

SmartBall[®]

INLINE FREE-SWIMMING PIPELINE INSPECTION PLATFORM



The SmartBall® platform is a free-swimming inspection tool used to detect leaks and gas pockets and map pipeline networks. This platform assesses pressurized water and wastewater pipelines in a single deployment, without disrupting regular service. The SmartBall platform provides utilities with pipeline condition data to make informed rehabilitation and management decisions on a pipe-by-pipe basis.

Why Choose SmartBall?

- Highly sensitive acoustic sensor can locate very small leaks and gas pockets
- Covers long inspections in a single deployment
- Actively tracked throughout the inspection
- Easy to deploy in live pipelines through existing features and hydrants
- Mapping confirms the location of underground pipelines and their alignment with other critical assets

SmartBall BY THE NUMBERS



7,000+Miles of pipeline inspection data



Years of experience across the globe



3,000+
Leaks identified

What You Can Expect

The SmartBall platform is a valuable addition to a proactive pipeline management program, helping water and wastewater pipeline owners better understand the condition and location of their buried assets. By detecting leaks and gas pockets, this platform empowers utilities to reduce non-revenue water and address problem areas before they result in larger failures. With this information, pipeline owners can also better target the assets that need repair or replacement, reducing capital expenditures while increasing operational confidence.



Operational Excellence

The SmartBall platform can be inserted through a 4-inch (100-mm) access point into a live or depressurized pipeline six inches (150 mm) or larger. This inline, free-swimming tool performs inspections without disrupting regular service in pipelines operating up to 500 psi (34 bar). The SmartBall platform travels with the product flow, collecting pipeline condition information for up to 24 hours. It requires only two access points, one for insertion and another for extraction. SmartBall is actively tracked throughout the inspection at predetermined, fixed locations along the pipeline. This makes data analysis less sensitive to changes in flow rates.



Since 2005, utilities around the world have relied on the SmartBall platform to inspect more than 7,000 miles (11,500 km) of pipeline and detect over 3,000 leaks. This operational experience ensures quality project management and professional inspection delivery.



Leak and Gas Pocket Detection – The SmartBall platform is equipped with a highly sensitive acoustic sensor that can detect pinhole-sized leaks. The sensor also identifies the sound of trapped gas, which can adversely affect pipeline flow or lead to pipe wall degradation in wastewater force mains. The SmartBall platform indicates the location of leaks and gas pockets relative to known points, within a typical location accuracy of 6 feet (1.8 m).

Pipeline Mapping – The SmartBall platform can map the X and Y coordinates of the pipeline using the latest accelerometer and gyroscope technologies, advanced location algorithms, and field collected global positioning system (GPS) points. Compared with available pipeline information, SmartBall Mapping can help confirm pipeline alignment or identify major conflicts with utility records.



Get More from Xylem

Xylem is a world leader in the inspection of water and wastewater pressure pipelines and leverages a large database of comparable results to calculate remaining useful life and better understand the structural integrity of these assets. Complement the leak detection data collected by SmartBall with one of Xylem's best-in-class condition assessment solutions, the **PipeDiver*** platform, **PureRobotics*** platform, or **PipeWalker**™ platform. For continuous, remote monitoring of Prestressed Concrete Cylinder Pipe (PCCP), Xylem's **SoundPrint*** **Acoustic Fiber Optic (AFO)** platform detects and locates wire breaks to prevent pipe failure.

Related Case Studies

Champlain Water District, Vermont, United States

Project highlights

- 1.8 miles (2.9 km) of Ductile Iron Pipe inspected
- Acoustic inspection with the SmartBall platform identified no leaks or gas pockets
- Transient monitoring revealed no harmful pressure surges
- The results gave the water district the confidence to reallocate funds originally set aside for repairs toward other capital improvement projects

Read the full case study

Waternet, The Netherlands

Project highlights

- 121 miles (195 km) of PCCP inspected with the SmartBall platform
- Lengthy sections of the pipeline were inspected in a single run, without a disruption in service
- Three leaks located and verified
- Risk mitigated on a critical pipeline

Read the full case study

For more information on how we can help you, contact us at: <u>puretech@xyleminc.com</u>



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