



Customer:

Borough of Fair Lawn
New Jersey

Challenge:

Chronic Clogging of Pumps

Solution:

Flygt N-Technology
Wastewater pumps

Results:

For more than 20 years,
the pumps have run clog free.

Two Decades of Clog-Free Pumping in New Jersey

Flygt Pumps with N-Technology have stood the test of time since 1999

The Borough of Fair Lawn, New Jersey is a mere 10 miles from New York City. But in contrast to the towering skyscrapers and bustle of Midtown, Fair Lawn is a suburban town. The borough – established in 1924 – occupies a little more than 5 square miles in Bergen County and is home to 34,000 people. With its two train stations, Fair Lawn is home to many commuters to Manhattan and elsewhere in the metro area.

CLOGFREE GUARANTEED SMART PUMPS

While Fairlawn once treated its own wastewater, the borough's sewer system now transports its flow to the Passaic Valley Sewerage Commission for treatment. Fair Lawn generates between 3.5 and 4 million gallons per day (MGD) of wastewater. The sewer system includes 550,000 linear feet of pipe, which often end up carrying their share of modern trash. Rags, towels, and other non-flushable debris ends up in the sewers like at any town. The Sewer Division's main challenge is to keep the wastewater moving in the most efficient manner.

Challenge

When Jake Mamo started his career in the wastewater industry, he quickly discovered the kind of maintenance work he didn't want – and that was cleaning out clogged wastewater pumps. Now Public Works Supervisor, Mamo described how he used to unclog pumps regularly in his first days at Fair Lawn.

"We'd have to clean the pumps at the Radburn Pump Station every day – five days a week and on the weekends," he said, speaking about one of the major lift stations in town. "The job needed a minimum of two guys. We'd have to shut the 8-inch suction and discharge valves. Next, we'd have to shut down the electric. Inside the dry pit, we'd have to remove the 6-inch inspection plate on the bottom of the pump. Then we'd reach our arm up inside and pull out all the rags and debris from inside the pump."

Mamo and the borough considered a number of solutions for the unwanted debris flowing into its two largest stations – Radburn and Saddle River. At one time, they thought about installing comminutors and sewage grinders. But ultimately, they wanted a better solution to save them the time and aggravation of dealing with clogged pumps.

Solution

Fortunately for Mamo and the borough, Pumping Services, Inc. (PSI) had a solution to eliminate clogged pumps. PSI is the exclusive pump distributor for Flygt, a Xylem brand, in Northern New Jersey. John Corkery, now Municipal Sales Manager at PSI, has a long history of service to Mamo and Fair Lawn. Back in 1999, Corkery recommended Flygt N-Technology Wastewater Pumps for the first of three pumps at the Radburn Pump Station.

Flygt N-Technology pumps have an innovative and proven impeller design. The N-impeller vanes have back-swept leading edges, so that rags and other debris have no sharp edges to cling to. In addition, the impeller has a guide pin that sweeps solids away from the center to the perimeter of the inlet. When the solids get to the perimeter, they are directed inside a relief groove and slide along the tip of the impeller vane and out of the pump discharge. The N-Technology is so proven that Xylem guarantees the pumps to be clog free for the first year of service in municipal wastewater. The impeller also is more energy efficient, so Xylem also guarantees 25% energy savings in the first year when compared to older technologies. For intelligent Flygt pumps, Xylem offers longer clog free guarantees.

Flygt N-Technology pumps have an engineered impeller to maintain clog free operation in wastewater applications. Xylem even provides clog Free Guarantees for the technology.



Fair Lawn's Jake Mamo (left) and John Corkery of Pumping Services, Inc. (right) have a relationship that goes back two decades. The two men – along with Flygt N-Technology – solved chronic clogging issues at the Radburn Pump Station and elsewhere in the system.



Fair Lawn installed the first N-Technology pump – a 35 HP Flygt NT 3201 – in 1999. The success with that pump led to the replacement of Radburn’s other two pumps – both 25 HP Flygt NT 3201 – in 2001. Installation of Flygt pumps followed at other stations, including the borough’s largest station – Saddle River. Saddle River has operated clog free with three Flygt N-Technology pumps – two 75 HP Flygt NT 3300 and a 130 HP Flygt NT 3305 – since 2001.

Results

The borough’s selection of Flygt N-Technology pumps has solved their clogging issues once and for all.

In addition, the borough never did have to install comminutors or sewage grinders at its stations. The Flygt pumps simply handle the rags and other debris. And because the Flygt pumps are so effective, Mamo and his staff are able to focus on more proactive things to keep the nearly 100-year-old system running.

“We have never pulled the pumps due to clogging. And at Radburn, we always have at least one pump running continuously. So those pumps have basically run clog free for 20 years.”

Jake Mamo – Fair Lawn Public Works Supervisor

“Jake runs a solid preventative maintenance program,” Corkery said. Mamo agreed, “We inspect our pumps regularly and perform the proper scheduled maintenance,” he said. “And every five years, we bring in a vac truck to clean out sediment from the station wet wells.”

The combination of Fair Lawn’s proactive Sewer Division, PSI’s service, and Flygt’s N-Technology have proven a winning combination for the borough. For more than 20 years, Flygt N-Technology pumps have run clog free. In so doing, they have freed up Mamo and his team to focus on the many other demands of running a modern sewer system in a major metro area.



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20
YEARS
CLOG FREE

IMPROVED
RELIABILITY

with substantially
less maintenance

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