



COURSE OVERVIEW ME0713 Passive Fire Protection Systems

Course Title

Passive Fire Protection Systems

Course Date/Venue

Session 1: April 21-25, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

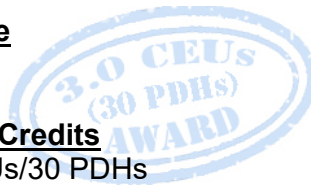
Session 2: October 19-23, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

Course Reference

ME0713

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description

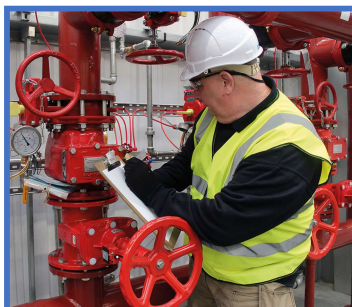


This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

Properly functioning fire sprinklers can significantly reduce the extent of property damage and increase the chance of building occupants escaping a fire. However, keeping these systems in optimal condition calls for a thorough understanding of complex mechanics, equipment, and practices.



This course is designed to provide participants with a detailed and up-to-date overview of fire protection systems inspection, testing and maintenance. It covers the NFPA 4 standard for integrated fire protection and life safety system testing; the NFPA 25 standard for the inspection, testing and maintenance of water-based protection systems; the application of NFPA 25, deluge foam-water sprinkler and foam-water spray systems, valve and water-based fire protection system; the inspection, testing and maintenance of task frequencies; the NFPA 25 general requirements; the inspection, testing and maintenance of performance-based compliance programs; and the inspection, testing and maintenance of sprinkler systems, standpipe and hose systems, private fire service mains, fire pumps, water storage tanks, water spray fixed systems, foam-water sprinkler systems, water mist systems and common components and valves.



During this interactive course, participants will learn the component action, testing requirements, corrective action, operational tests and ultra-high-speed water spray system (UHSWSS) operational tests; the automatic tank fill valves, control valves in water-based fire protection systems, system valves, pressure-reducing valves and relief valves and hose valves; the backflow prevention assemblies and fire department connections; the automatic detection equipment, air compressors and nitrogen generators; the assembly of internal condition of piping, obstruction investigation and prevention; the role of impairment coordinator, tag impairment system and impaired equipment; and the preplanned impairment programs, emergency impairments and restoring systems to service.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Inspect, test and maintain fire protection systems in a professional manner
- Discuss the NFPA 4 standard for integrated fire protection and life safety system testing including NFPA 25 standard for the inspection, testing and maintenance of water-based protection systems
- Discuss the application of NFPA 25 as well as deluge foam-water sprinkler and foam-water spray systems, valve and water-based fire protection system
- Inspect, test and maintain task frequencies
- Identify the NFPA 25 general requirements covering responsibility of property owner or designated representative, manufacturer's corrective action, records and water supply status
- Inspect, test and maintain performance-based compliance programs
- Inspect, test and maintain sprinkler systems, standpipe and hose systems, private fire service mains, fire pumps, water storage tanks, water spray fixed systems, foam-water sprinkler systems, water mist systems and common components and valves
- Recognize component action and testing requirements and apply corrective action, operational tests and ultra-high-speed water spray system (UHSWSS) operational tests
- Identify automatic tank fill valves, control valves in water-based fire protection systems, system valves, pressure-reducing valves and relief valves and hose valves
- Illustrate backflow prevention assemblies and fire department connections
- Describe automatic detection equipment and air compressors and nitrogen generators
- Assemble internal condition of piping and carryout obstruction investigation and prevention
- Recognize the role of impairment coordinator including tag impairment system and impaired equipment
- Carryout preplanned impairment programs, emergency impairments and restoring systems to service

Exclusive Smart Training Kit - H-STK®



*Participants of this course will receive the exclusive "Howard Smart Training Kit" (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*



Who Should Attend

This course covers systematic techniques on fire protection systems inspection, testing and maintenance for all group of professionals including risk managers, loss control specialists, fire officers, fire marshals, fire inspectors, safety managers, fire protection consultants, designers, engineers, code enforcers, facility managers, fire and safety technicians and for those who have responsibilities dealing with the application of fire safety, protection, prevention and suppression technologies.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Fee

US\$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.




Course Certificate(s)


Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.



Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Jawdat Alnajjar is a **Senior Mechanical Engineer** and an **International Fire Fighting & Response Technical Adviser** with over **30 years** of practical experience within the **Oil, Gas, Power & Utilities** and other **Energy** sectors. His expertise includes **Fired Pumps, Fired Heaters & Exchangers, Water-Based Fire Protection System, Fire Protection Systems, Fire Pump Inspection & Testing, Fire Suppression Design, Firefighting System, Fire Protection & Life Safety System Testing, Firefighting Techniques, Fire & Gas Detection System, Fire Fighter & Fire Rescue, Fire Risk Assessment, Fire Protection & Life Safety System Testing, Fire Extinguishers, Fire Prevention & Investigation, Fire Suppression Systems, Fire Safety, Fire Detection & Alarm Systems, Hose Reels & Sprinkler Systems, Fire & Rescue Planning & Operation, Fire Equipment & Facilities Inspection**. Further, he is also well-versed in **Water Pipes Inspection & Repair, Water Network Operations, Water Chemistry, Water Leak Detection, Water Pumps Safety Operation, Piping System, Water Treatment, Rural Pipe System, Pipe Materials & Fittings, Pipes & Fittings, Water Loss Reduction, Main Water Line Construction, Hydraulic Modelling for Water Network Design, Water Utility Industry, Water Treatment Chlorination Process, Chlorination Disinfection Methods, Chlorine Measurement Techniques, Pump & Valve Maintenance & Repair, Pump Operation & Maintenance, Pump Repair & Troubleshooting, Pump Technology, Pump Selection & Installation, Safety Relief Valve Design & Installation, Valve Inspection & Testing, Control Valve & Actuators, Motor & Control Panel Troubleshooting, ASNT-NDT Techniques, Piping Systems, Storage Tanks, Boiler Operation & Maintenance, Steam & Gas Turbine, Compressor Maintenance & Troubleshooting, Compressor Control & Protection, Heat Exchanger & Heat Transfer, Heating, Ventilation, Air-Conditioning (HVAC), Heating & Cooling Systems, Heat Insulation Systems, Chiller Design, CNC Machine, Machinery Bearings, Lubrication & Greasing, Cutting Tools, Lathe Procedures, Milling Procedures, Tribology, Welding & Brazing, Leakage Detection System, Pneumatic Tube System, Bearings & Lubrication, Machinery Lubrication, Process Plant Shutdown & Turnaround, Maintenance Optimization, Maintenance Auditing & Benchmarking, Reliability Management, Rotating Equipment Maintenance & Troubleshooting, Integrity & Asset Management, Maintenance Management Best Practices, Material Cataloguing, Maintenance Planning & Scheduling and Effective Reliability Maintenance.**

During his life career, Mr. Jawdat has gained his practical and field experience through his various significant positions and dedication as the **Technical Production Manager, Engineering Manager, Technical Lead Project Engineer, Consultant Engineer, Lead Engineer, Water Engineer, Fire Engineer, Mechanical & MPG Section Head, Site Supervisor, Engineer Assistant, Technical Mechanic and Instructor/Trainer** from various companies such as the Innovation & Gulf Training Institute, Saudi Bin Laden Group (SBG), **ARAMCO**, Aljasser Steel Group, Abdullah Hashim for Gas & Equipment (AHG), Alandus Factory, Wolfgang Engineering, K.Porcellan Manufacture and Lehe-Planen.

Mr. Jawdat has a **Bachelor's degree in Mechanical Engineering** and a **Diploma in Industrial Production & Manufacturing Administration of Factories** from the **Technical University of Berlin, Germany**. Further, he is a **Certified Trainer/Instructor** and a **CNC-Machines Workshop Mechanic Professional**. He has further delivered various trainings, seminars, courses, workshops and conferences internationally.



Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0830	Registration & Coffee
0830 – 0845	Welcome & Introduction
0845 – 0900	PRE-TEST
0900 – 0930	Introduction NFPA 4 Standard for Integrated Fire Protection & Life Safety System Testing • NFPA 25 Standard for the Inspection, Testing & Maintenance of Water-Based Protection Systems
0930 – 0945	Break
0945 – 1100	NFPA 25 Overview Application • Deluge Foam-Water Sprinkler & Foam-Water Spray Systems Definitions • Valve Definitions • Water-Based Fire Protection System Definitions • Inspection, Testing & Maintenance (ITM) Task Frequencies
1100 – 1300	NFPA 25 General Requirements Responsibility of Property Owner or Designated Representative • Manufacturer's Corrective Action • Records • Water Supply Status • Inspection & Testing • Performance-Based Compliance Programs • Maintenance & Safety
1245 – 1300	Break
1300 – 1420	Sprinkler Systems: Inspection, Testing & Maintenance Inspection • Testing • Maintenance • Component Action Requirements
1420 – 1330	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day One

Day 2

0730 – 0930	Standpipe & Hose Systems: Inspection, Testing & Maintenance Inspection • Testing • Maintenance • Component Action Requirements
0930 – 0945	Break
0945 – 1100	Private Fire Service Mains: Inspection, Testing & Maintenance Inspection & Corrective Action • Testing • Maintenance • Component Action Requirements
1100 – 1230	Fire Pumps: Inspection, Testing & Maintenance Inspection • Testing • Reports • Maintenance • Component Replacement Testing Requirements
1230 – 1245	Break
1245 – 1420	Water Storage Tanks: Inspection, Testing & Maintenance Inspection • Testing • Maintenance • Automatic Tank Fill Valves • Component Action Requirements
1420 – 1420	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1420	Lunch & End of Day Two



Day 3

0730 – 0930	Water Spray Fixed Systems: Inspection, Testing & Maintenance Inspection & Maintenance Procedures • Operational Tests
0930 – 0945	Break
0945 – 1100	Water Spray Fixed Systems: Inspection, Testing & Maintenance (cont'd) Ultra-High-Speed Water Spray System (UHSWSS) Operational Tests • Component Action Requirements
1100 – 1230	Foam-Water Sprinkler Systems: Inspection, Testing & Maintenance Inspection • Operational Tests • Maintenance • Component Action Requirements
1230 – 1245	Break
1245 – 1420	Water Mist Systems: Inspection, Testing & Maintenance Inspection • Testing • Maintenance • Training
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

Day 4:

0730 – 0930	Common Components & Valves: Inspection, Testing & Maintenance General Provisions • Control Valves in Water-Based Fire Protection Systems
0930 – 0945	Break
0945 – 1100	Common Components & Valves: Inspection, Testing & Maintenance (cont'd) System Valves • Pressure-Reducing Valves & Relief Valves • Hose Valves
1100 – 1230	Common Components & Valves: Inspection, Testing & Maintenance (cont'd) Automatic Detection Equipment • Air Compressors & Nitrogen Generators • Component Testing Requirements
1230 – 1245	Break
1245 – 1420	Common Components & Valves: Inspection, Testing & Maintenance (cont'd) Automatic Detection Equipment • Air Compressors & Nitrogen Generators • Component Testing Requirements
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

Day 5

0730 – 0930	Internal Piping Condition & Obstruction Investigation Assessment of Internal Condition of Piping
0930 – 0945	Break
0945 – 1030	Internal Piping Condition & Obstruction Investigation (cont'd) Obstruction Investigation & Prevention • Ice Obstruction
1030 – 1230	Impairments Impairment Coordinator • Tag Impairment System • Impaired Equipment
1230 – 1245	Break

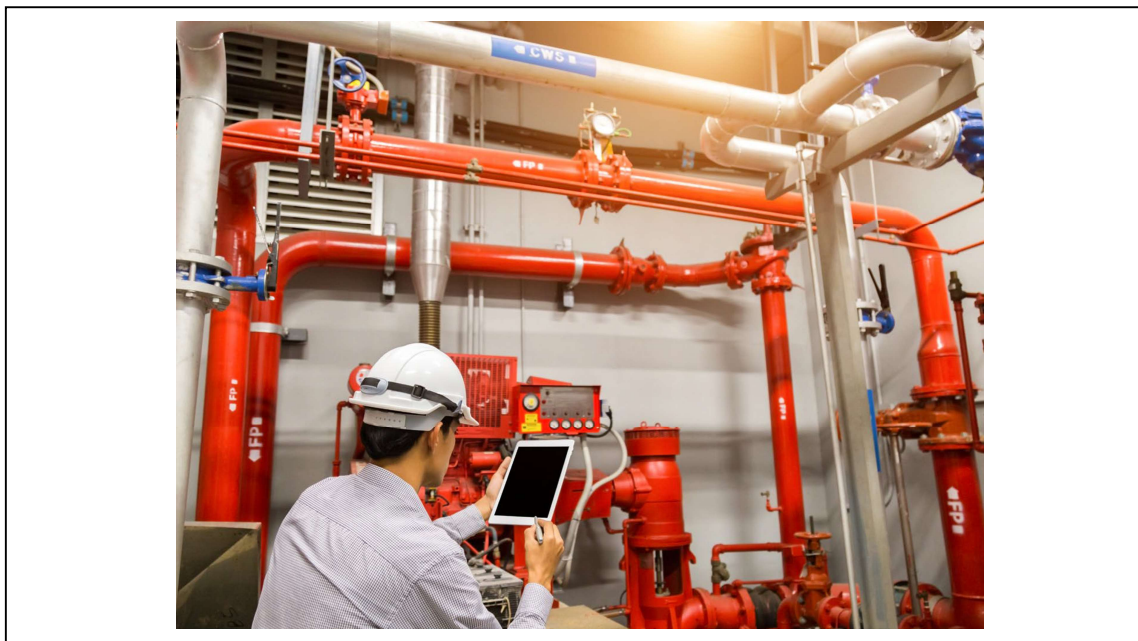




1245 - 1345	Impairments (cont'd) <i>Preplanned Impairment Programs • Emergency Impairments • Restoring Systems to Service</i>
1345 - 1400	Course Conclusion <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course</i>
1400 - 1415	POST-TEST
1415 - 1430	<i>Presentation of Course Certificates</i>
1430	<i>Lunch & End of Course</i>

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-



Course Coordinator

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