Postgraduate Certificate in Pipeline Integrity Management

Pipeline Maintenance and Repair

Aboveground Installations: Facilities and equipment associated with pipelines that are located aboveground, such as pump stations, valve sites, and metering stations.

ACFM (Alternating Current Field Measurement): A non-destructive testing (NDT) technique used to detect and size external and internal corrosion in pipelines.

ACWI (Automated Corrosion Warning System): A system that monitors the cathodic protection current and alerts operators when the current falls outside of the predetermined limits.

Anomaly: A deviation from the normal or expected condition of a pipeline, such as a dent, corrosion, or crack.

API (American Petroleum Institute): An organization that develops and publishes standards for the oil and natural gas industry, including pipeline integrity management.

ASME (American Society of Mechanical Engineers): An organization that develops and publishes codes and standards for the engineering and manufacturing industries, including pipeline integrity management.

ASTM (American Society for Testing and Materials): An organization that develops and publishes standards for testing and materials, including pipeline materials and coatings.

Batch Inspection: A method of inspecting pipelines in which a specific volume of product is inspected for defects or anomalies.

Bend Stress: The stress that occurs in a pipeline when it is bent or curved, which can lead to deformation or failure.

Burst Pressure: The maximum pressure that a pipeline can withstand before it fails.

Cathodic Protection: A method of protecting pipelines from corrosion by applying a protective current to the pipeline to counteract the corrosive effects of the environment.

CIS (Computerized Inventory System): A system that tracks and manages the inventory of pipeline materials and supplies.

CLR (Corrosion Loop Resistance): A measure of the resistance of a pipeline coating to corrosion.

Coating: A material applied to the exterior of a pipeline to protect it from corrosion.

CP (Cathodic Protection): A method of protecting pipelines from corrosion by applying a protective current to the pipeline to counteract the corrosive effects of the environment.

CPP (Close Interval Potential Profile): A method of measuring the voltage along a pipeline to detect areas of corrosion.

Corrosion: The deterioration of a pipeline due to chemical or electrochemical reactions with its environment.

Corrosion Coupon: A piece of metal used to measure the rate of corrosion in a specific environment.

Corrosion Rate: The speed at which a pipeline is corroding.

CR (Corrosion Resistance): The ability of a pipeline material to resist corrosion.

DCVG (Direct Current Voltage Gradient): A method of measuring the voltage along a pipeline to detect areas of corrosion.

DCVI (Direct Current Voltage Indication): A method of measuring the voltage along a pipeline to detect areas of corrosion.

DE (Data Extraction): The process of extracting data from a pipeline inspection tool.

DEP (Department of Environmental Protection): A government agency responsible for protecting the environment and public health.

DET (Direct Examination Technique): A method of inspecting pipelines using visual or mechanical means.

DF (Data Flow): The movement of data through a pipeline inspection tool.

DFT (Depth of Fitting): The depth to which a fitting or component is recessed into a pipeline.

DFW (Data File Writer): A device that writes data from a pipeline inspection tool to a storage medium.

DI (Direct Inspection): A method of inspecting pipelines using visual or mechanical means.

DIP (Direct Inspection Pressure): The pressure used during a direct inspection of a pipeline.

DL (Data Link): The connection between a pipeline inspection tool and a data storage or analysis system.

DMA (Data Management Assistant): A software tool used to manage and analyze data from pipeline inspections.

DMD (Data Management Database): A database used to store and manage data from pipeline inspections.

DOFS (Depth of Fault): The depth to which a fault or anomaly extends into a pipeline.

DP (Data Processing): The conversion and interpretation of raw data from a pipeline inspection tool.

DPI (Data Processing Interface): The connection between a pipeline inspection tool and a data processing system.

DR (Dielectric Response): The ability of a pipeline coating to resist the flow of electrical current.

DS (Data Storage): The storage of data from a pipeline inspection tool.

DSA (Data Storage Assistant): A software tool used to manage and store data from pipeline inspections.

DSD (Data Storage Database): A database used to store and manage data from pipeline inspections.

DSI (Direct System Interface): The connection between a pipeline inspection tool and a direct data analysis system.

DSS (Direct System Software): Software used to analyze data from a pipeline inspection tool in real-time.

DT (Data Transmission): The transfer of data from a pipeline inspection tool to a storage or analysis system.

DU (Data Utility): A software tool used to manage and analyze data from pipeline inspections.

DVB (Direct Visual Bore): A method of inspecting pipelines using visual means.

ECDA (External Corrosion Direct Assessment): A method of assessing the external corrosion of a pipeline using a combination of inspection and analysis techniques.

ECD (External Corrosion): Corrosion that occurs on the exterior of a pipeline due to exposure to the environment.

EMI (Electromagnetic Interference): Interference caused by electromagnetic fields that can affect the operation of a pipeline inspection tool.

EO (Engineering Order): An instruction given to a pipeline maintenance and repair team to perform specific work.

ERW (Electric Resistance Welded): A method of welding in which heat is generated by passing an electric current through the metal to be welded.

Excavation: The process of digging up a pipeline for inspection, maintenance, or repair.

Explosion-Proof: Equipment that is designed to contain an explosion or prevent the ignition of flammable gases or vapors.

External Corrosion: Corrosion that occurs on the exterior of a pipeline due to exposure to the environment.

FCI (Flow Control Interface): The connection between a pipeline inspection tool and a flow control system.

FE (Failure Evaluation): The process of determining the cause of a pipeline failure.

FEP (Fluorinated Ethylene Propylene): A type of plastic used for pipeline coatings.

Fiber Optic: A type of cable that uses light to transmit data or signals.

FIS (Flow Isolation System): A system used to isolate a section of pipeline for inspection or maintenance.

FL (Flow Line): A pipeline used to transport fluids from a wellhead to a processing facility.

FMD (Fitness-for-Service Determination): The process of evaluating the structural integrity of a pipeline to determine its suitability for continued service.

Force Main: A pipeline used to transport sewage or wastewater under pressure.

FRA (Fatigue Analysis): The process of analyzing the effects of cyclic loading on a pipeline.

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