Free-Swimming Acoustic Tool for Liquid and Natural Gas Pipeline Leak Detection

DTPH56-08-T-000007

PHMSA ACCOMPLISHMENTS

Pipeline and Hazardous Materials Safety Administration

Pipeline Safety Research and Development

Technology Development for Improved Pipeline Leak Detection

Project Abstract

This purpose of this joint academic/industry/government research project was to develop a free-swimming acoustic leak detection tool from technology currently used in the water pipeline industry and further develop the device for application in oil product pipelines and evaluate its potential for natural gas pipelines.

PHMSA Funding: $388,332

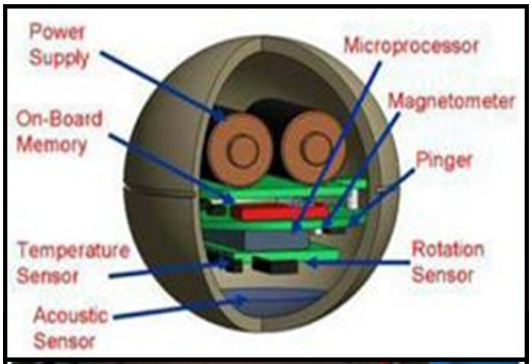
Public Project Page
https://primis.phmsa.dot.gov/matrix/PrjHome.rdm?prj=234

NET Improvement

SmartBall® is a new innovative leak detection technology for oil, gas and petroleum products pipelines larger than 4-inch (100 mm) diameter. It can be deployed to complement existing pipeline integrity programs or as an integrity check on non-piggable lines. The device consists of an instrumented aluminum core in a urethane shell. The device contains a range of instrumentation, including an acoustic data acquisition system that listens for leaks as the ball travels through the pipeline.

US Patent under DOT Contract:

N/A



Commercial Partner

Pure Technologies
Telephone: (403) 266-6794

http://www.puretechnologiesltd.com/

http://www.puretechnologiesltd.com/products/smartball/smartball_oil_gas.

Contact

James Merritt

303-683-3117

james.merritt@dot.gov