Product Brochure

Atmos Pipe

ATMOS INTERNATIONAL

Atmos Pipe - The statistical volume balance leak detection system

Detected more pipeline leaks and ruptures around the world than any other system

Most trusted

Pipeline controllers trust the supreme reliability and ease of alarm and event analysis; prompt response to Atmos Pipe leak alarms has helped minimize the significant costs of real pipeline leaks and ruptures.

Better performance

Patented algorithms manage thermal and hydraulic transients, to optimize sensitivity and accuracy on the most complex pipelines and gathering networks. Self-trained filters automatically compensate for measurement errors to maximize performance.

Key features

- Very reliable - minimal in false alarms
- Field proven for over 25 years on more than 1,500 pipelines
- Detects onset, slow opening and existing leaks
- Leak detection size as small as 0.25% of flow with high-quality instrumentation
- Deployed on pipelines from 0.24 to 1,180 miles long, and 0.5” to 48” in diameter
- Software solution that uses flow and pressure data from SCADA, DCS, PLC or RTU systems
- First choice of most major pipeline operators worldwide
- Detects leaks under all operating conditions with no change in minimum detectable leak size during transients
- Draining and filling module ‘reduces’ likelihood of false alarms during pipeline filling
- Fully compliant with; API 1130, API 1175, API 1155, API 1149, CSA Z662, German Regulations for Pipeline Leak Detection (TRFL), Shell Pipeline Leak Detection Recommendations (DEP 31.40.60.11Gen)
- Can be added to very large pipelines and networks quickly and efficiently
- Runs without crashes on very large pipelines and networks
- Easy to analyze and interpret alarms and other information output by the system
- Powerful, user-controlled data point override system to overcome data faults, instrument maintenance and other abnormal operations

Why Atmos Pipe is the most reliable

Since its release as the first statistical corrected volume balance system in 1995, Atmos Pipe has been at the forefront of leak detection technology. It uses the powerful Sequential Probability Ratio Test (SPRT) with pressure and flow analysis to optimize leak detection.
At Atmos, we understand that every pipeline has its own personality. The design of Atmos Pipe assures tuning and optimization for every pipeline to minimize the effect of:

- Instrument faults, including telecommunication failures
- Operational changes from start-up, running and shut-in conditions
- Fluid property changes
- Seasonal changes or supply and demand variations
- Instrument drift and calibrations

Sensors used

- Pressure meters at each supply and delivery point and optionally, at intermediate pump and valve stations
- Flow meters at supply and delivery points
- Temperature meters are not crucial but recommended when there are large differences between product temperature and ambient temperature.

Additional features

- Cumulative Volume Balance Leak Detection – An additional leak detection engine using the cumulative volume balance method

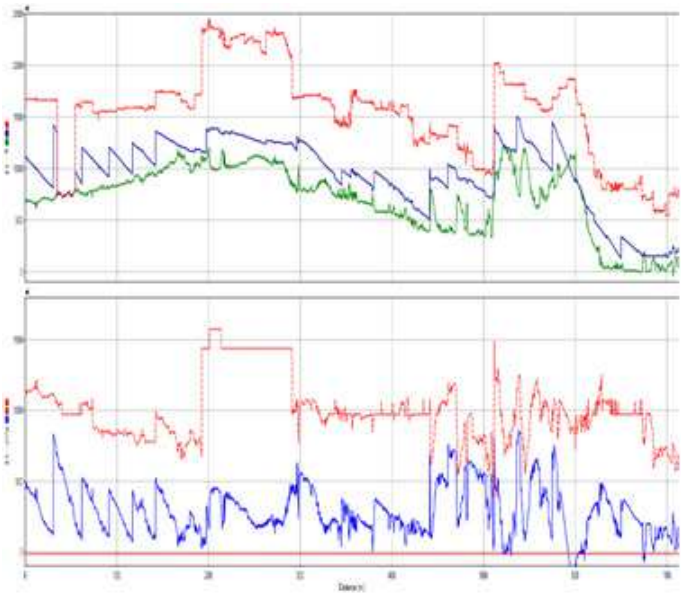
- Fast Scan – Improved leak location performance through use of Atmos hardware to detect rarefaction waves

- SCADA Wave Leak Detection - An additional leak detection engine for use during steady state. This method is particularly useful in the presence of poorly performing flow meters

Data source

- SCADA, DCS, PLC or RTU
- Atmos AWAS, AWAS JSP, or Eclipse

Historical trend



Hydraulic profiles

Atmos International (Atmos) provides pipeline leak detection and simulation technology to the oil, gas, water, and associated industries. The company was founded in 1995 in the UK by the inventor of the statistical pipeline leak detection system – Atmos Pipe, now one of a suites of leak and theft detection solutions from Atmos. These technologies are implemented on thousands of pipelines in over 60 countries, including major oil and gas companies such as Shell, BP, ExxonMobil, and Total.

With associated offices in the USA, China, Singapore and Costa Rica, and local agents in 28 countries, the multi-cultural and multilingual team can provide effective support all over the world.

E commercial@atmosi.com
W atmosi.com

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