscaMax® and it has helped them reach their original goal of minimizing rags and debris in its stream.

Get in touch with a member of our team for more information about HUBER Belt Screen EscaMax® including technical details, drawings, and specifications.

## **Related Products:**

■ HUBER Belt Screen EscaMax®

#### **Related Solutions:**

HUBER Solutions for Mechanical Pre-Treatment







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