



TrunkMinder

Pipeline Asset Protection System

We're listening...



- Burst avoidance, asset protection and maintenance scheduling
- Permanent, automatic detection of small leaks on large pipes
- Real-time alerts via OPC protocol SCADA, or automated SMS
- Operating statistics and graphics via a 'dashboard' interface over VPN on the internet, suitable for pressure transient monitoring
- Sensors up to 1 km apart, depending on the pipe size and material (several pairs can combine to cover greater distances)
- Fluctuating pressure and flow rates built in
- For iron, steel and MDPE pipes (applicable to concrete/PCP)

Designed for the water industry, Syrinix "TrunkMinder" provides a technology that continuously monitors mains pipelines to *automatically* detect small (<50 l/h) leaks in the early stages of their development. Using a fusion of sensors, including a hydrophone in direct contact with water, the section of pipeline between a pair of sensing stations is protected. Simultaneously it also monitors the medium pressure, and optionally the flow, with catastrophic failures (bursts) being immediately detected and alerted.

Using a sophisticated signal processing scheme, it models the operating conditions of the pipe in a variety of environmental conditions. Unusual features are automatically detected, the leak likelihood is computed and emergent leaks automatically monitored for a relatively long period (several days), before an alert is raised with a high degree of confidence. By using pairs of sensors mounted directly on the pipe, it is able to *locate* the leak as well as detect it. Early location allows small leaks to be repaired in a planned manner, preventing emergency repairs of much larger failures and saving the operator money whilst improving customer and investor perception.



When to use TrunkMinder

- Where important infrastructure requires protection, e.g. roads, railways, runways, ports, retail centres, business centres, hospitals, schools, national monuments
- Where the pipeline is critical, e.g. single supply, DG3
- Where the pipeline itself requires permanent monitoring as an alternative to renewal
- Where the cost of frequent, 'snapshot' correlation surveys are prohibitive
- Where ad hoc, correlation surveys are difficult because of geography
- Where ad hoc, correlation surveys are difficult because of pipe geometry



If you are interested in this technology and wish to discuss this further, please contact us below:

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