Next-Gen Rupture Prediction

Leverage advanced Machine Learning on PIG data to proactively manage pipeline integrity, reduce risks, and cut operational costs for the Oil & Gas Industry.



Unlock Compelling Returns & Enhance Operations

Pipeline Intelligence delivers quantifiable results, translating predictive power into tangible business value. Clients typically achieve a full Return on Investment within 6-9 months, driven by multiple value streams.

Traditional vs. ML-Powered Performance

Traditional Approach

- Processing Time: 72+ hours
- False Positive Rate: 45%
- Detection Lead Time: 0-7 days

Pignosis ML-Powered

- · Processing Time: 25 seconds
- False Positive Rate: 8%
- Detection Lead Time: 60-90 days

The Technical Advantage: How Pignosis Works

Our solution utilizes cutting-edge technology, specifically optimized for pipeline operations, running on a robust and secure Microsoft Azure infrastructure. We turn complex data into actionable intelligence.

Advanced Machine Learning Pipeline

Feature Engineering

Extracts 137+ critical indicators from standard PIG data, revealing hidden patterns undetectable by human analysis.

Ensemble Models

Combines gradient boosting with deep neural networks to maximize prediction accuracy across diverse failure modes.

Progressive Learning

Continuously improves prediction capability with each new inspection cycle, enhancing accuracy over time.

Early Anomaly Detection

Identifies subtle precursors to failure 60-90 days before conventional methods, enabling timely intervention.

Secure Microsoft Azure Infrastructure

Azure Machine Learning

Powers enterprise-grade AI model training and deployment without requiring specialized internal staff.

Azure DataBricks

Transforms complex PIG data into actionable intelligence through efficient processing and visualization.

Security & Compliance

Provides industry-standard protection, meeting rigorous Oil & Gas security requirements.

System Integration

Connects seamlessly with existing SCADA and ERP systems, preserving investments in current infrastructure.







