SMART LEAK DETECTION

for heating applications

37° C

64° C

17,212 kWh

DIEHL
Metering

SMART LEAK DETECTION
FOR HEATING APPLICATIONS

The key to managing leaks is to be informed quickly and act rapidly. And that's exactly what Smart Leak Detection allows you to do.
This powerful solution is part of Diehl Metering's Energy Network Analytics, an offer that makes heating networks more intelligent.

To benefit from our Smart Leak Detection solution, you need a fixed network.
In combination with SHARKY heat meters, this allows data reading to be fully automated.
In addition, SHARKY FS ultrasonic flow sensors are installed in the return pipes of the heat distribution network.

Did you know that mid-sized utilities in Denmark lose a daily average of 30 m³ in leaks within their heating network? And their counterparts in Germany experience daily losses of 50 m³?
If you're a heating utility, leaks are one of the most costly problems you'll face.

The cost is not just financial; it's also environmental because a leak is essentially a wasted resource. What's more, if that leak occurs in a pipe inside a consumer's home, it can cause major structural damage to the building, resulting in yet more costs and impacting your customer satisfaction.

So, how can you limit the cost of leaks? How can you make sure you intervene promptly to avoid major damage? What can you do to reduce the risk of leaks happening in your network? And how can you achieve all this while offering new services and added value to your customers?
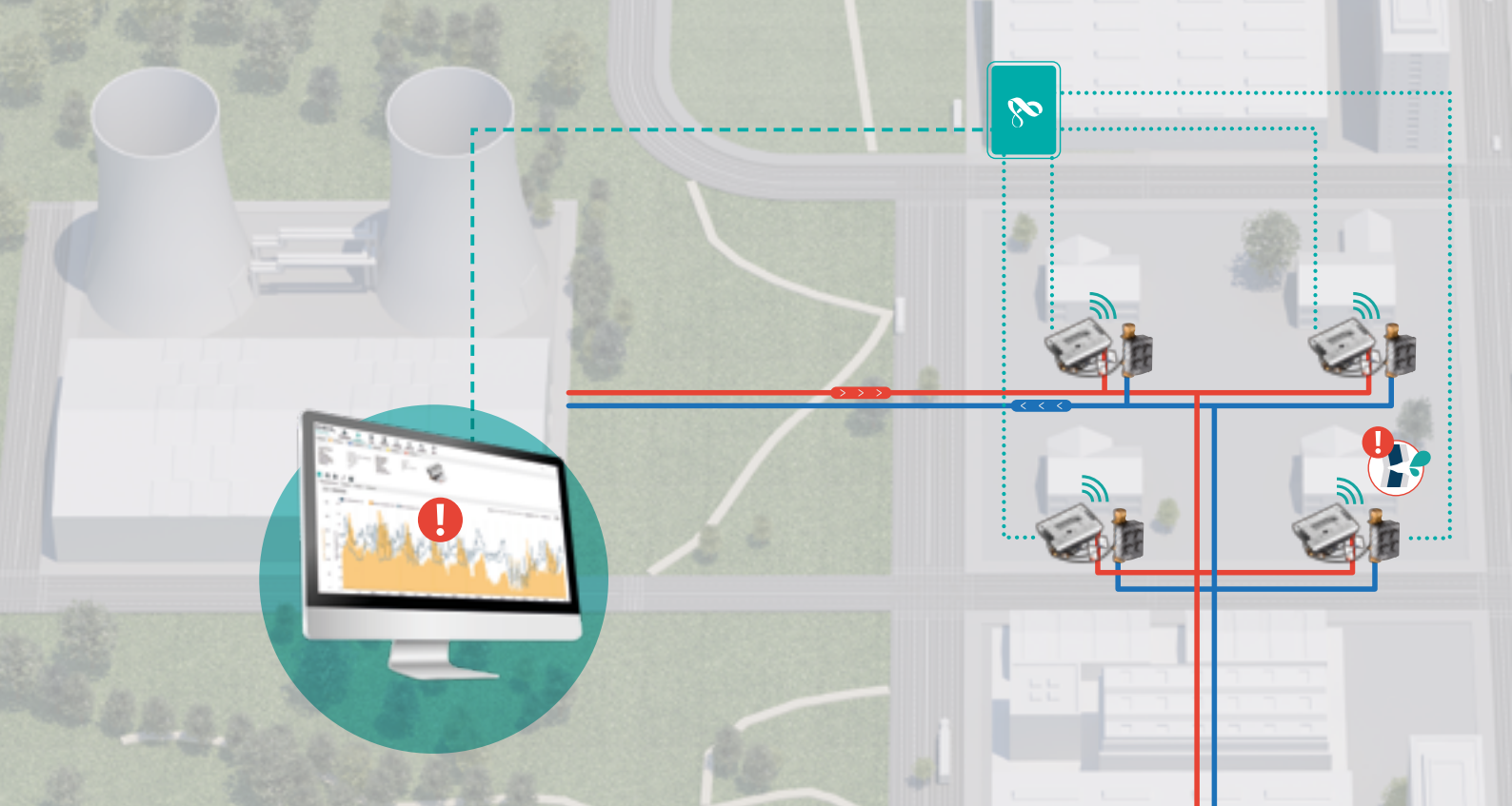
RAPID REACTIONS

By monitoring flow rates in the forward and return pipes, Smart Leak Detection can detect a leak in the very early stages. Any deviation from the predefined range of flow rates immediately triggers an alarm. Within 90 seconds of an anomaly occurring, the SHARKY heat meter sends a warning message. This then shows up with precise information about the location and nature of the problem on the Central Data Management software – IZAR@NET 2 if hosted locally on your server or IZAR PLUS PORTAL if you prefer Software as a Service.

Furthermore, you can follow the flow rates in different parts of your network on IZAR@NET 2 through easy-to-understand graphics and clear analytics that are regularly updated. This means you can detect less obvious types of leak, such as a dripping radiator in a consumer's home.

REDUCE COST

GROW CUSTOMER SATISFACTION

With Smart Leak Detection, all the processes in your network run more efficiently, helping to reduce operating costs. From the heating plant to distribution in individual homes, you'll have a clear overview of flow rates, with alarms enabling you to swiftly resolve any problems before costly damage is done. And by reducing heat loss through leaks, you'll not only positively impact your bottom line; you'll also boost the sustainability of your business.

The solution also opens up the possibility of creating new services for your customers. Smart Leak Detection can be customized to send leakage alarms directly to consumers, 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 you'll be even more popular with your clientele.

CUSTOMER
SUCCESS STORIES

BRØNDERSLEV
FORSYNING A/S

The utility is responsible for the district heating and water supply of the Danish city of Brønderslev.

➜ A fixed network solution enabled the automated reading of **more than 4,600 SHARKY 775 ultrasonic energy meters**

➜ **SHARKY FS 473 ultrasonic** flow sensors were installed in the return pipes for leak detection

➜ Leaks and other anomalies are now **quickly detected and regulated**

➜ **A leakage alarm** is offered to consumers, with households receiving a message via email and/or SMS if they are affected.

STØVRING
KRAFTVARMEVÆRK A.M.B.A.

Støvring Kraftvarmeværk a.m.b.a. is a publicly owned company supplying district heating to the small town of Støvring in Denmark.

➜ A comprehensive fixed network solution was implemented for the automated reading of **3,065 SHARKY 775 ultrasonic energy meters**

➜ **SHARKY FS 473** ultrasonic flow sensors were installed in the return pipes for leak detection

➜ Water loss in the network and in households was **reduced from 15 m³/day to 5 m³/day**

➜ Contrary to what the utility believed, most water loss occurred in consumers' homes, leading it to adjust its strategy accordingly

FOR MORE INFORMATION:

Contact us for a personalised analysis of your needs and how Smart Leak Detection can help increase your network efficiency.

Visit our website:
www.diehl.com/metering