



Success Story

Kansas correctional facility installed OverWatch™ Direct In-Line Pumping System to solve frequent clogging issues and prepares for almost anything to be flushed

Overview

In this Kansas minimum / medium security prison, items such as cloth, plastic bags, paper, feminine products, and even needles are often flushed down the toilet, wreaking havoc on the original pumping system, causing headache for the maintenance teams.

The prison's greatest concern is the potential for a clogged pump to cause unscreened sewage to back up into the prison block. This would require moving hundreds of inmates to another location to properly clean and sanitize. Not only is this logistically difficult, but the time and expense would be painstaking.

The original "non-clog" submersible pumps were anything but that. At least 3 times per week, the maintenance team had to make the trip out to the pump station. The 48 inch diameter wet well made for a claustrophobic and hazardous climb down 26 feet to the pumps.

The facility wanted to upgrade the entire pumping station. An OverWatch™ Direct In-Line Pumping system was installed. This complete system including the duplex OW101-6VV 5HP stainless steel pumps and valves were pre-installed into the new dry well, along with a plug-in-ready control panel. The entire tank was lowered into place, connected to the inlet and discharge, and was on-line pumping in just a few short days.

The pumps were installed with the patented DIPCut® impeller, allowing the pumps to reverse rotation and shred potential clogs when the smart-sense VFD's sense an increase in torque. This has allowed the facility to eliminate those frequent trips to the wet well.

PROBLEM

- "Non-clog" submersible pumps were clogging and requiring maintenance 3+times/ week
- Needed to prevent possible back-up causing unscreened sewage into the prison population
- Safety concerns with previous wet well entry; 48" diameter, depth of 26'



RESULTS

- Eliminates the potential of sewage overflow into the prison cells
- Zero clogged pumps
- No un-scheduled maintenance for cleaning

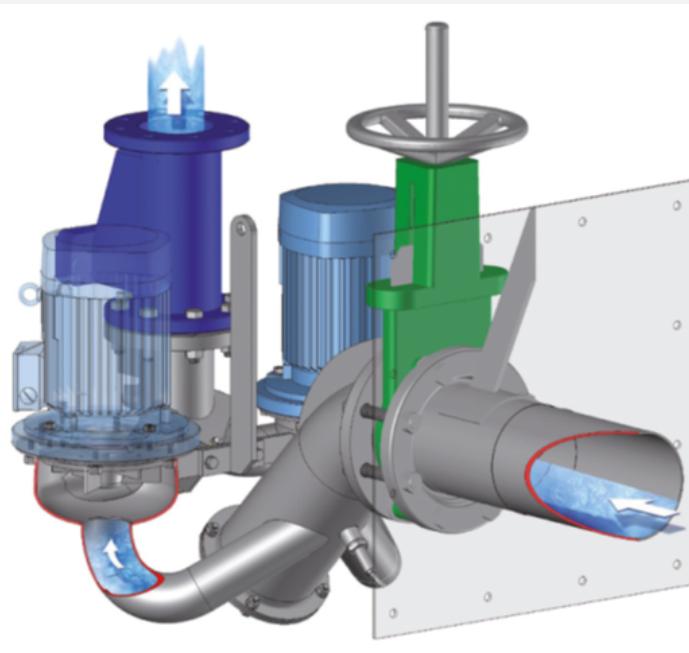
FEATURES

Immersible IP67 IE3 Motors

Modulated pumping driven by variable speed drives for optimized performance and savings

Optional DIPCut® Shredding impeller for self cleaning operation

Shared stainless steel hydraulic body



Isolation valve for easy maintenance

Stainless Steel wall flange supplied for easy mounting

Optional remote monitoring allows for control anywhere

Stainless Steel level pressure sensor

Stone trap/Clean out

Eliminating the wet well to maximize safety; minimize maintenance

The OverWatch™ Direct In-line Pumping Technology creates an environment that eliminates wet well maintenance, exposure to dangerous gases and hazards associated with retained effluent, while saving 30% on energy costs and 65% total savings over the life of the pump. Lifting liquid as it arrives removes the opportunity for whip, fats, oils or greases to build up and solidify. The VFD controlled pump allow the system to adjust its performance real-time; reversing operation to remove clogs. With over 2000 installations globally, OverWatch™ is maximizing safety and minimizing risk by retrofitting current lift stations all over the world.

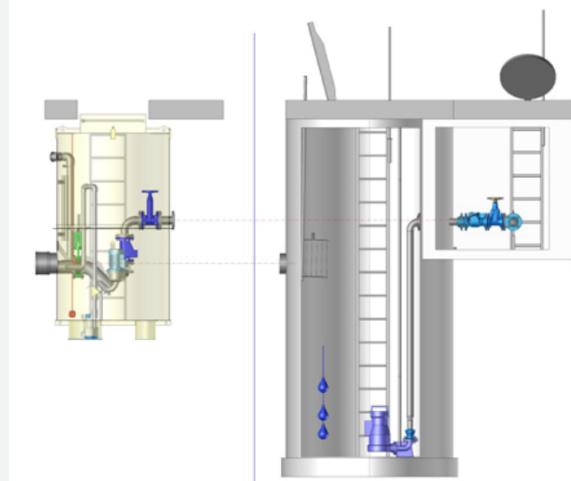
BENEFITS

- Eliminates the wet well and hazards associated with them
- Constant self monitoring operation allows the system to adapt real-time to the environment, adjusting motor performance to the incoming flow and eliminating potential clogs without human intervention
- Reduced maintenance; no screen or well cleaning; no scheduled site visits.

APPLICATIONS

- Municipal retrofits or new wet wells
- Residential, commercial or industrial ejector pumps
- In-line pipe booster systems

Direct In-Line vs. Traditional Installation



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