SIEMENS



SIWA BLOCKAGE PREDICTOR

Reducing risk from a hidden network

Predicting unconsented spills and monitoring performance in wastewater networks.

Real-time performance monitoring is now in reach for every wastewater utility

The wastewater network, whether separate or combined, often operates with little real-time monitoring. Maintenance is often reactive, and performance issues are addressed with capital expenditures. Advances in sensing, communications and cloud technologies have changed this paradigm. For combined sewers, combined sewer overflows (CSOs) are a critical relief mechanism during heavy rainfall. If an overflow occurs under nonconforming conditions, such as a blockage in the network, a pollution incident from undiluted or poorly screened waste is likely. In separate systems, inflow and infiltration (I&I) can account for up to 30% of wastewater flow. Identifying and then removing I&I improves treatment efficiency and reduces the risk of plant overloading.

siemens.com/water#SIWAapps

Designed for water: SIWA Blockage Predictor

SIWA Blockage Predictor offers:



Increased operational efficiency



Time to act



Greater transparency

SIWA Blockage Predictor is part of the **Siemens Water (SIWA) portfolio of applications** that help water and wastewater utilities optimize their processes and operations.

Reveal the solution to pinpoint abnormal behavior in your network

You cannot manage what you cannot measure. Siemens offers a modular solution that links radar sensing with 4G communications and a cloud application. If sensors are already installed, the AI can be trained on historical data. If new sensors are required, the AI is sensor vendor agnostic. Using Siemens' own radar sensors reduces installation time and risk; automated workflows onboard the sensor to SIWA Blockage Predictor in less than 5 minutes and the AI begins self-learning immediately.

SIWA Blockage Predictor brings this AI-driven insight within reach of every utility with a low barrier to entry. As a data-light solution, the application can be deployed on one or thousands of assets and does not require hydraulic models or network information.

Daily work is simplified for operators and analysts. A prioritized alarm list helps users address the highest risks first. Commenting and notification management capabilities help teams coordinate service and work orders. And pre-built IT connectors support integration with ERP, EAM, and GIS systems. Data quality and sensor health metrics ensure you can trust what you see.

Security is the foundation of the application design. SIWA Blockage Predictor is built on Siemens Insights Hub, a cloud-based, open Internet of Things (IoT) operating system hosted on AWS infrastructure. Insights Hub's out-of-the-box functionality reduces risk and time to value, and provides transparent lifecycle costs. The built-in security framework is compliant with the most stringent industry standards (e.g., IEC 62443 or ISO 27001).

Reduce flooding risks and pollution incidents

SIWA Blockage Predictor aids you with detecting inflow and infiltration, predicting blockages, and automated reporting.



Based on a single sensor installation, the app can be used for network overflows or in manholes.



SIWA Blockage Predictor finds nine out of ten blockages.



Advanced warning of issues up to 2 weeks in advance.

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