



South Florida wastewater treatment plant successfully measures flow with the DFM 6.1.

Overview

A large wastewater treatment plant in South Florida needed a flow measurement solution for their raw sewage feed lines to oxygen trains. To ensure that they found the best solution for their application, they reached out to various flow measurement companies to find the best fit.

Trial of different flow measurement solutions

This South Florida wastewater treatment plant was built with two treatment process systems at one treatment plant location. Due to the scale of the treatment plant, it was important that the solution they used for measuring flow from their raw sewage lines to their oxygen trains was accurate, required low to no maintenance, and was cost-effective.

To ensure they found the ideal solution, they reached out to different companies about trialing their products at the wastewater treatment plant. They knew before starting this trial that inline electromagnetic flow meters were not going to be the fit. Installing an inline solution would cause the facility to shut down so they could cut into the pipe, which was not something they had the time or money to do. The key criteria all trialed solutions needed to meet was accurate and repeatable flow measurement. Whatever flow rate was recorded through their train feed lines, needed to match that of the plant's influent flow.

One of the companies they reached out to was Pulsar Measurement's municipal representatives in Florida, AWC, and they were asked to trial DFM 6.1 Doppler Flow Meter on six oxygen train feed lines.

Clamp-on versus insertion meters

When finding the right flow measurement solution, the product types that the South Florida Plant had in mind were either clamp-on flow meters or insertion flow meters.

When installing either a clamp-on flow meter or an insertion flow meter, systems do not need to be shut down, a major selling feature for both technology types. The downside



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to installing an insertion meter in a wastewater treatment plant is that the plant would have to worry about debris getting caught on the meter and interfering with the flow rates. The only way to work around this issue is to frequently clean the sensor. This does not take long, but it does take time to have someone constantly maintain the meter.

A clamp-on flow meter, specifically a Doppler flow meter, is ideal for wastewater as it captures flow based on the movement of suspended particles or gasses in a pipe.

Why the DFM 6.1 Doppler Flow Meter?

Pulsar Measurement's DFM 6.1 Doppler Flow Meter allows the end-user to measure flow from outside of the pipe, with just a single sensor that quickly and easily installs on the pipe surface. It is also ideal for measuring difficult liquids that can be found in the wastewater industry such as slurries, sludge, chemicals, viscous liquids, and abrasives. Since the end-user needed a product that can work for raw sewage feed lines, the Doppler meter made more sense compared to the insertion meters which would require maintenance.

The DFM 6.1 also has an intuitive and easy to use interface, with backlit display and 5 key programming system. This makes the meter easy to configure and review flow rates throughout your system. The sensor that comes with the DFM 6.1 works perfectly as it works with any pipe diameter from 12.7 mm (0.5 in) or larger, and the application of the South Florida treatment plant required a solution that would work for a 1.2 m (48 in) pipe.

Success with a Pulsar Measurement flow solution.

After the trial of meters, the South Florida Plant decided to move forward with AWC's recommendation of the DFM 6.1. The trial was so successful at the plant that the end-user said, "We want to standardize on the DFM 6.1 for this part of the plant. Installation is easy, and we don't have to waste time cleaning probes."

Pulsar Measurement offers a range of flow and level measurement solutions for a variety of applications. Find your ideal solution using our product configurator or by speaking with our team of experts.

To find your local Pulsar Measurement partner visit our partner locator: <https://pulsarmeasurement.com/partnerlocator>

More Information

DFM 6.1: <https://pulsarmeasurement.com/greyline-dfm-6-1>

AWC Inc: <https://www.awc-inc.com/>



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