

Basic Factors for Successful Pigging Operations

Understanding Successful Pigging Operations



Informed Decision-Making

About the Class

One Day Course

Basic success factors for pigging operations will take you through an introduction and history of pigs used in the pipeline industry and where they are today.

With line evaluation and preparation being the cornerstone of a successful pigging program, you will walk through the entire process of cleaning, caliper and inspection programs. Starting with line cleanliness and understanding the different types of cleaning processes whether it be mechanical, chemical or a combination of the two. With this knowledge we can now implement a cleaning program that addresses your individual pipeline needs.

Bore assessment is the next step in your pigging program. This will cover when to use caliper, gaging, and dummy pigs, understanding the purposes of the single and multi channel caliper tools and considerations for quality results including tracking of the tools and quantification of dents, bends, ovalities, etc.. Knowing the accuracy, resolution, and potential errors in a caliper survey will increase your confidence in the probability of pig passage.

Inspection tools will begin with computer aided modeling/simulation and verification of new design work. From here we move to Launching and Receiving and design of the optimum configurations.

Followed by an overview of current and upcoming inspection technologies for internal pipeline inspection including Axial & Circumferential MFL (Magnetic Flux Leakage), UT (Ultrasonic) & EMAT (Electro Magnetic Acoustic Transducer). Understanding their limitations and what they mean to you as a pipeline owner/operator.

Understand the Deformation technology and how it differs from Caliper tools, the similarities and differences.

INS/GPS and how it fits into the total pipeline inspection program with maps and the

Who should attend

This class is designed for pipeline operators and contractors that are involved in internal pipeline inspection programs.

Attendees that would gain from this class include field operation personnel, project managers, and Integrity Assessment personnel such as management and project engineers.

Outline *

- Introduction/History to Intelligent Pigging
- Pipeline Piggability Evaluation
- Line Preparation Requirements
- Bore Assessment - When to use Caliper, Gaging, and Dummy Pigs
 - Mechanical Cleaning. Disks, Brushes, Magnets
 - Basic Caliper Survey - Purposes, Considerations for Quality results
 - Tracking and Locating Pigs
 - Quantification of Dents, Bends, Ovality, etc.
 - Accuracy, Resolution, and Potential Errors in a Caliper Survey
 - Probability of Pig Passage
 - Pig Sigs for Launching and Receiving
- Bends, Fittings and Other Restrictions
- Modeling/Simulation/Verification
- Pig Launching, Propelling, Tracking, and Receiving
- Internal Inspection Tools
 - MFL (Magnetic Flux Leakage)
 - UT (Ultrasonic)
 - EMAT (Electro Magnetic Acoustic Transducer)
- Deformation Tools and Caliper Tools Compared
- Defect locating - Map Systems, GPS Coordination
 - INS/GPS (Inertial Navigation System/Global Positioning System)
 - AGM (Above Ground Markers)
- What Pigging Vendors Expect from Pipeline Companies

**Includes continental breakfast and lunch.*

Copyright 2003 Tuboscope Pipeline Services 1.800.Linalog | www.tuboscope-pipeline.com