



Case Study

Shredding the Evidence: Correctional facility solves contraband-clogged wastewater pumps

Overview

A correctional facility in the Great Plains region was struggling with the consequences of tape, pieces of cloth and other contraband being flushed down toilets by prisoners. The contraband would work its way through the septic system and into the wastewater pump. The facility's two grinder pumps that transport raw sewage to the municipal wastewater treatment plant frequently clogged due to large solid remnants.

To help minimize clogging of the grinder pumps, maintenance staff had installed spiked catch baskets on the in-flow pipes. Due to the amount of debris, catch baskets had to be cleaned out manually three times a week, at significant time and maintenance costs.

In 2017, facilities managers decided to source different style pumps that could reliably handle wastewater filled with large solid debris, without clogging.

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PROBLEM

- Clogging of grinder pumps
- High maintenance costs due to frequent manual clean-outs
- Difficult access to catch baskets



Solution

Through their regional distributor, facilities managers identified the BJM Pumps® SK Series corrosion-resistant, solids-handling, non-clog pump to replace their existing grinder pumps. SK Series pumps consist of dual-shredding, solids handling pumps designed to prevent clogs in wastewater. Their Tungsten Carbide fitted, non-clog Fang™ impeller shreds and shears 360 degrees to expedite flow in wastewater.

SK Series pumps can handle solids up to 3.5 inches in size and pump wastewater at 570 gallons per minute with a maximum head of 54 ft. The 304 stainless steel motor housing make them particularly corrosion resistant.

SK Series pumps offer the flexibility to integrate with a slide rail system, which would make future maintenance and inspection much easier for facilities managers. Catch baskets were no longer necessary and were removed. Since installation in June 2015, all clogging problems have been eliminated.

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FEATURES

- Corrosion-resistant solids-handling non-clog pump
- Wear-resistant shredding and cutting system designed to tear, break, rip solids
- Tungsten carbide-tipped impeller
- Max solids from 1.6-3.5 inches

APPLICATIONS

- Municipal Water & Wastewater
- Mining & Minerals
- Food & Beverage
- Pharmaceutical & Medical

RESULTS

- Zero clogging, zero downtime
- Reduced maintenance costs through removal of catch baskets
- Slide rail assembly reduces inspection and maintenance time



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