

# Technology Development Center

## Liquid Test Loop Facility



With a focus on inline inspection and leak detection technologies to identify threats sooner, it is critical that the pipeline industry has a facility that allows for the validation and development of next generation solutions for enhanced operational safety and reliability.

### The Solution

The PRCI Technology Development Center's liquid test loops provide the ideal location for a variety of testing configurations using water as the liquid medium. The existing setup has proven beneficial for both onshore and offshore pipeline applications.

### Key Advantages

- the ability for continuous bi-directional test cycles allowing high repeatability and extended data collection
- Highly configurable pipe setup ranging from easily piggable to "difficult to inspect" features including back-to-back bends, tee/wye pipes, and a vertical jumper
- Easy access and low risk operations using water at a pressure of ANSI Class 150

### Liquid Loop Facility Technical Specifications

pipe sizes available .....	6" to 12"
piping length .....	up to 1000 ft
testing product .....	water
product temperature .....	ambient (above ground piping)
maximum operating pressure.....	2,000 Kpa (285 psi)
operating speed range .....	up to 3.3 m/s (7.4 mph)
minimum pipeline bend radius .....	5d (smaller bends available)
average cycle time.....	5 minutes

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The TDC is a state-of-the art research facility located in Houston, TX and is focused on enhancing and developing the next generation of tools, processes, and people. Learn more at [prci.org/TDC](http://prci.org/TDC).

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## **About Pipeline Research Council International**

PRCI is a community of the world's leading pipeline companies, and the vendors, service providers, equipment manufacturers, and other organizations supporting the industry. Since 1952, PRCI has been recognized around the world as a unique forum within the energy pipeline industry delivering great value to its members and the industry — both quantitative and qualitative — through the development and deployment of research solutions to improve pipeline safety and performance. PRCI's mission is to collaboratively deliver relevant and innovative applied research to continually improve the global energy pipeline systems.

PRCI is dedicated to assuring the maximum efficiency of research development and deployment through a highly-leveraged funding model of member and external funding, information sharing, cooperative research development, and the broad dissemination and application of its results. Along with funding, the strength of the collaborative model stems from the contributions to PRCI of member technical and operations experts and the ongoing support to them from PRCI and their companies. It is this collaboration in the direction, implementation, and adoption of research that defines PRCI's value to its members and the industry.

## **PRCI's Value Proposition**

Using the leverage generated by our members' resource contributions to create a research forum of ideas and results producing solutions that assure the safe, reliable, environmentally sound, and cost-effective pipeline transportation of energy to consumers worldwide.