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Picatech Huber AG

Maschinen für die Abwassertechnik im Kommunal- und Industriebereich



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Flawless operation and longevity make the RakeMax® Multiple Rake Screen invaluable to Guelph's Screening Process

Flawless operation and longevity make the RakeMax® Multiple Rake Screen invaluable to Guelph's Screening Process

"Nothing slips by the RakeMax®. Its operation is absolutely flawless. After three years, we look at the components in amazement because they are ageless – it's as if they were just installed yesterday."

Majde Qaqish, Project Engineer for the City of Guelph WWTP

It had become obvious to The City of Guelph that it was time to replace several of the components in its treatment process. Project leaders also wanted to take the opportunity to upgrade its treatment processes by implementing leading edge technology. Working with consultants, the City thoroughly researched solutions to identify, review, and choose the technology and vendor that was the best match for the plant and the long-term wastewater treatment goals of the City.

After visiting implementation sites, talking to other Huber clients, participating in demonstrations of technology and vendors, the City confi dently selected HUBER and the RakeMax® bar screen.

The City of Guelph installed four RakeMax® screen systems over 3 years to complete a configuration that produces 100% uptime. Two systems are in production at all times with two reserved for backup. The City maintains 100% capacity through regularly scheduled cleanings and maintenance checks.

- Minimum maintenance
- Incredibly high uptime
- Consistent performance
- Ageless durability
- Flawless operation

Challenge:

For Majde Qaqish, Project Engineer for the City of Guelph Wastewater Treatment Plant, putting a leading edge screening system in place was a priority. He had a set of stringent performance and durability requirements for the technology itself and wanted to combine those with productivity priorities for the maintenance crew. The City of Guelph required four things of its technology and vendor:

- 1. Improve the amount of waste removed from the stream
- 2. Operate efficiently with little required maintenance
- 3. Last well into the 50 year strategic wastewater treatment plan
- 4. Support the technology with knowledgeable, and responsive resources

Solution:

Majde knew HUBER and its local support resources. He understood the RakeMax® technology and – after seeing it operate at another treatment plant – considered it to be the best technology of its kind and the best choice for Guelph's needs.

With expectations set for its new technology to produce good efficiency in removing inorganics and grit from the stream, the City was delighted when the system was even more impressive, producing at high removal efficiency, zero-maintenance operations and consistently flawless performance.

According to Majde, there is a tremendous quality improvement in what gets extracted at the headworks. As a result all tank capacity is made available for optimizing plant capacity.

Made to be a workhorse

The design, manufacturing, and materials make the RakeMax® incredibly durable and maintenance free. It consistently out-performs other technology.

The RakeMax® is also configured for easy processing. Screen covers on both the top and bottom reduce emitted odors by 70%. Monitoring screenings is as simple as lifting the covers.

Low maintenance

Grit tank cleanings - previously performed by the City's crew on 2-month cycles - are now performed on 9-month cycles.

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"Nothing slips by the RakeMax®." - Majde Qaqish with one of 'his' RakeMax® screens

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Aerial view of Gulph's treatment plant

Low downstream impact

Debris no longer collects in digesters and their operational efficiency has shown a 90% improvement.

Improvements across the screening process

Marked improvements are obvious in all areas the City's screening process. The volume of screenings removed has increased, quality of end-product has improved and unscheduled maintenance needs have been reduced to zero.

Operator Quotes:

"We have 100% confidence in our technology and our vendor. The RakeMax® operates flawlessly and HUBER's resources are close by and knowledgeable of the technology and our processes."

"The odor reduction is significant. The staff faced very offensive odors when entering the area. The covered screens block any odors that exist, however the process eliminates so much of the waste that the process's 'trademark' odors just don't exist."

City of Guelph, ON - Waste Water Treatment Plant:

Facilities: 1

RakeMax® Implementations: 4

Service Area: City of Guelph as well as the Village of Rockwood and the Gazer-Mooney subdivision located in the Township of

Guelph- Eramosa

Average Flow: 54.5 ML/d

The City of Guelph, Environmental Services Department, Wastewater Services Division (WSD), is engaged in wastewater, storm water and water quality management for the area which it serves. The WSD manages and operates the Wastewater Treatment Plant located at Hanlon and Wellington Street West and is responsible for meeting the treatment standards prescribed by Ministry of Environment (MOE) legislation.

Related Products:

HUBER Multi-Rake Bar Screen RakeMax®

Related Solutions:

HUBER Solutions for Mechanical Pre-Treatment

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