

# Xylem's Godwin Dri-Prime NC350 Pump provides non-clog sewer bypass solution

Rented pump features non-clog and remote monitoring technologies

Godwin's Dri-Prime 16-in. pump ran a sewer bypass system continuously for a month without issues while the city of Raleigh, North Carolina, replaced a major outfall line feeding its wastewater treatment plant. The Dri-Prime NC350 combined Flygt N-technology with its innovative self-cleaning impeller and Godwin Field Smart Technology, which provides 24/7 remote monitoring of the pump.

## Project

The city of Raleigh, North Carolina, needed to replace a major 42-in. outfall line, one of the major lines that feeds the city's wastewater treatment plant. The flow in the line ranged from less than 1,000 gallons per minute (gpm) to more than 5,300 gpm.

To maintain treatment operations while the outfall was replaced, Ken Malonson, Vice President at Park Construction, needed to set up a temporary sewer bypass system. Malonson first contracted with a different company to set up the system, but the company's North Carolina division closed before the job could be completed. Malonson turned to Xylem and its Godwin brand of pumps. "Xylem was right there for us," Malonson said. "They took over the job and replaced the pump. We never missed a beat."

Malonson rented Godwin's Dri-Prime NC350, which was the primary pump of the bypass system and handled the project's incredibly varied flow. The project included 1,800 ft of 18-in. HDPE discharge pipe and a short, 12-in. HDPE discharge line into an 18-in. manifold. The sewer bypass project took one month, and the NC350 ran nearly 24/7.

## Solution

The project marked the first rental of Godwin's Dri-Prime NC350 pump, equipped with non-clog technology and Field Smart Technology, to remotely monitor pressure, sump level and flow data. The NC350 features Flygt N-technology with a self-cleaning impeller that prevents the pump from becoming clogged by stringy solids. A special pump-out vein acts like a pump within the pump, allowing stringy solids a path around the impeller.

The Dri-Prime NC350 outperformed the two pumps initially rented for the bypass, Malonson said. There was no need to break down the pump and clean out anything that got stuck in it. Because the NC350



The Dri-Prime NC350 pump features a self-cleaning impeller that prevents the pump from becoming clogged by stringy solids. During the month-long project, the pump never had to be backflushed or cleaned.

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**CUSTOMER:** Park Construction, for the city of Raleigh, North Carolina

**CHALLENGE:** Deliver a non-clog wastewater pumping solution for a temporary sewer bypass

**PRODUCTS:** Godwin Dri-Prime NC350 and Field Smart Technology (FST)

**RESULTS:** The pump ran continuously for a month without clogging, handling an incredibly varied flow and providing real-time data to monitor the pump's performance.

The Godwin Dri-Prime NC350 combines Flygt N-technology with an innovative self-cleaning impeller for non-clog performance, with Field Smart Technology to provide remote monitoring via cellular signal or satellite connection.

never had to be backflushed or cleaned, the pump saved Park Construction time and money. With its wide range of flows, the NC350 was able to handle low flows at night as well as higher flows during the day by increasing and decreasing speed.

By renting from Xylem, Malonson benefitted from the company's full-service maintenance and pump monitoring through Xylem's Field Smart Technology. Traditionally, a bypass project requires people to monitor the pump 24/7 to ensure they are operating effectively. With Field Smart Technology, instead of paying someone to stay and watch the pump system run, contractors can monitor the pumps themselves from anywhere on a smartphone, or can hire Xylem to provide monitoring. Alerts of minor issues can help operators address problems before they cause a major shutdown.

Renting the equipment provided significant cost savings for the city. "A bypass of this size is not something that you do every day," said Dave Donahue, North Carolina Branch Manager for Xylem. "For larger projects, end users don't have justification for the cost of the pumps. It's a lot smarter to rent the pump and turn it back in." Xylem's rental options provide the contractor flexibility with a wide fleet of pumps to choose from, and Malonson was able to reap the benefits of Xylem's expertise. "They're very professional, and they know their pumps," Malonson said. "It's a joy to work with them."

## Results

Replacing two competitor pumps, the Godwin Dri-Prime NC350 ran continuously for one month with no issues and no clogging. Xylem and Malonson were able to monitor the pump's performance remotely via Field Smart Technology.

Malonson will rely on Xylem for another project as well. He plans to rent six, 12-in. pumps for an upcoming bypass project. Malonson prefers working with Xylem for the company's pricing and expertise. "They're just good people to work with," Malonson said. "They're the experts."



The temporary sanitary sewer bypass system in Raleigh, North Carolina, allowed the city to replace a major outfall line feeding the city's wastewater treatment plant.