PetroSkills

Pipeline Hydraulics and Flow Assurance

MODULE

About the Skill Module

This skill module explains the physical properties and fluid flow characteristics of hydrocarbon gas and liquids. Topics also covered are friction flow, volumetric flow, multiphase flow, and flow assurance considerations for pipeline systems.

Target Audience

Engineers or Facilities Engineers involved in design, operation, maintenance or construction of pipelines or pipeline facilities.

You Will Learn

Participants will learn how to:

- Describe the physical properties and fluid flow characteristics of hydrocarbon gas and liquid
- Apply volumetric flow equations for natural gas & liquid flows
- Define the key parameters for pump station locations based on hydraulic profile & compressor station locations
- Describe the impact of system pressure on volumetric flow rate, diameter, friction losses, and compression power in gas pipelines
- Describe multiphase flow characteristics
- Describe the importance of temperature management, uses of insulation, and the challenges of design, installation and operation of insulation / heat tracing systems
- Describe the fluid characteristics, flow assurance issue and methods to manage for Hydrates, Wax / Paraffinic Fluids, Multiphase Flow, Scale

Product Details

Categories: Midstream

Disciplines: Pipeline Engineering

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 3 hours (approx.)

$395.00