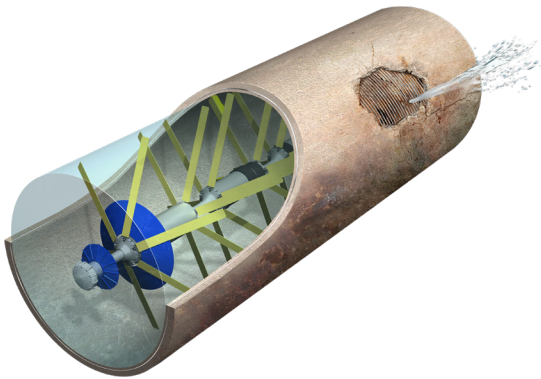


PipeDiver® platform

Free-swimming condition assessment platform for concrete pipelines



Features and benefits

- Pinpoint pipe wall defects and detect leaks
- Understand asset condition on a pipe-by-pipe basis
- Inspect transmission mains and force mains without disrupting service
- Cover long inspection distances in a single deployment
- Enable decisive action and inform long-term asset management plans

The PipeDiver platform delivers precise pipeline integrity data, helping utilities prevent failures and make informed rehabilitation and management decisions.

PipeDiver is an inline inspection tool for prestressed concrete and bar-wrapped pipe. It operates while pipelines remain in service, simplifying inspection of water transmission mains and sewer force mains.

Actionable information

In a single run, PipeDiver collects multiple layers of integrity data using electromagnetic and acoustic sensors. High-definition cameras record a 360-degree view of the pipe wall. The tool accurately locates and quantifies broken wire wraps or broken bars on each inspected pipe. PipeDiver also identifies potential operational and integrity threats, such as leaks, gas pockets, debris, features, and changes in pipe properties.

Data analysis and accessibility

Utilities receive a comprehensive report of inspection results with structural engineering analyses showing current pipe integrity and forecasting future serviceability. View all inspection results geospatially for another layer of insight into the causes and consequences of integrity threats. Xylem also provides dig sheets to help utilities precisely locate and repair problematic pipe segments. Data deliverables and report recommendations provide a comprehensive view of pipeline health, equipping utilities with the insights to make confident decisions and guide long-term management strategies.

Operational and service excellence

The PipeDiver platform is a best-in-class solution that improves inspection efficiency. Xylem typically uses existing access points to insert and extract the tool, minimizing the need for costly civil works. The tool navigates inline valves as well as sharp bends and tees, enabling inspections with little to no service disruption. This makes



Locate and quantify pipe wall defects with high-resolution electromagnetic data



Minimize operational disruptions, civil work, and dewatering with multiple insertion and extraction options



High-definition cameras record a 360-degree view of the pipe wall to identify cracks, debris, and other potential threats

PipeDiver ideal for critical pipelines that cannot be shut down or dewatered.

Xylem has performed thousands of PipeDiver inspections around the world over the past decade. This operational experience ensures quality project management and professional inspection delivery.

Operating conditions

Product	Potable water, raw water, and wastewater
Pipeline material	Prestressed concrete cylinder pipe (PCCP), noncylinder pipe (NCP), and bar-wrapped pipe (BWP)
Pipe diameter	16 to 120 in (400 to 3,000 mm)
Maximum change in diameter	Pipelines can be two diameters with a maximum difference up to 12 in (300 mm)
Flow velocity	0.5 to 3 fps (0.2 to 0.9 mps)
Maximum pressure	300 to 500 PSI (2,070 to 3,450 kPa)
Butterfly valve passage	Minimum internal diameter of 24 in (600 mm)
Maximum bend	Sharp 90-degree bends in pipes 18 in (450 mm) and greater

System specifications

Access	Pressurized and depressurized access options available
Access diameter	12 in (300 mm) and above
Sensors	Electromagnetic, acoustic, and video systems
Detection threshold	PCCP and NCP: 5 broken wire wraps BWP: 5 broken bars; 3 in (75 mm) x 30% cylinder wall loss*
Non-standard conditions detected	Leaks, gas pockets, debris, features and changes in pipe properties
Tool tracking	Tool position monitored throughout the inspection using pre-deployed tracking units
Certification	NSF / ANSI 61 - Drinking Water System Components

**An additional run is required to inspect BWP cylinder*

Xylem's operating and system specifications represent standard conditions, but we understand that every pipeline has unique challenges. We're committed to working with you to find tailored solutions. [Contact us to discuss your specific needs.](#)