

Diehl Metering

Press release, 2021.07.07

Diehl Metering's Smart Leak Detection enables heat utilities to boost reactivity and cut costs

With Smart Leak Detection from Diehl Metering, heat utilities have a powerful tool for managing leaks in their distribution network and minimizing damage and disruption for consumers. This comprehensive digital solution makes heating networks more intelligent, boosting their efficiency and sustainability while also increasing customer satisfaction.

Leaks are one of the biggest challenges facing heat utilities – and they are surprisingly common. If not detected quickly, a leak can result in widespread service disruption and inflict costs on a number of levels. First, there is the financial cost, which can quickly escalate by causing major damage to district heating pipelines. Second, there is the cost on the environment, because a leak is essentially a wasted resource and also represents heat loss, which the heating plant must then compensate by producing extra energy. And finally, there is the potential danger of leaks due to the extreme heat of water in the pipes. If that leak occurs inside a consumer's home, it can also cause major structural damage to the building, resulting in yet more costs and impacting customer satisfaction.

Intelligent network analysis

To address these many challenges, the Smart Leak Detection solution from Diehl Metering quickly informs heat utilities of leaks in their network and, in certain countries, within consumers' homes. This empowers utilities to act more rapidly while also providing new services and added value to their customers.

Smart Leak Detection relies on a fixed network (AMI solution) in combination with SHARKY heat meters installed in the forward pipes and SHARKY FS ultrasonic flow sensors installed in the return pipes of the heat distribution network. This allows a wealth of network data to be automatically collected, and then analyzed and interpreted by Diehl Metering's Central Data Management software – IZAR@NET 2 if hosted locally on the utility's server or IZAR PLUS PORTAL if they opt for Software as a Service.

Rapid reactions

By monitoring flow rates in the forward and return pipes, Smart Leak Detection can identify a leak in the very early stages. Any deviation from the predefined range of flow rates immediately triggers an alarm. As soon as an anomaly occurs, the SHARKY heat meter sends a warning message, which shows up on the IZAR software with precise information about the location and nature of the problem.

Furthermore, utilities can follow flow rates in different parts of their network on IZAR software through easy-to-understand graphics and clear analytics that are regularly updated. They can even detect less obvious types of leaks in a consumer's home, such as a dripping radiator.

Reduced costs & customer satisfaction

With Smart Leak Detection, all the processes in a heating network run more efficiently, helping to reduce operating costs. From the heating plant to distribution in individual homes, utilities have a clear overview of flow rates, with alarms enabling them to rapidly resolve any problems before costly damage is done. And by reducing energy loss, the solution not only positively impacts their bottom line; it also boosts the sustainability of their business.

Furthermore, Diehl Metering has added another level to the solution by offering utilities in certain countries the potential to create new services for their customers. Smart Leak Detection can easily be customized to forward leakage alarms directly to consumers by SMS or email, helping to drive customer satisfaction while also reducing the risk of structural damage. In certain countries, smart meter infrastructures entitle consumers to discounts on burst-pipe insurance – meaning utilities can be even more popular with their clientele.

Continual innovation

Smart Leak Detection is evidence of Diehl Metering's continued commitment to bring its customers new innovations that revolutionize the way heating networks are managed. Through its combination of cutting-edge technology and customer-orientation, the solution empowers utilities to bring new efficiencies to their network while simultaneously pursuing the goals of sustainability and consumer satisfaction.

About Diehl Metering

Diehl Metering is a worldwide leader in the design, manufacture and supply of smart metering solutions. With over 150 years of experience, we empower utilities, municipalities and industries to take control of their infrastructures, bringing new efficiencies to the way they manage water and energy.

Our extensive range of services and solutions includes data-driven insights, IoT connectivity, fully-flexible software, and seamless intelligent metering. We also utilise artificial intelligence to boost performance and deliver cost savings for our customers.

Headquartered in Germany, we are a family-owned business with an international reach. We are proud to maintain our founding principles of quality, reliability and customer proximity while proactively shaping a better future for our customers and the communities they serve. Our approach is to think global and act local. By anticipating trends and remaining agile, we adapt and develop our strategy with our customers and for them.

In supporting their long-term growth, we also contribute to the sustainability of the planet, crafting innovations that enable our customers to make ever better use of the natural resources we all rely on.