



Critical Application Measurement in Wastewater Treatment with REFLECT™

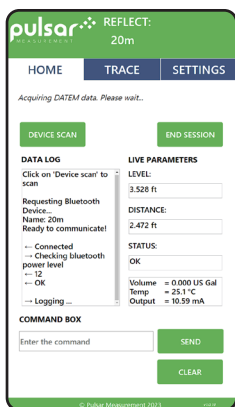
Pulsar Measurement is a leader in providing instrumentation for wastewater treatment facilities. At the Fourche Creek Treatment Plant, Arkansas' most innovative water reclamation facility, more than 7 million gallons of wastewater per day are collected, treated, and disposed of as reclaimed water. Fourche Creek ensures that the reclaimed water exceeds water quality standards before being released into the Arkansas River.

Headworks Protects the Entire Operation of Downstream Equipment

The first stage of the wastewater treatment process is in the headworks, which plays a crucial role in the pretreatment of wastewater. At the headworks, devices such as bar screens

filter and remove large inorganic solids like paper, plastic, and cloth from the influent and separate them for transport to a solid waste facility. Bar screens can also remove grit and excessive grease and oil in the treatment process. Removing this debris enhances the efficiency of the overall treatment process and is key to protecting the operation of all downstream equipment. Bar screens also need to be raked regularly to keep the screens free of solids and to keep the influent flowing. Since the wastewater must be cleared of debris before being treated down the line, the headworks is integral to the wastewater treatment process. Increased frequency of screen raking during peak hours, or during an influx of wastewater during storm flows, can create health and safety concerns like potential overflows.

The Fourche Creek Treatment Plant uses automatic bar screens at their facility for efficiency and ease, and therefore level measurement is critical in monitoring this process. If the level of influent entering a bar screen rises to a certain point, the bar screen can be automatically controlled to be raked and unclogged which is essential to preventing overflows or stalled processes.



The customer was impressed with the ease of use, Bluetooth® app, and durability of the REFLECT™.

A previously installed radar level transducer from another manufacturer failed with no notice. Plant operations chose to replace their existing products with Pulsar Measurement REFLECT™ devices due to their desire wanting to try comparable products that were better equipped to handle the demands of the environment. In doing so, they also avoided excessive lead times from their previous supplier. Other area facilities look to Fourche Creek for their forward-thinking and creative solutions, and switching to Pulsar Measurement saved them both time and money; allowing them to protect public health and the environment even more effectively.

Using REFLECT™ is Easy to Use, Reliable, and Maintenance-Free

The REFLECT™ 2-wire radar level sensor provides the highest confidence in level measurement in challenging conditions such as turbulent applications with foam present, making it the perfect choice for wastewater pretreatment stages. REFLECT™ is non-contact and thus requires no routine servicing and its robustness maintains accuracy with moisture, debris, and chemicals present.

In 'Installation' mode, REFLECT™ **TILT**™ ensures optimal measurement by using the built-in LEDs to signal when the sensor is level (in liquid applications) or giving the greatest signal strength (in solids applications). The sensor also benefits from Pulsar Measurement's worldwide reputation of accuracy and reliability thanks to the built-in DATEM echo tracing algorithms. With DATEM, the sensor will ignore false signals from walls, chains, pump heads, ladders, or any other obstruction, and hone-in on the true level – giving you the accurate and reliable data you need to be able to make decisions about your operations.

Pulsar Measurement's REFLECT™ is Bluetooth® enabled, with a user-definable range for added security, and uses a web-based app, to give an easy and convenient way for you to change parameters, access trend reports, and view echo traces.



More Information

REFLECT™ 2-Wire Radar Sensor: <https://pulsarmeasurement.com/en/reflect>



www.pulsarmeasurement.com

INFO@PULSARMEASUREMENT.COM

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Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales*

United States
+1 888-473-9546

Asia
+60 102 591 332

Canada
+1 855-300-9151

United Kingdom
+44 (0) 1684 891371

pulsarmeasurement.com