

Delivering non-intrusive leak detection to the water industry

Increasing legislation and penalties within the water industry has seen an increased effort to mitigate the impact of leaks within operators' networks.



Investment programs have seen improvements to the wider and often aging infrastructure including pipeline replacement and new technologies to monitor the performance of the network. There is still significant work to meet the Ofwat targets set in the five-year planning cycles of AMP 6 and AMP7 for 2020-25. The target for 2025 is a 15 percent reduction in leaks and an ambition of 50 percent by 2050.

Often when a leak is seen it has already caused significant problems such as damage to highways to property, environmental contamination and loss of product. Similarities exist in other liquid pipeline operations such as the oil, gas and chemical industries. Atmos International's experience over 25 years has led to in-depth knowledge and experience of delivering leak detection, simulation and rupture technologies that provide its customers with early insights of a leak and its location.

Using combinations of pressure, flow and acoustic correlations Atmos International's technologies are used to provide sensitive, fast and accurate leak detection at all times. Proven

on pipelines from 2" to 72" in diameter, Atmos has delivered leak detection on short length pipes to networks of over a kilometer long.

The challenges faced by operators looking to implement effective leak detection is often that pipelines have limited or no instrumentation. This is compounded by a lack of communication and power. And while the oil and gas industries implement technology, knowledge and experience are not often shared. In recent years, development and improvements have been made and low-cost solutions have provided significant benefits. Following extensive research and development, the Atmos Eclipse unit offers a fully enclosed non-intrusive compact unit – combining flow, pressure and acoustic technology with a variety of power and communications options.

Adding to this has been a continued improvement in the accuracy and sensitivity of flow balance and pressure systems (also known as negative pressure wave). This has enabled Atmos to identify leaks at 1% and also provide greater location points. The robustness of data and the hardware means that a greater



number of pipelines can be retrofitted with high-quality leak detection. The approach has also been used for theft detection and location with great success in the oil sector.

Systems are now operational in high consequence areas (HCAs), challenging climates such as deserts and arctic conditions. Leak detection projects including the use of the Atmos Eclipse solution have been delivered in the United Kingdom Singapore and Belgium.

This cross-over technology has significant advantages for rising main pipelines and trunk mains. To discover more about Atmos International visit www.atmosi.com or call +44 161 445 8080 to speak to one of our leak detection experts.



Water pipeline leak detection specialists

Non-intrusive technology delivering sensitivity, leak location, reliability and responsiveness.

Atmos International has 25 years' experience helping pipeline owners and operators with the latest software and hardware to monitor their pipelines.

- **Atmos Eclipse** – non-intrusive flow, pressure and temperature technology
- **Atmos Leak Detection Suite**
- **Atmos Rupture Detector**

Discover how Atmos can help you
+44 (0) 161 445 8080