PetroSkills

Fractional Distillation Crude Oil - OT-44

COURSE

About the Course

This foundational course shows how crude oil is converted by fractional distillation to premium quality gasoline, diesel, kerosene, jet fuel, lubes, and subsequent chemical / refinery unit feedstocks. The course is excellent for experienced operators who want to understand the "why" as much of the "how" of separation, fractional distillation, and splitting processes. The course introduces operators to basic troubleshooting techniques for the process, equipment, and critical controls.

Target Audience

Refinery, process unit operations and maintenance technicians, supervisors and managers, as well as other non-engineering personnel requiring a fundamental focus on refinery processing facilities.

You Will Learn

- Fractional Distillation as applied in refinery crude unit operations
- Advanced level physical principles, hydrocarbon properties and hydrocarbon phase-behavior
- Principles of fluid dynamics and application to pumps
- Practical thermodynamics: Mass and Energy Balances
- Physical principles to understand distillation and splitting towers
- Distillation process, equipment, and controls troubleshooting techniques

Course Content

- Overview of refinery processes
- Crude stabilization
- Fractional distillation
- Produced hydrocarbon fluids and their properties
- Physical principles
- Oil and condensate processing
- Practical thermodynamics: mass and energy balances
- Mass transfer operations
- Introduction to hydrotreating and hydrocracking
- Systems and equipment troubleshooting
- Process unit walkthroughs (as permissible)

Product Details

Categories: Upstream, Midstream, Downstream, Operations & Maintenance

Disciplines: Operations & Maintenance Refining

Levels: Intermediate

Product Type: Course

Formats Available: In-Classroom

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