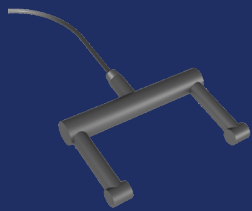


Ultrasonic sensors safeguard environmental protection

Industry
Wastewater

Products
MSM200
433SD



- Results**
- Greater confidence when measuring
 - Ensuring sludge would not overflow
 - Reduced response time

We helped a leading UK water company to provide a system to detect sludge blanket levels and avoid potential environmental impacts. The plant now benefits from improved critical level detector, resulting in reduced response time and manual inspection costs, as well as giving the customer environmental peace of mind.

Customer Benefits

- ▶ Peace of mind solution for settlement tank sludge level alarm
- ▶ Improved response time, reduced need for manual intervention
- ▶ Greatly reduced risk of environmental damage penalties



Challenge

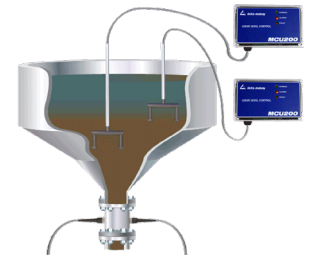
We were asked to assist on a final settlement tank (FST) level monitoring controls at a major wastewater treatment plant. The crucial factor was to ensure sludge would not overflow from the tank to the weir, causing environmental damage. The existing quality monitors were positioned on shared discharge lines and were unable to identify which tank was responsible for any accidental sludge discharge. Continuous effluent control was managed through manual intervention and monitoring; therefore, an improved sludge blanket control was required.

Solution

Following our review of the site, each FST was fitted with a Gap Sensor and Control Unit. These were mounted on the rotating bridge, with the sensor positioned a meter below the supernatant. The ultrasonic signal from the sensor easily passed through the clear water but is highly attenuated by sludge. Ultrasonic Gap Sensors have proven to be accurate trouble-free controls for practical applications where alternative technologies require regular attention. This system therefore provides an ideal solution to detect increasing sludge levels, trigger alarms, and ensure preventative action to safeguard the environment.

Ultrasonic Point Level Sensor 433SD

- ▶ Wastewater sludge can be measured up to 29% undissolved solids
- ▶ Industrial slurries can be measured up to 60% undissolved solids



Industrial Control Unit 200 Series

- ▶ Simple and cost-effective control electronics
- ▶ Three LED indicators for Normal, Alarm, and Fault
- ▶ Continuous cable check

Talk to us about our process instruments for a wide range of applications