

# PRCI Technology Development Center

## Liquid Test Loops

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

### The Solution

The liquid test loops at PRCI’s Technology Development Center in Houston, TX, provides the ideal setup for a variety of testing configurations using water as the liquid medium. The existing setup has already proven beneficial for both onshore and offshore pipeline application.

### Key Advantages

- Design incorporates the ability for continuous bidirectional test cycles allowing high repeatability and extended data collection
- Highly configurable setup ranging from easily piggable to “difficult to inspect” piping 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 (285psi)

### About the TDC

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

## Liquid Loops Technical Specifications

|                              |                               |
|------------------------------|-------------------------------|
| pipe sizes available         | 6" and 12"                    |
| piping length                | 400ft (up to 800ft)           |
| 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                     |



Liquid Flow Loops Located at PRCI's Technology Development Center in Houston, Texas