



MWM-Array Detection & Characterization of Damage through Coatings and Insulation

DTPH56-08-T-000009

PHMSA ACCOMPLISHMENTS

Pipeline and Hazardous Materials Safety Administration

Pipeline Safety Research and Development

Technology Development for Improved Corrosion Mitigation & Mechanical Damage Mapping

Project Abstract

JENTEK will deliver new capability for inspection from outside pipelines, without coating/insulation removal. The goal is reliable/rapid imaging of external/internal corrosion, mechanical damage, and Stress Corrosion Cracking (SCC). With matching funds from Chevron, we will first adapt Meandering Winding Magnetometer (MWM)-Array technology for external damage, using high frequency methods. This includes integrated field demonstrations within twenty-four months. Solution for internal corrosion will transition later, using lower frequency methods.

PHMSA Funding: \$ 502,971

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NET Improvement

The project provided a foundation for the development of the enhanced characterization of mechanical damage, corrosion, SCC, and welding defects being developed under related DOT funding (Project 354, Contract DTPH56-10-T-000009). It has also led to commercially-funded demonstrations for the characterization of internal and external corrosion through insulation and weather protection.

US Patent under DOT Contract:
N/A

Commercial Partner

JENTEK Sensors, Inc.
<http://jenteksensors.com>



Courtesy JENTEK Sensors, Inc.