



IE158: Maintenance of ON/OFF & Control Valves

Training Description:

This comprehensive course equips you with the knowledge and skills to effectively maintain both on/off and control valves, ensuring optimal performance and preventing costly downtime. Learn from industry experts about valve types, operation, troubleshooting, and best practices for maintaining these critical components of your process systems.

Training Objectives:

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

- ✓ identify and differentiate various types of on/off and control valves.
- ✓ Understand the operating principles and components of each valve type.
- ✓ Perform routine maintenance tasks, including lubrication, packing adjustment, and actuator checks.
- ✓ Diagnose and troubleshoot common valve problems, including leaks, cavitation, and sticking.
- ✓ Implement preventive maintenance strategies to optimize valve lifespan and performance.
- ✓ Apply best practices for safety and environmental considerations when handling valves.
- ✓ Understand relevant industry standards and regulations for valve maintenance.

Training Designed for:

This course is intended for Plant operators, maintenance technicians, engineers, and other personnel responsible for valve maintenance; Individuals seeking to understand and improve valve performance in various industrial applications; Those preparing for relevant industry certifications in valve maintenance.

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:

- ❖ Introduction
- ❖ **Module 1: Introduction to Valves**
 - Valve types and applications (ball valves, gate valves, butterfly valves, etc.)
 - On/off vs. control valve operation and characteristics
 - Basic anatomy and functions of valve components
 - Materials of construction and their suitability for different applications
- ❖ **Module 2: On/Off Valve Maintenance**
 - Routine maintenance procedures for various on/off valve types
 - Packing adjustment and replacement techniques
 - Identifying and resolving common on/off valve problems
 - Disassembly, inspection, and repair of on/off valves

- Safety considerations during on/off valve maintenance
- ❖ **Module 3: Control Valve Maintenance**
 - Understanding control valve principles and components (actuators, positioners, etc.)
 - Calibration and tuning of control valves for various process conditions
 - Diagnosing and troubleshooting common control valve problems (sticking, cavitation, etc.)
 - Advanced maintenance procedures for actuators and positioners
 - Safety considerations specific to control valve maintenance
- ❖ **Module 4: Preventive Maintenance Strategies**
 - Developing a comprehensive preventive maintenance program for on/off and control valves
 - Scheduling routine inspections and maintenance tasks
 - Utilizing predictive maintenance tools and techniques
 - Monitoring valve performance and data analysis for early detection of potential issues
 - Optimizing maintenance practices for cost-effectiveness and reliability
- ❖ **Module 5: Industry Standards and Regulations**
 - Relevant industry standards for valve maintenance (API, ASME, etc.)
 - Regulatory requirements for safety and environmental compliance
 - Best practices for documentation and recordkeeping of maintenance activities
- ❖ **Course Conclusion**
- ❖ **POST-TEST and EVALUATION**

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 Certificate(s):

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

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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