# COURSE OVERVIEW ME1073(GA2)-4D
# Sulphur Bulk Loading

**Course Title**
Sulphur Bulk Loading

**Course Reference**
ME1073(GA2)-4D

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

**Course Date/Venue**

| Session(s) | Date | Venue |
|---|---|---|
| 1 | July 29-August 01, 2024 | Club B Meeting Room, Ramada Plaza by Wyndham Istanbul City Center, Istanbul, Turkey |
| 2 | October 28-31, 2024 | Al Aziziya Hall, The Proud Hotel Al Khobar, Al Khobar, KSA |
| 3 | December 16-19, 2024 | Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE |

**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 sulphur bulk loading. It covers the fundamentals of sulphur bulk handling, feeding, storage and ship loaders; the portal reclaimers, pipe conveyors and belt conveying; the methods of increasing capacity, take-ups, selection of components and mechanical conveying; the reduction in maintenance on bucket, screw, drag-link and vibrating conveyers; and the elimination of feeding, discharge problems and trough conveyors.

During this interactive course, participants will learn the hoppers, chutes, silos, piling and retrieving; the pneumatic conveying, line length, line diameter, pressure and vacuum; the components of blowers, rotary valves and elbows; the bin hopper design, belt, apron, screw and other feeders; the storage and flow, flow properties of materials, funnel-flow and expanded flow; the flow rate analysis, gravity reclaim and transfer chutes; the spillage and buildup; the awkward marriage of conveyer and chutes; and the problem solving of bulk materials.

## Course Objectives

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

- Apply and gain an in-depth knowledge on sulphur bulk loading
- Discuss the fundamentals of sulphur bulk handling, feeding, storage and ship loaders
- Describe portal reclaimers, pipe conveyors and belt conveying
- Identify the methods of increasing capacity, take-ups, selection of components and mechanical conveying
- Employ reduction in maintenance on bucket, screw, drag-link and vibrating conveyers
- Increase speed and eliminate feeding and discharge
- Determine trough conveyors, hoppers, chutes, silos, piling and retrieving
- Illustrate pneumatic conveying, line length, line diameter, pressure and vacuum
- Select the components of blowers, rotary valves and elbows
- Describe bin hopper design, belt, apron, screw and other feeders
- Recognize storage and flow, flow properties of materials, funnel-flow and expanded flow
- Classify flow rate analysis, gravity reclaim and transfer chutes
- Eliminate spillage and buildup as well as recognize the awkward marriage of conveyer and chutes
- Handle problem solving of bulk materials

## Who Should Attend

This course provides an overview of all significant aspects and considerations of sulphur bulk loading for maintenance engineers, plant engineers, mechanical engineers, design engineers, inspection and repair managers, supervisors, and technicians.

## Course Fee

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| Istanbul | **US$ 5,000** per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), 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. |
| 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. |

## 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: -

- 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.

**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 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. Saad Bedir**, MSc, BSc, is a **Senior Chemical Engineer** with over **30 years** of extensive experience in the **Power**, **Petrochemical**, **Oil & Gas** and **Cement** industries. He is well-versed in the areas of Introduction to **Process Troubleshooting**, **Polyethylene** Manufacturing & Process Troubleshooting, **Polyethylene Flexible Packaging**, **Polyethylene** Wire & Cable, **Polymers**, **Polymers & Composites**, **Distillation Column** Operation & Control, **Polymers & Polymerization**, **Oil Movement** Storage & Troubleshooting, **Process Equipment** Design, **Slit Rolling**, **Steel Making**, **Painting & Coating Technology**, **Lubrication Technology**, **Tank & Tank Farms**, **Heat & Power Consumption**, **Heat Transfer**, **Clean Energy & Power Saving**,, **LLDPE** Productions & Utilization, **Process Plant** Optimization, **Heat & Power Consumption**, **Heat Transfer**, **Clean Energy & Power Saving**, Fuel Handling System, **Oil Movement & Operation**, Oil Production, Gas Conditioning & Processing, Plastic Additives, Process Plant Performance & Efficiency, Plant Optimization and Process Operations. His expertise also includes the implementation of Environmental Impact Assessment (**EIA**), **OHSAS 18001**, **ISO 9001**, **ISO 14001**, **QHSE** Management Planning, Air Quality Management, Health, Fire, Safety, Security & Environmental Codes of Practice, Legislations and Procedures. Crisis & Business Continuity Management Planning, Emergency Response & Procedures, Industrial Security Risk Assessment & Management, , Behavioural Safety, Incident & Accident Investigation, Integrated EHS Aspects, Risk Assessment & Hazard Identification, Environmental Audits, Hazardous & Non-Hazardous Waste Management, Confined Space Safety, **SHEMS** Principles, Process Safety, Basic & Advanced Construction Safety, Rig & Barge Inspection, , Safety & Occupational Health Awareness, Loss Control, Lifting & Slinging, Marine Pollution Hazards & Control, Ground Contamination & Reclamation Processes, Waste Management & Recycling, **HAZOP**, **HAZID**, **HSEIA**, **QRA**, Hazardous Area Classification, Radiation Protection, Active and Positive Fire Fighting, Fire & Gas Detection Systems, Fire Fighting Systems, Fire Proofing, ESD, Escape Routes. Presently, he is the **HSE Director** for one of the largest and renowned companies in the Middle East, wherein he takes charge of all HSE and security operations of the company.

Mr. Saad's vast professional experience in directing & managing process operations and health, safety and the environment aspects as per OSHA framework and guidelines can be traced back to his stint with a few international companies like **Saudi ARAMCO**, **CONOCO**, **Kuwait Oil Co.** (**KOC**), etc, where he worked as the **Field Senior Process Consultant** handling major projects and activities related to the discipline. Through these, he gained much experience and knowledge in the implementation and maintenance of **internationally accepted principles** of process operations. Through this, he has also gained knowledge regarding international safety standards for the National Fire Protection Association (**NFPA**), the American Petroleum Institute (**API**), Safety of Life at Sea (**SOLAS**), and Safety for Mobile Offshore Drilling Unit (**MODU**).

Mr. Saad has a **Master** and **Bachelor** degrees in **Chemical Engineering**. Further, he is a **Certified Lead Auditor** for **OHSAS 18001**, **ISO 9001** and **ISO 14001** and he holds **NEBOSH** certificate which includes health & safety measures. His passion for development and acquiring new skills and knowledge has taken him all over the Middle East to attend and share his expertise in numerous trainings and workshops.

## 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***

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| *0730 – 0800* | *Registration & Coffee* |
| *0800 – 0815* | *Welcome & Introduction* |
| *0815 – 0830* | ***PRE-TEST*** |
| *0830 – 0840* | ***Introduction to Sulphur Bulk Handling*** |
| *0840 – 0850* | ***Feeding*** |
| *0850 – 0900* | ***Storage & Ship Loaders*** |
| *0900 – 0915* | *Break* |
| *0915 – 0945* | ***Portal Reclaimers*** |
| *0945 – 1015* | ***Pipe Conveyors*** |
| *1015 – 1215* | ***Belt Conveying*** |
| *1215 – 1230* | *Break* |
| *1230 – 1300* | ***Methods of Increasing Capacity*** |
| *1300 – 1420* | ***Take-Ups*** |
| *1420 – 1430* | ***Recap*** |
| *1430* | *Lunch & End of Day One* |

***Day 2***

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|---|---|
| *0730 – 0800* | ***Selection of Components*** |
| *0800 – 0830* | ***Mechanical Conveying*** |
| *0830 – 0900* | ***Reduction in Maintenance on Bucket, Screw, Drag-Link & Vibrating Conveyers*** |
| *0900 – 0915* | *Break* |
| *0915 – 1000* | ***Increase in Speed*** |
| *1000 – 1030* | ***Elimination of Feeding & Discharge Problems*** |
| *1030 – 1215* | ***Trough Conveyors*** |
| *1215 – 1230* | *Break* |
| *1230 – 1300* | ***Hoppers, Chutes, Silos*** |
| *1300 – 1420* | ***Piling & Retrieving*** |
| *1420 – 1430* | ***Recap*** |
| *1430* | *Lunch & End of Day Two* |

***Day 3***

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|---|---|
| *0730 – 0800* | ***Pneumatic Conveying*** |
| *0800 – 0830* | ***Line Length, Line Diameter, Pressure & Vacuum*** |
| *0830 – 0900* | ***Selection of Components: Blowers, Rotary Valves, Elbows*** |
| *0900 – 0915* | *Break* |
| *0915 – 1030* | ***Bin & Hopper Design*** |
| *1030 – 1215* | ***Belt, Apron, Screw & Other Feeders*** |
| *1215 – 1230* | *Break* |
| *1230 – 1300* | ***Storage & Flow*** |
| *1300 – 1420* | ***Flow Properties of Materials*** |
| *1420 – 1430* | ***Recap*** |
| *1430* | *Lunch & End of Day Three* |

***Day 4***

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|---|---|
| *0730 – 0800* | ***Funnel-Flow & Expanded Flow*** |
| *0800 – 0830* | ***Flow Rate Analysis*** |
| *0830 – 0900* | ***Gravity Reclaim*** |
| *0900 – 0915* | *Break* |
| *0915 – 1030* | ***Transfer Chutes*** |
| *1030 – 1215* | ***Eliminate Spillage & Buildup*** |
| *1215 – 1230* | *Break* |
| *1230 – 1245* | ***The Awkward Marriage of Conveyer & Chutes*** |
| *1245 – 1345* | ***Bulk Materials Handling Problem Solving*** |
| *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