COURSE OVERVIEW PE0303(KO3)-4D
LPG Filling-Depot & Loading Stations

Course Title
LPG Filling-Depot & Loading Stations

Course Reference
PE0303(KO3)-4D

Course Duration/Credits
Four days/2.4 CEUs/24 PDHs

Course Date/Venue

Session(s)	Date	Venue
1	February 26-29, 2024	Ajman Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
2	June 10-13, 2024	Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE
3	October 14-17, 2024	Boardroom, Warwick Hotel Doha, Doha, Qatar
4	December 16-19, 2024	Jubail Hall, Signature Al Khobar Hotel, Al Khobar, KSA

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course is designed to provide a clear overview of the LPG filling depot and loading stations. It covers the design and update procedures for operating the filling centers equipment, operational and procedures for monitoring the inline equipments, inspection/test, calibration procedures, latest technology of filling process Pequipment, mass flow meter, radio frequency identification (RFID) system, daily/monthly production reporting and ensuring the integrity and accuracy of LPG components through analysing the LPG received on a daily basis.

The course will also cover the various procedures for periodic inspection/test of emergency equipment; the international standards for designing, erecting storage tanks, LPG pumps, compressors, loading and unloading depot; the effectiveness of control system and the efficiency of filling process; potential operations risks and methods of minimizing potential risks; applicable standards in all operations equipment; comprehensive procedure with detail explicit requirements for compliance statutory requirements of QHSE MS; maintenance plan for all in line equipment/machines; and the responsibility to those who contact the local contractors to assess and minimize the risks associated with the services.

At the completion of the course, participants will be able to provide regular and thorough feedback to operations and distribution enabling them to measure the circulated cylinders stock and working conditions; regular and accurate reports for rejected maintenance cylinders; organize or participate in visits to local contractors premises; assess quality of reconditioned cylinders and effectiveness of procedure; evaluate track record; prepare clear and logical reports to make recommendations based in observations found and criteria; as well as identify the potential risk elements associated with the relationship and investigate methods of minimizing potential risk.

Course Objectives

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

- Apply and gain a good working knowledge on the various operations of LPG filling-depot and loading stations
- Design and update procedures for operating the filling centers equipment
- Discuss and apply the operational and procedures for monitoring the inline equipments
- Perform accurate inspection/test and calibration procedures to ensure the integrity and high performance of operation equipment
- Determine the latest technology of filling process equipment including mass flow meter, radio frequency identification (RFID) system to ensure accuracy and achieve LPG filling branch policy
- Prepare accurate, reliable daily/monthly production reports
- Analyze the LPG received on daily basis to ensure the integrity and accuracy of LPG components
- Establish a procedure for periodic inspection/test of emergency equipment (mobile filling station and bulk emergency truck)
- Continuously follow-up the international standards for designing, erecting storage tanks, LPG pumps and compressors and loading and unloading depot
- Evaluate the effectiveness of control system and contribute to continued efficiency of filling process including storage tanks and LPG cylinders equipment to meet the needs of LPG filling branch
- Identify potential operations risks and develop methods of minimizing potential risks
- Comply with applicable standards in all operations equipment and verify that operations equipment accurately reflects the performance of operations division
- Develop comprehensive procedure with detail explicit requirements for compliance statutory requirements of QHSE MS
- Identify and develop a maintenance plan for all in line equipment/machines to ensure high performance of the equipment/machines
- Describe responsibility to those who contact the local contractors to assess and minimize the risks associated with their services
- Provide regular and thorough feed back to operations and distribution to enable them to measure the circulated cylinders stock and working conditions
- Prepare regular and accurate reports for rejected maintenance cylinders including daily production, inspection report, etc.

- Organize or participate in visits to local contractor's premises; assess quality of reconditioned cylinders and effectiveness of procedure; evaluate track record; and prepare clear and logical reports to make recommendations based in observations found and criteria
- Identify potential risk elements associated with the relationship and investigate methods of minimizing potential risk

Who Should Attend

This course is intended for those involved in the operation, maintenance and management of LPG filling depot and loading stations including engineers and other technical, operational and maintenance staff.

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.*

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

Abu Dhabi	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day
Dubai	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Doha	**US$ 5,500** per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.
Al Khobar	**US$ 4,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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:-

- 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 **2.4 CEUs** (Continuing Education Units) or **24 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.

- 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.

Accommodation

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

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. Mike Poulos, MSc, BSc, is a **Senior Process Engineer** with over **35 years** of industrial experience within the **Utilities**, **Refinery**, **Petrochemical** and **Oil & Gas** industries. His expertise lies extensively in the areas of **Process Equipment Design & Troubleshooting**, **Petroleum Processing**, **Process Design Specifications**, **Process Calculation Methods**, **Equipment Sizing & Selection**, **Piping**, **Pumps**, **Compressors**, **Heat Exchangers**, **Air Coolers**, **Direct-Fired Heaters**, **Process Vessels**, **Fractionator Columns**, **Reactors, Ancillary Equipment**, **Mechanical & Safety Aspects**, **Cost Estimation**, **Commissioning & Start-Up**, **Production & Cost Reduction**, Reactor Building Ventilation System, **PVC** Initiators Storage Bunkers, **PVC** Modernization & Expansion, **PVC** Reactor, **PVC** Plant Reactors Pre-Heating, **PVC** Plant Start-Up & Commissioning, **PVC** Plant Shutdown, **PVC** Driers Automation, **VC**M Recovery, **VCM** Sphere Flooding System, **VCM** Storage Tanks, Steam Tripping Facilities, Solvents Plant Automation Commissioning & Start-Up and Inferential Properties System. Further, he is also well-versed in Advanced Process Control Technology, Designing Process Plant Fail-Safe Systems, Quantitative Risk Assessment, On-Line Statistical Process Control, Principles and Techniques of Contemporary Management, Rosemount RS3, Polymer Additives, Polymer Reaction Engineering, Polymer Rheology and Processing, GRID Management and Batch Process Engineering.

During his career life, Mr. Poulos held significant positions as the **Chemical Plants Technology Engineer**, **PVC Plant Production Engineer**, **PVC Plant Shutdown Coordinator**, **PVC Plant/CC Solvents Plants Acting Section Head** and **Chemical Distribution Section Head** from Hellenic Petroleum, wherein he was responsible for the development of integrated system.

Mr. Poulos has **Master** and **Bachelor** degrees in Chemical Engineering **from the** University of Massachusetts **and** Thessaloniki Polytechnic **respectively. Further, he is a** Certified Instructor/Trainer, a **and a** member **of the** Greek Society of Chemical Engineers **and** Greek Society of Engineers.

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 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0900	***LPG Filling Verification Process***
0900 - 0930	***Designing & Updating Procedures for Operating the Filling Centers Equipment***
0930 – 0945	*Break*

0945 – 1100	***Discussing & Applying the Operational & Procedures for Monitoring the Inline Equipments***
1100– 1230	***Performing Accurate Inspection/Test & Calibration Procedures to Ensure the Integrity & High Performance of Operation Equipment***
1230 – 1245	*Break*
1245 – 1420	***Carryout the Latest Technology of Filling Process Equipment e.g. Mass Flow Meter, Radio Frequency Identification (RFID) System to ensure Accuracy & Achieve LPG Filling Branch Policy***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2

0730 – 0930	***Preparing Accurate & Reliable Daily/Monthly Production Reports***
0930 – 0945	*Break*
0945 – 1100	***Analysing the LPG Received from MAA on Daily Basis to Ensure the Integrity & Accuracy of LPG Components***
1100 – 1230	***Establishing a Procedure for Periodic Inspection/Test of Emergency Equipment (Mobile Filling Station & Bulk Emergency Truck)***
1230 – 1245	*Break*
1245 – 1330	***LPG Storage Process***
1330 - 1420	***Continuously Following-up the International Standards for Designing, Erecting Storage Tanks, LPG Pumps/Compressors & Loading & Unloading Depot***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3

0730 – 0830	***Evaluating the Effectiveness of Control System & Contributing to Continue the Efficiency of Filling Process (Storage Tanks/LPG Cylinders) Equipment to Meet the Needs of LPG Filling Branch***
0830 - 0930	***Identifying the Potential Operations Risk & Developing Methods of Minimizing the Potential Risks***
0930 – 0945	*Break*
0945 – 1100	***Complying with Applicable Standards in All Operations Equipment & Verify that Operations Equipment Accurately Reflect the Performance of Operations Division***
1100 – 1230	***Developing Comprehensive Procedure which Detail Explicit Requirements for Compliance Statutory Requirements of QSHE MS***
1230 – 1245	*Break*
1245 – 1420	***Non-Confirming 12 kg Cylinder Process Control***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

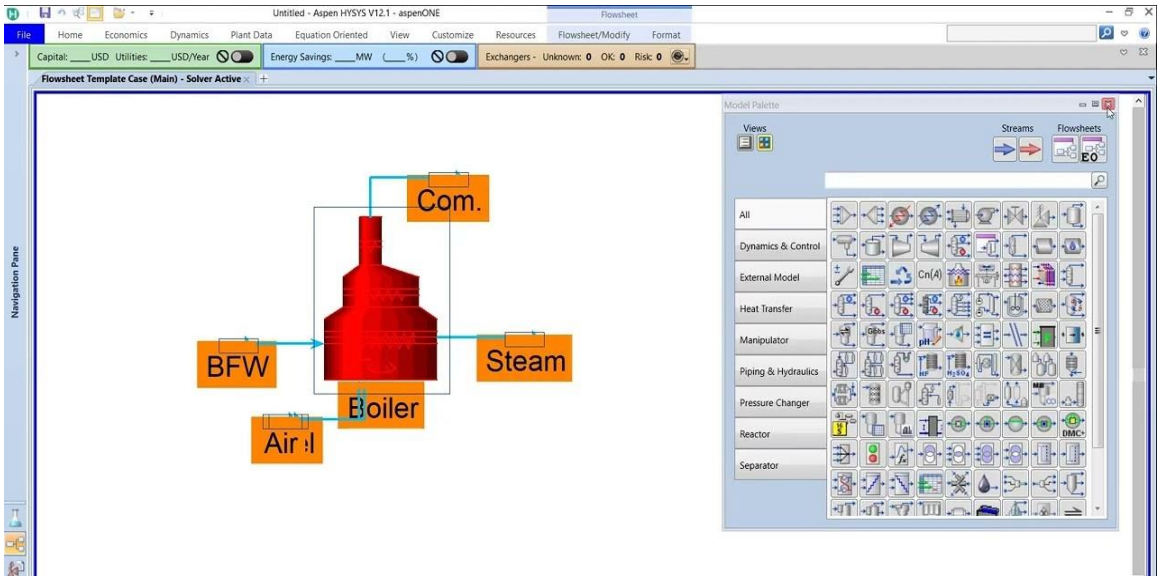
Day 4

0730 – 0930	***Identifying & Developing a Maintenance Plan for all in Line Equipment/Machines to Ensure High Performance of the Equipment/Machines***
0930 – 0945	*Break*

0945 – 1100	***Describing the Responsibility to those who Contact the Local Contractors to Assess & Minimize the Risks Associated with their Services***
1100 - 1200	***Providing Regular & Thorough Feedback to Operations & Distributing them to Measure the Circulated Cylinders Stock & Working Conditions***
1200 – 1230	***Preparing Regular & Accurate Reports for Rejected Maintenance Cylinders such as Daily Production, Inspection Report etc.***
1230 – 1245	*Break*
1245 – 1315	***Organizing or Participating in Visits to Local Contractors Premises, Assess Quality of Reconditioned Cylinders; Effectiveness of Procedure, Evaluate Track Record, Prepare Clear & Logical Reports to make Recommendations Based in Observations Found & Criteria***
1315 – 1345	***Identifying Potential Risk Elements Associated with the Relationship & Investigate Methods of Minimizing Potential Risk***
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulator (Hands-on Practical Sessions)

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the "ASPEN HYSYS" simulator.



ASPEN HYSYS V12.1 Simulator

Course Coordinator

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