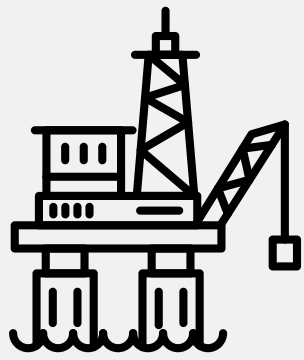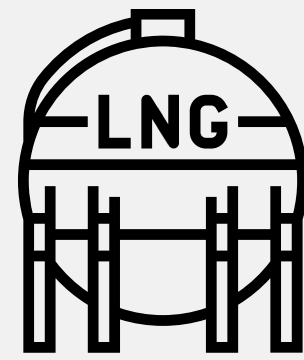# IMS PEI: Pressure Equipment Integrity
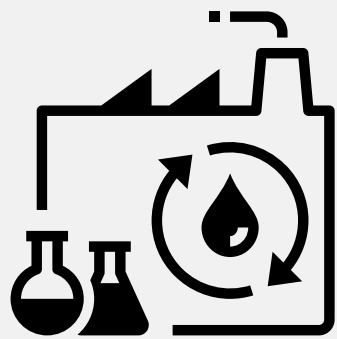
cenosco

Areas of application

Oil & Gas: Upstream Operations

- Onshore & offshore production facilities
- Flowlines & manifolds
- Floating installations (FPSO, FLNG & FSRU)
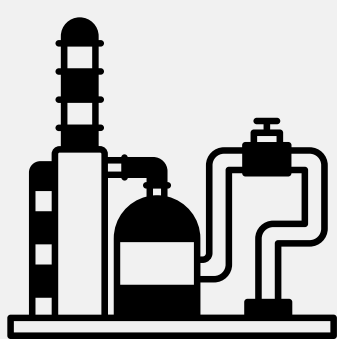- Early production & test facilities

Midstream & Storage

- Marine & land-based terminals
- Pumping stations
- Gas dehydration & compression units
- Tank farms (crude, refined, chemicals)
- Collection hubs

Petrochemical & Chemical

- Petrochemical units
- Chlor-alkali plants
- Acid production (sulfuric, phosphoric)
- Specialty & performance chemicals
- Integrated chemical complexes
- Fertilizers

Downstream & Processing

- Refineries
- LNG liquefaction & regasification
- GTL (Gas-to-Liquids) plants
- Fertilizer & methanol plants
- Hydrogen, industrial gases

Asset-Heavy Industries

- CCS (Carbon Capture & Storage)
- Blue/green hydrogen plants
- Biofuels/renewable Diesel Facilities
- Mining & mineral processing
- Pulp & paper (Pressure Systems)

Types of Equipment

- Piping & Pressure Vessels
- Tanks
- Relief Devices
- Heat exchangers
- Air coolers

Integrity Management Toolkit

Core Capabilities

Risk-Based Inspection (incl. pressure equipment, heat exchangers, tanks & PRVs) • Inspection Data Management System (IDMS) • Wall Thickness Trending & Analysis • Degradation Management Framework (CMF) Configurable Checklists • Configurable Reporting, Queries & Dashboards • History Recording & Audit Trail

Corrosion & Degradation Management

Wall Thickness Readings & Trends • Wall Thickness Analysis • Automated Wall Thickness Anomaly Detection Prediction Models (Dynamic Linear Modelling) • Extreme Value Analysis • Corrosion Control Documents (CCD) Degradation Mechanisms & Barrier Management • Advanced Corrosion Calculations Integrity Operating Windows (IOW) • Access to Corrosion Rate Prediction or Susceptibility Levels

Planning & Optimization Tools

Inspection & Corrective Action Planning & Scheduling • Planned Events – Shutdowns • Digital Twins & 3D Models Bulk Data Analysis & Visualization • CUI Consequence Assessment Model (CCAM) • Cathodic Protection Survey Tool • Sensitivity Analysis for Risk Factors

Compliance

IMS is supporting:
- RBI Methodology
- API Standards (580, 581, 571, 584, etc.)
- Auditable Events
- ISO 9001, 17020, 14224
- Microsoft Gold Partner
- IEC612511, EEMUA 159

Interfaces

HEXAGON · AVEVA · SAP · Assai · ORACLE · aspentech · OSIsoft. · IBM maximo · infor EAM · permasense

Cenosco Academy

- 4-day Tool Training
- 3-day RBI Training

Contact Us

Learn more