INGU Pipers[®] Free Floating Inspection Technology





Pipers[®], a free floating inspection device utilizes acoustics to identify air pockets and leaks, magnetic sensors to determine metallic pipe wall anomalies and locate hot taps, and a pressure sensor to identify deposits and sediment buildup on pressure pipelines. This technology has been used throughout North America in water, wastewater, oil and gas pipeline applications to collect data on over 600 pipelines of all materials and size totaling 2,800 miles. Pipers[®] provide easy access to pipeline assets regardless of condition, location, material or configuration, and can inspect any material down to 2-inches in diameter.

Inertial Measurement Unit

Magnetic Sensor

Metallic pipe
 wall anomalies

Bend angles and radii*

Localization

Pipers®

Large diameter pipelines up to 48-inches and specialized conditions

- Pressures up to 1,450 psi
- Temperature range: -4 to 140° F
- Runtime up to 24 hours for storage and operation at 68° F
- Diameter: 2.8-inches

Leak Detection

Greater program integrity and risk mitigation by regularly monitoring high consequence areas.

Hydraulic Grade line

With 100 pressure measurements per second, Pipers[®] can provide a highly accurate hydraulic grade line.

Wall Condition Monitoring

Pipers[®] data is highly repeatable over time allowing for an accurate determination of changes in the pipeline condition. Regular monitoring delivers greater program control, early detection, and lower costs.





Hydraulic grade line
Localized build-up
Pressure profile

Acoustic Sensor

Leak detection

Gas pocket detection

*Only when Pipers® are used mounted to a cleaning pig.





