



PIMS | Permanently Installed Monitoring System

WHAT IS PIMS

The MISTRAS Permanently Installed Monitoring System (PIMS) is a permanent transducer that can be installed and left on most pipe work. PIMS allows users to collect data from remote locations at any time to assess pipe conditions. The PIMS transducer is encased by a layer of polyurethane material, protecting the transducer from a variety of environmental conditions including buried, subsea, sleeved, and contaminated locations. PIMS offers better results than standard transducer rings, producing stable, repeatable, and enhanced results over time.

WHY INSTALL PIMS

- Access cost for many inspections is a large proportion of the overall inspection cost.
- With PIMS repeat inspection is a simple connection and data collection requiring no further access to the pipe.
- Repeatability identifies and detects changes of less than 1% in the pipe cross section.
- Transducer can be installed on pipes before they are put in service allowing results to be obtained from sections of pipe that would be inaccessible such as sleeved pipes.
- Results are directly comparable to standard transducer rings so pipes can be tested before installing PIMS.

WHERE

PIMS have already been installed on 100's of buried pipes. PIMS are pre-installed on subsea pipes and cabled back to a platform. Subsea PIMS have been installed on risers above the splash zone in the North Sea and offshore in South America. PIMS have also been installed within the casing of cased road crossings.

PIMS can be installed on pipes operating up to 90° Celsius, generating accurate and efficient results without variation from extreme environmental conditions.

WAVEMAKER PIMS FEATURES

The PIMS transducers give virtually identical results to the removable transducer rings used in the Wavemaker G3 system. Using the G3 with the PIMS transducer gives pipe operators a number of key benefits:

- Due to the excellent repeatability of results from the PIMS, changes in pipe cross-section of less than 1% have been detected
- Unique dynamic frequency sliding makes dramatic improvement in detection of defects. Previously using discrete frequency analysis led to arbitrary defect shape that may not detect critical defects.

- The unrolled pipe display gives immediate access to C-scan style results that allow defect locations to be more accurately determined. The added sensitivity of this display is immediately available to the operator and does not require collecting additional data to focus the guided waves
- Cable lengths can be in excess of 100m, allowing for flexibility in locating the connection point
- Programming of transducer and test location details into a connection box allows for an automated collection sequence which aids productivity and repeatability, reducing operator dependency on the data collected and making repeat testing a simple plug and collect operation
- The low profile of the transducer gives flexibility in choosing installation location

For more information:

Please call 1-609-716-4000 or visit us on the web at www.mistrasgroup.com.