Thames Water and HWM deliver ambitious SDM installation project

deploying almost 4,000 advanced ultrasonic level sensors last year

HWM is pleased to be supporting Thames Water in the delivery of an ambitious Sewer Depth Monitoring (SDM) installation programme which saw almost 4,000 advanced level sensors installed last year.

Every day, more than 15 million people in London and the Thames Valley flush or drain 4.6 billion litres of used water. To cope with this huge demand, Thames Water maintains a complex 68,000-mile sewer network.

With such huge quantities of water to manage, it is critical that the sewer systems remain functional at all times. This is especially important as population growth and more extreme weather patterns are putting additional stress on sewer networks.
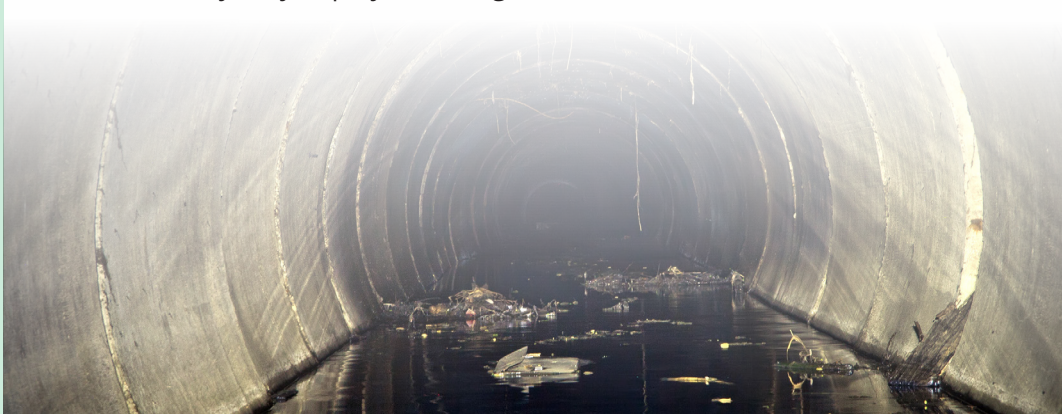
Water companies also face various problems associated with pipe blockages, so sewer maintenance is key. On average, Thames Water spends £18 million every year clearing 75,000 blockages from its sewers, unclogging five house blockages and removing 30 tonnes of material from just one of its sewage works every day.

This is critical maintenance, as blocked pipes can result in the flooding and pollution of customers' homes and businesses.

"We get thousands of entirely avoidable blockages on our sewers each year when things like wet wipes, nappies or cotton buds are flushed down the loo, or when cooking fat from kitchens is poured down the sink. We'd urge everyone to help by only flushing the 3Ps – pee, poo and paper – as well as disposing of fat and oils in the bin, not the sink, which helps to keep the sewers flowing and to prevent them blocking and backing up into people's houses and gardens, or even into the local rivers"
Anna Boyles, Performance, Risk and Optimisation Manager, Thames Water

To help monitor their network through Sewer Depth Monitoring, Thames Water installed 3,700 SonicSens 3 ultrasonic level sensors last year, which saw it hit its yearly deployment target.

About SonicSens 3

SonicSens 3 is an intrinsically safe level sensor developed for use in multiple applications, including sewer level monitoring.

Through the use of ultrasonic technology, SonicSens 3 avoids contact with its environment, reducing contamination and lowering maintenance requirements.

Compatible with multiple HWM telemetry data loggers, SonicSens 3 is the ideal solution for remote and challenging installations.

MONITORING ASSETS, DELIVERING DATA, BRINGING CONTROL

SonicSens 3 uses ultrasonic technology to measure the level of wastewater in a chamber, information which can provide an early warning of blockages within the network.

The benefit of using ultrasonic technology is that SonicSens 3 is installed within the chamber but avoids contact with its environment. This lack of contact with the contents of the sewer lowers the requirement for maintenance of the SonicSens 3 devices.

In this SDM programme, SonicSens 3 has been paired with our Intelligens WW data loggers for efficient data transfer. Intelligens WW is a truly flexible data logger with the versatility to be tailored for a variety of specific user needs.

Intelligens WW delivers recorded data through advanced telemetry technology. This quick transfer of data allows customers to monitor their networks effectively and to react swiftly to any potential issues as they arise.

Intelligens WW was also chosen for this programme because it contains a long-life battery which powers not only itself, but also the SonicSens 3 sensor without the need for additional battery packs.

In choosing to install the combination SonicSens 3 and Intelligens WW, Thames Water has selected an effective early warning system. Should levels rise, the device will send alarms to Thames Water, drawing attention to a developing problem within their network and helping to avoid the damage caused by flooding and pollution incidents.

"These monitors are an important tool in our armoury in the fight against sewer blockages. The data they provide gives us a picture of what's happening in our sewers and helps us to nip blockages in the bud before they cause problems."
Anna Boyles, Performance, Risk and Optimisation Manager, Thames Water

The next phase of the SDM programme will see an additional 5,000 units installed over the next year, providing Thames Water with even more data with which to monitor their network.

HWM is proud to be supporting Thames Water in this ongoing programme, helping to reduce the damage caused by flooding and pollution.

About Intelligens WW

Intelligens WW is a truly flexible data logger specifically engineered for the rigours of waste water applications.

Intrinsically safe and built for compatibility, the versatile Intelligens logger can be tailored to meet a variety of specific user needs.

Intelligens WW is safe for use in explosive environments, and as such, is an ideal logging solution in combined sewer overflows, general sewer monitoring, storm drains, storage tanks and flood warning systems.

Intelligens WW is available with support for WITS 1.3.

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