

COURSE OVERVIEW DE0931 Advanced Gas Lift Design & Deliquification

Course Title

Advanced Gas Lift Design & Deliquification

Course Date/Venue

February 09-13, 2025/Al Buraimi Meeting Room, Sheraton Oman Hotel, Muscat

Course Reference

DE0931

Course Duration/Credits AWA

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.

This course is designed to provide participants with a detailed and up-to-date overview of advanced gas lift design and deliquification. It covers the symptoms of liquid loading in gas wells; the critical velocity to analyze wells loading or not; the techniques with nodal analysis and sizing tubing; and the proper selection, sizing and operation of compression.

During this interactive course, participants will learn the continuous (bypass), conventional and gas assisted plunger lift; the use of foam and beam pumps to deliquefy gas wells; the hydraulic pumps; the electrical submersible pumps and progressive cavity pumps; the gas lift technology, gas lift process, various types of gas lift system and the advantages and limitation of gas lift; the unloading gas lift wells, gas lift equipment and valves mechanism; and the dual gas lift installation, gas lift system evaluation, surging production, troubleshooting gas lift wells and production optimization.



























Course Objectives

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

- Apply and gain an advanced knowledge on advanced gas lift design and deliquification
- Recognize the symptoms of liquid loading in gas wells and the critical velocity to analyze wells loading or not
- Optimize techniques with nodal analysis and apply sizing tubing
- Carryout proper selection, sizing and operation of compression
- Identify the continuous (bypass), conventional and gas assisted plunger lift
- Use foam and beam pumps to deliquefy gas wells and recognize hydraulic pumps
- Identify electrical submersible pumps and progressive cavity pumps
- Discuss gas lift technology, gas lift process, various types of gas lift system and the advantages and limitation of gas lift
- Recognize unloading gas lift wells, gas lift equipment and valves mechanism
- Employ dual gas lift installation, gas lift system evaluation, surging production, troubleshooting gas lift wells and production optimization

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 conveniently saved in a **Tablet PC**.

Who Should Attend

This course provides an advanced overview of gas lift design and deliquification for engineers, field technicians, field supervisors, and those who select, design, install, monitor and evaluate, or operate artificial lift systems for use in dewatering gas wells.

Course Fee

US\$ 8,000 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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 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: -



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.

• 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

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. Samer Shukri, BSc, IADC, IWCF, is a Senior Drilling & Petroleum Engineer with over 25 years of offshore and onshore experience in the Oil & Gas, Refinery & Petrochemical industries. His wide expertise includes Enhanced Oil Recovery (EOR), Improved Oil Recovery (IOR), Oil Recovery Enhancement Techniques, Water Filtration Systems & Oil Recovery System, IADC WELLSHARP Drilling Operations Supervisor Combination Both Surface & Subsea Stack, IWCF Drilling Well Control, WellCAP Driller, WellCAP Supervisor, Well Control & Blow Out Prevention, Workovers & Completions, Well Completion Design &

Operations, Well Intervention, Well Life Cyle, Well Stimulation & Workover Planning, Workover Practices, Workover Operations, Well Integrity System, Well Control, Oil & Water Wells, Workover/Remedial Operations & Heavy Oil Technology, Plug & Abandonment of Oil & Gas Wells, Petroleum Engineering, Open Hole & Cased Hole Logs, Petroleum Risk & Decision Analysis, Well Testing Analysis, Stimulation Operations, Coiled Tubing Operations, Coiled Tubing Equipment, Rigless Operations, Reserves Evaluation, Reservoir Fluid Properties, Reservoir Engineering & Simulation Studies, Reservoir Monitoring, Geology & Reservoir Engineering, Artificial Lift Design, Gas Operations, Applied Water Technology, Oil & Gas Production, X-mas Tree & Wellhead Operations & Testing, Wellbore Design & Construction, Drilling Fluids & Solids Control, Drilling Fluids & Cementing Operations, Drilling Practices & Techniques, Stuck Piping & Fishing Operations, Rig Equipment Maintenance & Inspection, Rigging & Lifting Operations, Artificial Lift Systems (Gas Lift, ESP and Rod Pumping), Well Cementing, Oil Field Cementing, Production Optimization, PLT Correlation, Slickline Operations, Well Testing, Production Logging, Wireline Logging, Wireline Technology, Wireline Fishing Operations, Project Evaluation & Economic Analysis. Further, he is also well-versed in Marine Environment Protection, Maritime Professional Training, Operational Audit, Improvement, Planning & Management, Climate Change & Emissions Trading Services, International Trade & Shipping, Fitness for Service-API 579, Refining Process & Petroleum Products, OSHA (General Industry & Construction), IOSH (Managing Safely, Working Safely), HSE Standards & Procedures in the Oilfield, HSE Principles, Incident Prevention & Incidents, Working at Height, First Aid, H2S Awareness, Defensive Driving, Risk Assessment, Authorized Gas Tester (AGT), Confined Space Entry (CSE), Root Cause Analysis (RCA), Negotiation & Persuasion Skills, ISO-9001 Quality Management System (QMS), ISO-14001 Environmental Management System (EMS), ISO-45001 Occupational Health and Safety Management System (OHSMS), ISO-17020 Conformity Assessment, ISO/TS-29001 Quality Management System, IOS-50001-Energy Management System (EnMS) and Basic Offshore Safety Induction & Emergency. Currently, he is actively involved in Project Management with special emphasis in commissioning of new wells, completion design, well integrity management, production technology and field optimization, performing conceptual studies, economic analysis with risk assessment and field development planning.

During his career life, Mr. Samer has gained his field experience through his various significant positions and dedication as the Senior Production Engineer, Well Services Department Head, Senior Well Services Supervisor, Senior Well Integrity Engineer, Senior HSE Engineer, Well Services Supervisor, Drilling/Workover Supervisor, International oil & Gas Trainer, Leadership & Management Instructor and Senior Instructor/Trainer from the various international companies such as the ADCO, Al Furat Petroleum Company (AFPC), Syrian Petroleum Company (SPC), Petrotech, Global Horizon-UK, HDTC, Petroleum Engineers Association, STC, Basra University and Velesto Drilling Academy, just to name a few.

Mr. Samer has **Bachelor's** degree in **Petroleum Engineering**. Further, he is an a **Certified IADC WELLSHARP Instructor**, **Accredited IWCF Drilling & Well Intervention Instructor**, a **Certified Instructor/Trainer**, a **Certified Train-the-Trainer** and further delivered innumerable training courses, seminars, conferences and workshops worldwide.













Accommodation

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

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: Sunday, 09th of February 2025

Day 1:	Sunday, 09" of February 2025
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Recognize Symptoms of Liquid Loading in Gas Wells
0930 - 0945	Break
0945 - 1045	Critical Velocity to Analyze Wells Loading or Not
1045 - 1145	Optimize Techniques with Nodal Analysis
1145 – 1200	Break
1200 - 1300	Sizing Tubing
1300 - 1420	Compression: Selection, Sizing & Operation
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2: Monday, 10th of February 2025

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0730 - 0900	Plunger Lift: Continuous (bypass), Conventional & Gas Assisted
0900 - 0915	Break
0915 - 1030	Use of Foam to Deliquefy Gas Wells
1030 - 1200	Hydraulic Pumps
1200 - 1215	Break
1215 - 1315	Use of Beam Pumps to Deliquefy Gas Wells
1315 - 1420	Electrical Submersible Pumps
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3: Tuesday, 11th of February 2025

0730 - 0900	Progressive Cavity Pumps
0900 - 0915	Break
0915 - 1030	Gas Lift Technology
1030 - 1200	Gas Lift Process
1200 – 1215	Break
1215 - 1315	Types of Gas Lift System
1315 - 1420	Advantages & Limitation of Gas Lift
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4: Wednesday, 12th of February 2025

0730 - 0930	Unloading Gas Lift Wells
0930 - 0945	Break
0945 - 1145	Gas Lift Equipment
1145 - 1300	Valves Mechanism
1300 - 1315	Break















1315 - 1420	Dual Gas Lift Installation
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5: Thursday, 13th of February 2025

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0730 - 0900	Gas Lift System Evaluation
0900 - 0915	Break
0915 - 1030	Surging Production
1030 - 1145	Trouble Shooting Gas Lift Wells
1145 – 1200	Break
1200 - 1330	Production Optimization
1330 - 1345	Case Study
1345 - 1400	Course Conclusion
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Practical Sessions

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



Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org









