PetroSkills

Compressor Systems - Mechanical Design and Specification - ME-46

COURSE

About the Course

This 5-day, specialized level course is for facility design engineers, operations engineers, and technicians seeking an in-depth understanding of centrifugal, reciprocating, and screw compressors. This course provides basic knowledge of compressor types and associated auxiliary systems, mechanical design of equipment, operating and performance characteristics, control and monitoring systems, maintenance practices, and codes and standards.

Target Audience

Mechanical, facilities, plant, or pipeline engineers and technicians needing an in-depth understanding of the different types of compressors.

You Will Learn

- How to apply thermodynamics to compressor performance and operating characteristics
- How to size, specify, and select compressors
- Compressor auxiliary systems
- Series and parallel application of compressors
- How to integrate compressor systems into process facilities used in the oil and gas industry
- How to use state-of-the-art monitor and control devices in the operation, maintenance, and troubleshooting of compression systems
- How to apply maintenance practices to improve compressor reliability
- Shop and field performance testing
- Compressor economics including OPEX vs. CAPEX considerations

Course Content

- Types and application of compressors
- Selection criteria of dynamic and positive displacement compressors
- Compressor thermodynamics and operating characteristics
- Performance curves and off-design evaluations
- Key compressor components and other auxiliary systems
- Equipment specifications
- Compressor controls and monitoring devices

- Driver and gear involvement
- Installation, operation, maintenance practices, and troubleshooting
- Economic considerations

Product Details

Categories: Midstream

Disciplines: Mechanical Engineering

Levels: Specialized

Product Type: Course

Formats Available: In-Classroom   Virtual

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