



Heat Transfer Equipment Overview

MODULE

About the Skill Module

This module provides an overview of the heat transfer equipment and mechanisms commonly used in the oil and gas industry. The module also provides an overview including advantages, disadvantages, and applications of different types of heat exchangers.

Target Audience

Production and processing personnel involved with natural gas and associated liquids, to acquaint or reacquaint themselves with gas conditioning and processing unit operations. This course is for facilities engineers, process engineers, senior operations personnel, field supervisors, and engineers who select, design, install, evaluate, or operate gas processing plants and related facilities. A broad approach is taken with the topics.

You Will Learn

Participants will learn how to:

- Identify types of heat exchangers and common applications in oil and gas processing facilities
- Describe heat transfer mechanisms: conduction, convection, and radiation
- Define heat transfer coefficient and describe the primary parameters that affect its value
- Describe the rate equation used to calculate heat transfer area
- Describe the “effective temperature difference” and explain how it affects heat transfer area
- Estimate heat transfer surface area required for a heat exchanger application
- Describe shell and tube exchanger types and applications
- Describe compact heat exchangers and fired heaters
- List the four primary process cooling (heat rejection) methods
- Describe why air-cooled heat exchangers are so frequently used, key operating parameters, and the difference between induced draft and forced draft designs

Product Details

Categories: Midstream

Disciplines: Gas Processing

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 2 hours (approx.)

\$250.00