INDUSTRIAL FLOW SOLUTIONS™

OverWatch™ Direct In-Line Pump System

Success Story

Chlorinated laundry liquid, combined with fibrous sewage would "sink" any submersible pump. An overnight OverWatch™ Direct In-line Pump installation pays for itself in less than 12-months

Overview

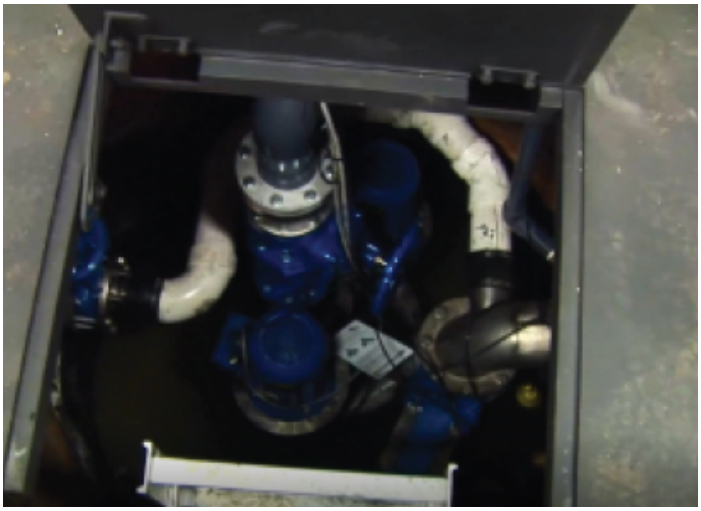
A rehabilitation and senior care center in North Wales, Pennsylvania had a sewage pumping system that was in constant need of repair. The system was a duplex pump set with pedestal mounted motors connected by line shaft to the submerged pumps in an 8' deep x 6' diameter cast iron basin. The problem centered around the annual cost to repair damage to the bronze fitted, cast iron constructed pumps, handling very aggressive influent that would attack the pump's metallurgy. This influent was primarily from their laundry operation. High concentrations of chlorine, from bleach, would eat away at the pump's impellers and destroy the performance. Also, a secondary inflow of raw sewage from the lower-level sanitary waste containing disposable wipes and other ragging materials were causing the current system to experience clogs. The center was experiencing an annual maintenance cost averaging $17,000.

The laundry operation is a critical function to the facility. To avoid any downtime or disruption to this function, they installed a new OverWatch™ Direct In-Line system during an overnight shutdown. The OverWatch™ duplex system is constructed of 304L stainless steel and uses patented technology to lift influent directly from the point of entry. Without water loading or the need to accumulate wastewater in a basin, the system resists corrosion from the chlorinated liquid.

The OverWatch™ Direct In-Line Pumping system was the perfect selection for the center.

PROBLEM

- High concentrations of chlorine influent from laundry operations destroyed impellers and corroded pipeworks
- Raw sewage that included disposable wipes and other ragging materials caused the pumps to clogged
- Cracked cast iron basin was leaching fluid into the surrounding area



Solution

- Stainless Steel construction prevents corrosion from chlorinated laundry liquid
- Eliminating the wet well saves on construction costs of replacing the basin
- Annual maintenance costs erased
- Odors are elminated

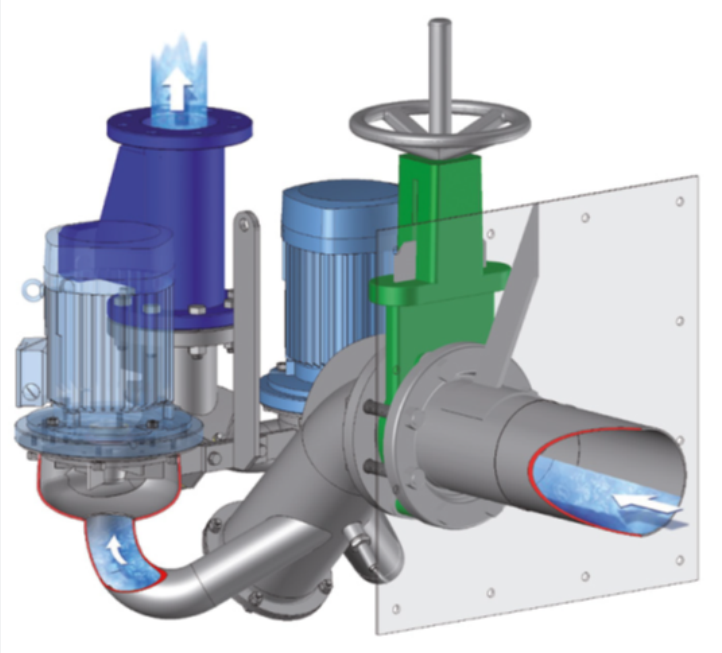
FEATURES

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 associates 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 it's 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.

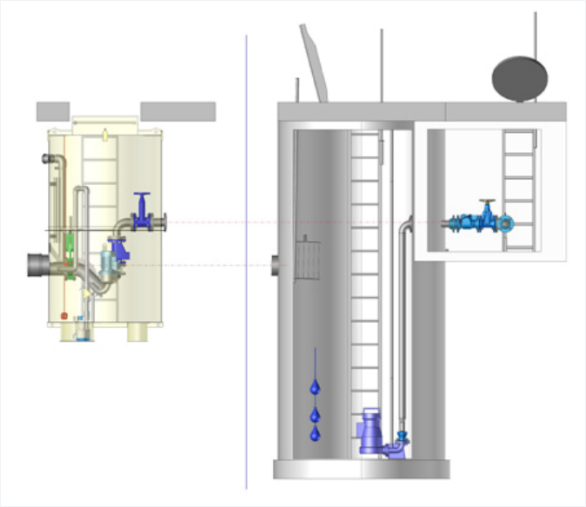
BENEFITS

- 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 vists.

APPLICATIONS

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

Direct In-Line vs. Traditional Installation



INDUSTRIAL FLOW SOLUTIONS™

104 John W. Murphy Drive
New Haven, CT 06513

860-631-3618

sales@flowsolutions.com
flowsolutions.com