Automations and Improvements in Data Collection

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Operations
Technology
Development

Operations Technology Development (OTD)



Stand-alone, not-for-profit, member-controlled company where gas utilities work together to develop technology solutions to common issues (est. 2003)



27 Members
serving 50 million
gas consumers
in the US and
Canada

























































OTD Smart Utilities Program Area



> Key initiatives include:

- GNSS Testing & Evaluation
- Enhanced/Digital Data Collection
- Tracking & Traceability (Steel Materials)
- GIS Analysis & Mapping
- Process-Based Business Analysis & Intelligence
- Excavation Encroachment Notification
 System
- Emerging Technologies



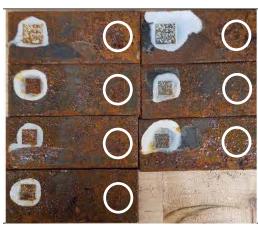
OTD Smart Utilities Program Area

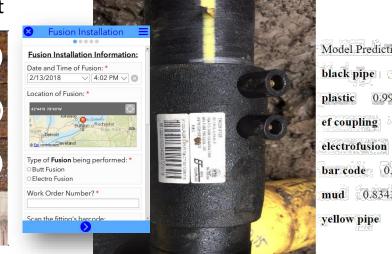


Samples prior to corrosion test



Samples after corrosion test





Model Predictions

black pipe | 0.9999788

plastic 0.9998192

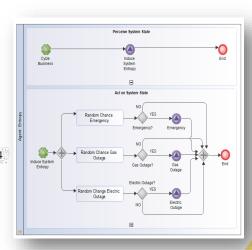
ef coupling 0.99801564

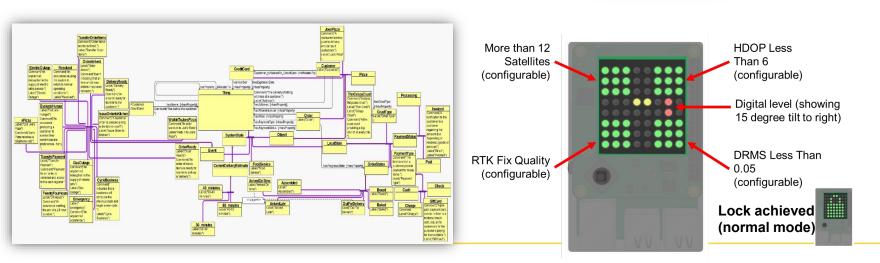
0.99801564

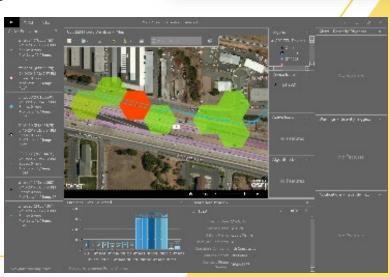
bar code 0.9839631

mud 0.8343955

yellow pipe 0.4571895







Research Gaps & Proposed Solutions



Existing Pipeline

 Locating and mapping existing pipe in 3-dimensions

New Construction • TVCR Mega Rule Compliance

Future Advancements Artificial Intelligence
 Analytics and Support





Research Gaps & Proposed Solutions



New Assets/ Infrastructure



Tailor Asset Mix

- Hydrogen
- Other Alternative Energy



Rethink Energy Business

- Optimize Value Chain
- Enabled by Digital Infrastructure

Maximize

Maximize Today's Potential

- Increase Resiliency & Reliability
- Improve Operations via risk consulting services



Rethink Operating Model

- Automations/AI/Machine Learning
- Cybersecurity

Existing Operations

New Operations

GTI image reimagined from:

https://www.energytoday.net/conventional-energy/the-energy-company-of-the-future-an-existential-crisis-for-oil-and-gas-companies/

Existing Assets/ Infrastructure





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