

Rotamat® RoK4 Vertical Screen

Case Study:

Oostburg WWTP, Oostburg, WI



Oostburg Sees Long-Term Value in Rotamat® RoK4 Vertical Fine Screen

“We have improved the quality of our solid screenings and reduced the workload on our downstream components...” Plant Operator, Greg Lemahieu

Oostburg Wastewater Treatment Plant (WWTP) found the Huber’s Rotamat® RoK4 Vertical Fine Screen when seeking out a new headworks screening solution. The WWTP’s engineers were elated with their find because they had doubted that a solution existed that could meet their requirements and limitations.

Oostburg’s facility is a lean operation with limitations in space for screening technology and in the staff resources available to manage, maintain and report on the Village’s processes. Because of these limitations and needs, the new fine screen solution must:

- **Improve screening potential**
- **Reduce operational costs**
- **Operate in confined space**
- **Eliminate hands-on management**

Challenge:

“We are a small facility, but the RoK4 puts us technologically above par among similar plants.”

Even though space was limited, Oostburg knew that putting a headworks screening solution in place would improve their operational efficiency. The WWTP also wanted to upgrade their technology from the aging and costly chopper-style comminutor in use at the time.



“We have improved the quality of our solid screenings and reduced the workload on our downstream components. We’re ecstatic with the fact that the periods between rebuilds for these components have increased since putting RoK4 in place. And that is significant to our overall operational costs since each rebuild can run several thousand dollars.”
“My favorite feature is the continuous bagger. It is totally hands-off because we don’t change bags. We simply cut and tie off like we’re sausage makers.”

Solution:

Oostburg truly maximizes the RoK4’s design because they require the system to operate in a completely vertical motion as it pulls solids from the headworks wet well. The RoK4 was installed with the system’s screen basket in the area that the comminutor occupied. This design required that the system raise the screenings vertically to the floor above for disposal. During the process upward, the screenings are washed, transported, dewatered, compacted and deposited into a continuous bagging unit. This all takes place in one square meter of floor space. Since the RoK4’s presence eliminates the need to chop solids, the comminutor isn’t missed.

Oostburg WWTP’s operations are managed and maintained by a one man team. But because of Huber’s RoK4 Vertical Screen, Plant Operator Greg Lemahieu has regained valuable time beyond his required maintenance, lab work and environment reporting activities allowing him to develop new ways to leverage the plant’s technologies and optimize operations.

“The RoK4 Vertical Fine Screen is an amazing solution. It works just as well today as when it was brand new. It has been clean as a whistle since day one.”



Quietly and cleanly doing its work

The WWTP team was surprised by the scale of improvements that the RoK4 provides to their operations. Immediately, the team noticed that the solution works flawlessly day after day as it:

- Pulls rags out in a vertical motion at the headworks
- Eliminates maintenance headaches downstream that rag clogs can cause
- Minimizes the odors and noises of the previous comminutor grinder process

Four factors illustrate the RoK4's clean machine image:

“The Huber folks are phenomenal. They know who we are and therefore immediately understand our requests. They make my maintenance duties totally hassle-free.”

1. The channel is cleaner from the onset. It gets the solid gunk out before it has the opportunity to start downstream.
2. It is “low-odor” by design. Any odors that result from screenings are concealed by the closed basket design.
3. Even the organics get “laundered”. It backwashes organics into the system for treatment.
4. It's a hands-off process. It washes, dewateres and compacts solids in a single step and then sends them directly to barrels through a continuous bagging process.

VILLAGE OF OOSTBURG



Oostburg Wastewater Treatment Plant

Location: Oostburg, Wisconsin

Website: <http://www.oostburg.org/>

Facilities: 1

RoK4® Vertical Fine Screen

Service Area:

The WWTP serves a population of 2200 and manages and treats an average daily flow of 280,000 gallons.

The WWTP's treatment process includes the Huber screen at headworks, a grit removal chamber, 290,000 gallon extended oxidation ditch, 2 secondary clarifiers and a belt press for sludge handling.

Sheboygan County's Village of Oostburg, settled in the 1840s by Dutch immigrants, is intent providing the highest quality of service to its residents and believes in improving the quality of life and promoting the importance of a "family friendly" atmosphere, without burdensome taxes or excessive government intervention.

Durability, reliability and incredibly low downtime

RoK4 is rock solid technology made completely of stainless steel. There is no corrosion – even in the highly corrosive wet well environment.



Oostburg's RoK4 has required minimal repair or parts replacement with only one set of auger brushes replaced over its six year lifetime.

RoK4 drives huge improvements in a WWTP's maintenance and repair resources – both human and budgetary. Man hours do not have to be committed to its operation, a repair budget is unnecessary and its maintenance schedule is minimal. Downtime associated with the RoK4 is practically non-existent. The removal of solids in the headworks reduces the workload for downstream components to such an extent that the period between rebuilds on downstream components such as pumps and clarifiers are extended. This is bottom line reality for Oostburg since rebuilds can cost as much as \$5K per component per rebuild.

Support as solid as the solution

Oostburg has experienced personal, responsive support at the rare points that its team has actually needed it, according to Lemahieu. Needs are matched to the right expertise –even connecting customers with technicians and engineers when questions require their attention. Huber understands the urgency of WWTP operations and handles order processing with speed and accuracy.

RoK4®'s design and manufacturing quality provides clients with reliable performance. Hard-working technology does require parts replacement and maintenance and when that is required, clients find the same reliability in Huber's support and services that they discover in using its technology. Huber's experience with municipalities and with wastewater processes is extensive as is its knowledge of the technologies it provides. This industry-technology insight allows Huber to work with organizations to ensure that systems are geared to perfectly match up to immediate tactical challenges and long-term strategic goals.

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