



MU090: Compressor System: Mechanical Design and Specification

Training Description:

This 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.

Training Objectives:

By the end of the training, participants will be able to:

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

Training Designed for:

This course is intended for Mechanical, facilities, plant, or Pipeline Engineers and Technicians needing an in-depth understanding of the different types of compressors

Training Requirement:

"Hand's on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

FIVE DAYS:

- ❖ PRE-TEST
- ❖ Introduction
- ❖ 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
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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