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

代傲表计智能检漏解决方案,助力热力公司提高响应能力和可持续性

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.

代傲表计提供了强大的智能检漏解决方案,可以帮助热力公司优化其供热管网中的漏损管理,同时最大程度减少为消费者带来的损失和干扰。这一综合数字化解决方案使供热管网更加智能化,提高了效率和可持续性,同时也提高了客户满意度。

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.

泄露问题是热力公司面临的最大挑战之一,而让人出乎意料的是,这一问题普遍存在。如果发现不及时,一次泄露可能会造成大范围的服务中断,并造成各个层面的损失。首先是财务成本,若因区域供热管道造成重大损害,则会造成财务成本的迅速增加。第二是环境成本,因为泄露问题实际上属于资源浪费,也代表着热量的损失,而热力厂必须生产额外的热量进行补偿。最后,由于管道中的水温很高,有可能出现漏水的风险。如果渗漏的情况发生在用户家中,则可能严重破坏建筑物的结构,造成更多成本并影响客户满意度。

Intelligent network analysis

智能管网分析

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. 为了应对众多挑战,代傲表计智能检漏解决方案能够将管网中的泄露情况(在一些国家,还包括用户家中的渗漏情况)迅速通知热力公司,以便他们迅速采取行动,同时还能提供新的服务并为客户带来附加值。

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. 智能检漏解决方案需要在固定管网(AMI 解决方案)中进行组合安装,在供热管网的供水管道中安装 SHARKY 热量表,在回水管道中安装 SHARKY FS 超声波流量传感器。这样可以自动收集大量管网数据,然后通过代傲表计中央数据管理软件(若为公共事业企业的本地托管,则通过 IZAR@NET 2,若公共事业企业选择软件即服务模式,则通过 IZAR PLUS 门户)进行分析和解读。

Rapid reactions 迅速响应

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. 智能检漏技术通过监测供水和回水管道中的流量,可在早期发现渗漏问题。偏离预先设定的流量范围将立即触发警报,一旦发生异常情况,SHARKY 热量表就会发出警告信息,并在 IZAR 软件上呈现问题的位置和性质等信息。

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.

而且,IZAR 软件呈现的图表简单易懂,提供的分析清晰且定期更新,公用事业企业可据此跟踪管网不同部分的流量。他们甚至可以检测出用户家中不太明显的泄漏情况,如散热器滴水。

Reduced costs & customer satisfaction

降低成本,提高客户满意度

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.

智能检漏技术可以提高供热管网中所有流程的运行效率,这有助于降低运营成本。从热力厂到千家万户,公用事业企业将清楚地了解整体流速,还能借助警报功能迅速解决任何问题,避免造成代价高昂的损失。该解决方案可以减少能源损失,不仅对经营产生了积极的影响,而且还驱动其业务实现可持续性。

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.

此外,代傲表计还将解决方案提升到新的高度,在一些国家,我们的这一解决方案为公用事业企业提供了潜力,使其能够为客户创造新的服务。定制智能检漏功能后,公共事业企业可直接通过短信或邮件向消费者发送渗漏警报,从而能够降低结构性能损坏的风险,同时还可以提高客户满意度。在一些国家,智能仪表基础设施的应用降低了消费者的管道破裂保险支出,使公共事业企业更受客户欢迎。

Continual innovation 持续创新

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.

代傲表计致力于不断为客户带来新的创新,彻底改变供热管网的管理方式,而智能检漏解决方案就是其创新的证明。该解决方案将尖端技术和客户导向结合起来,使公用事业企业能够为其管网带来新的效率,同时还可追求可持续性和用户满意的目标。

About Diehl Metering

关于代傲表计

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.

代傲表计是设计、制造及供应智能表计解决方案的全球领导者。凭借**150**多年的经验,我们为公用事业、 市政和工业领域赋能,为他们管理水资源和能源的方式带来新的效率。

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.

我们提供广泛的服务和解决方案,包括数据驱动的洞察力、物联网通讯、灵活自如的软件及无缝智能计量。我们还利用人工智能来帮助客户提高业绩并节省成本。

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.

我们的总部设在德国,是一家拥有国际影响力的家族企业。我们秉持优质、可靠和贴近客户的创始原则,积极主动为客户及其服务的社区塑造更美好的未来,为此我们感到非常自豪。我们采用全球化思考、本地化行动的方法。通过预测趋势并保持灵活性,我们与客户一起、为客户制定和调整发展战略。

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. 在支持客户长期发展的过程中,我们也为地球可持续发展做出了贡献,通过工艺创新,让客户能够更好地利用人类赖以生存的自然资源。