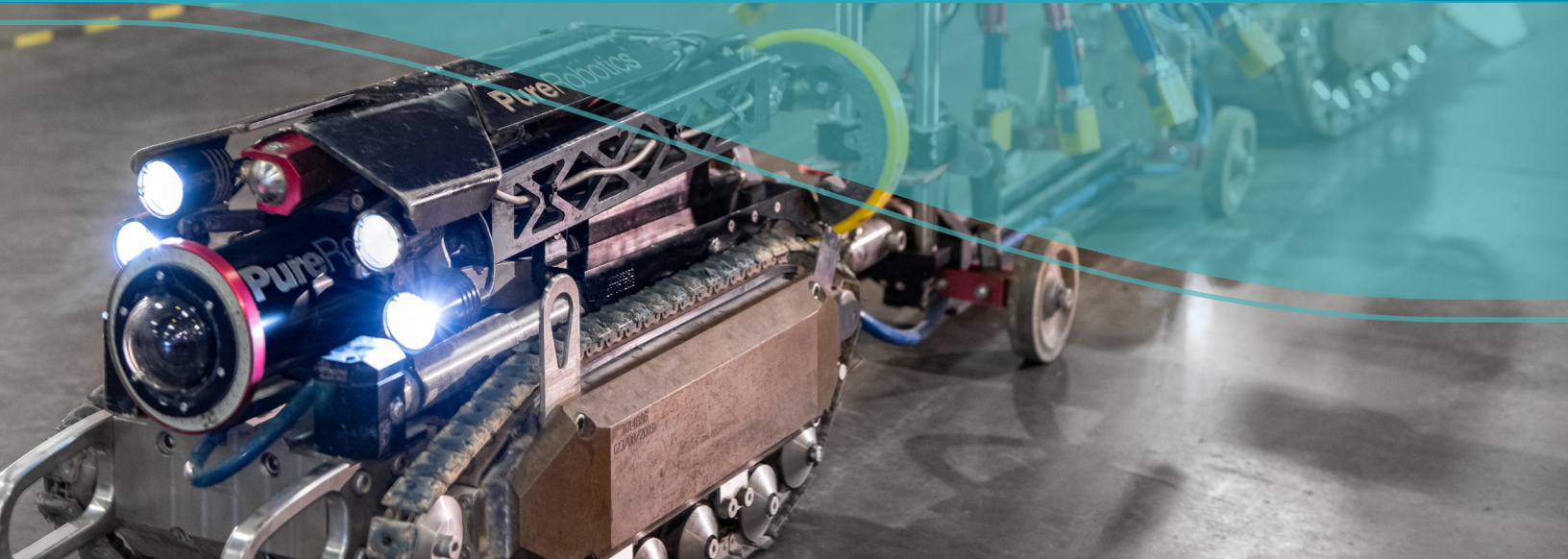




## A TETHERED ROBOTIC TOOL FOR CONDITION ASSESSMENT OF WATER PIPELINES

The PureRobotics® platform is a modular, multi-sensor condition assessment tool for depressurized water pipelines. This platform provides utility owners with comprehensive pipe wall condition data used to make rehabilitation and management decisions on a pipe-by-pipe basis.

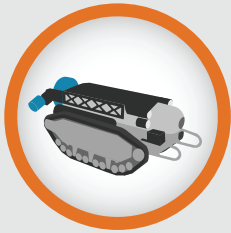
Replacing buried assets based on age is inefficient and expensive when most pipes have significant remaining useful life. Xylem provides the data, technology, and expertise to help utilities prioritize investment in the pipes that need it most.

PureRobotics leverages more than a decade of inspection experience to simplify and streamline pipe wall data collection. Condition data empowers utilities to address problem areas and reduce the risk of dangerous and expensive failures. With actionable insights, utilities can extend the life of critical infrastructure, increase operational confidence, and reduce capital expenditures.



### PUREROBOTICS BENEFITS

- Pinpoint areas of pipe wall distress in metallic and concrete pressure pipelines
- Visually inspect pipe lining, joints, and connections with live video
- Understand asset condition on a pipe-by-pipe basis
- Tethered and fully controlled to ensure data quality and reliable extraction
- Use common and available access ports for deployment and inspect without dewatering



# 830+

Miles of pipeline  
inspection data



## ACTIONABLE INFORMATION

The PureRobotics platform provides utilities with a comprehensive understanding of pipe wall condition. The platform's modular design can accommodate an array of sensors. Electromagnetic sensors pinpoint areas of pipe wall distress, and the tool's camera captures live footage to assess internal pipe lining, joints, and connections.

Xylem provides map-based results so utilities can visualize and contextualize the data. Dig sheets help utilities accurately locate problematic pipes and make precise repairs. Using pipe wall condition data, we can calculate a pipe's structural response to degradation and forecast future serviceability. These insights inform capital planning and guide a defensible, long-term pipeline management strategy.

## OPERATIONAL EXCELLENCE

Technicians actively control the robotic crawler throughout the inspection, ensuring the accuracy of location, electromagnetic, and visual data. The platform can be used in dewatered pipes or while submerged in depressurized water pipelines. It is significantly safer than inspections requiring human entry. The tool travels at a speed of up to 82 feet per minute (25 m/min). Fast and accurate results accommodate repairs during the same pipeline shutdown. The PureRobotics platform can inspect nearly 2 miles (3 km) from a single access point across a wide range of pipeline diameters – from 16 inches (400 mm) to over 120 inches (3000 mm).

## DELIVERY EXPERIENCE

Xylem has collected over 830 miles (1,330 km) of data from PureRobotics inspections around the world over the past decade. This operational experience ensures quality project management and professional inspection delivery.

For more information on data-driven pipeline management, contact us at: [puretech@xylem.com](mailto:puretech@xylem.com)



[www.xylem.com](http://www.xylem.com)