COURSE OVERVIEW HE0270
Safe Isolation of Plant Equipment

Course Title
Safe Isolation of Plant Equipment

Course Date/Venue
November 09-13, 2025/TBA Meeting Room, Taksim Square Hotel, Istanbul, Turkey

Course Reference
HE0270

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.

This course is designed to explain the requirements for the safe isolation of plant and equipment or control of hazardous energy sources set forth in the American Standards OSHA 29 CFR 1910.147 and ANSI/ASSE Z244.1-2003.

The accidental release of energy during work can and frequently does cause severe injuries, amputations, and death. Energy can be present in the form of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, potential energy (due to gravity) stored in elevated masses, spring energy, chemical corrosivity, chemical toxicity, pressure, or other energy.

The purpose of this course is to train participants on standards, procedures, techniques, designs and methods that protect personnel where injury can occur as a result of the unexpected release of hazardous energy. Unexpected release of hazardous energy can include any unintended motion, energization, start-up or release of stored energy, deliberate or otherwise, from the perspective of the person(s) at risk.

In addition to the Lockout/tagout (the primary method of hazardous energy control), the course will cover alternative methods of control that are based on risk assessment.

The course includes an e-book entitled "*The Safe Isolation of Plant and Equipment*", published by HSE books and a complete kit of Safety Videos burned in a CD, which will be given to the participants to help them appreciate the principles presented in the course.

Course Objectives

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

- Apply and gain an in-depth knowledge in the isolation of plant & equipment and control of hazardous energy sources
- Enumerate the types of hazards and give emphasis on chemical, fire & explosive hazards
- Implement procedures and assign escape routes in case of emergency isolation of chemical process plant
- Discuss the effects of electrical, confined space and mechanical hazards during the unexpected release of hazardous energy
- Enumerate the proper procedure for hazard identification and apply a detailed risk assessment for the different hazards
- Carryout the regulations, scope & application, procedures, training and auditing related to the safe isolation of plant and equipment (lockout/tagout)
- Create an effective Energy Control Plan to prevent injuries, amputations and death
- Demonstrate process disaster prevention & safety management to assure that it is in compliance with the American Standards OSHA 29 CFR 1910.147 and ANSI/ASSE Z244.1-2003

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 overview of all significant aspects and considerations of safe isolation of plant and equipment for HSE management and staff, plant department managers & engineers, electrical & electronic engineers, instrumentation & control engineers, mechanical engineers, process engineers, maintenance engineers, safety officers, environmental response leaders, site incident controllers, site main controllers, loss prevention and the emergency services.

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 **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.

- 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.

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. Eric Matthews is a **Senior SHEQ Consultant** with over **35 years** of industrial experience within **Oil**, **Gas** and **Power** industries. His expertise includes **Environmental Management System**, **ISO 14001**, **ISO 9001**, **OHSAS 18001**, **Safety Management System**, **Industrial Hygiene**, **Construction Safety** (**STOP**), **Process Safety Management** (**PSM**), **Risk Management**, **Risk Assessment**, **OSHA**, **SHEQ**, **HAZOP**, **PHA**, **Industrial Hygiene**, **Confined Space Entry**, **Fall Protection**, **Work Permit & First Aid**, **Forklift Operations**, **Accident & Incident Prevention**, **Site Inspection**, **HSE** Leadership, **Safety Attitude** and **Industrial Plant Safety** as well as Pneumatic, Control Systems and Logic Boards. Moreover, his experience includes Quality Management System (**QMS**), Change Management, Project Management, Contract Management, Business Management, Time Management, Performance Management, Supervisory & Management Skills, Coaching & Mentoring and Strategic Decision Making. He was the **Managing Director** of **Ken Matthews & Associates Training Consultancy**. Further, he is a **Registered** and **Certified Trainer**, **Assessor**, **Moderator**, **Verifier** and **Program Designer & Developer** as well as an **Authorized Accreditation Advisor**.

During Mr. Matthews' career life, he has shared his knowledge and practical expertise through the continuous and numerous trainings internationally. He started his profession from various challenging positions such as the **Tool Maker**, **Mechanical Technician**, **Sea Going Engineer**, **Safety Officer**, **Senior Lecturer/Professor**, **College Mentorship Programme Head**, **Mechanical Engineering Curriculum Designer**, **Learning Material Developer**, **Trainer & Assessor**.

Mr. Matthews has **Bachelor** degree in **Industrial & Organizational Psychology** with **Honours** (**Cum Laude**). Further, he is a **Certified Instructor/Trainer**; a **Certified Trainer/Assessor** by the **City & Guilds of London Institute**; a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management** (**ILM**); a **Registered SETA Assessor/Moderator/Skills Coach** and an active member of the British Institute of Works Managers and British Institute of Personnel Managers and delivered innumerable trainings, courses, seminars and workshops worldwide.

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$ 6,000 per Delegate + **VAT**. This rate includes Participants Pack (Folder, Manual, Hand-outs, etc.), buffet lunch, coffee/tea on arrival, morning & afternoon of each day. In addition to the Course Manual, participants will receive an e-book "*The Safe Isolation of Plant and Equipment*", published by HSE Books.

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 November 2025

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	**PRE-TEST**
0830 – 0900	**Introductions**
0900 – 1000	**General Safety**
1000 – 1015	Break
1015 – 1115	**Video**
1115 – 1200	**Hazards–General**
1200 – 1215	Break
1215 – 1330	**Chemical, Fire & Explosive Hazards**
1330 – 1420	**Review & Exercises**
1420 – 1430	**Recap**
1430	Lunch & End of Day One

Day 2: Monday, 10th of November 2025

0730 – 0830	**Emergency Isolation of Chemical Process Plant**
0830 – 0930	**Emergency Isolation of Chemical Process Plant (cont'd)**
0930 – 0945	Break
0945 – 1100	**Video**
1100 – 1200	**Electrical Hazards**
1200 – 1215	Break
1215 – 1330	**Confined Space Hazards**
1330 – 1420	**Review & Exercises**
1420 – 1430	**Recap**
1430	Lunch & End of Day Two

Day 3: Tuesday, 11th of November 2025

0730 – 0900	**Mechanical Hazards**
0900 – 0915	Break
0915 – 1045	**Hazard Identification /Risk Assessment**
1045 – 1200	**Video**
1200 – 1215	Break
1215 – 1330	**Hazard Identification /Risk Assessment (cont'd)**
1330 – 1420	**Review & Exercises**
1420 – 1430	**Recap**
1430	Lunch & End of Day Three

Day 4: Wednesday, 12th of November 2025

0730 – 0900	***Lockout/Tagout: Regulations & Case Studies ● Lockout/Tagout: Scope & Application***
0900 – 0915	*Break*
0915 – 1045	***Lockout/Tagout: The Energy Control Plan ● Lockout/Tagout: Procedures***
1045 – 1200	***Video***
1200 – 1215	*Break*
1215 – 1330	***Lockout/Tagout: Training ● Lockout/Tagout: Auditing***
1330 – 1420	***Review & Exercises***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5: Friday, 13th of November 2025

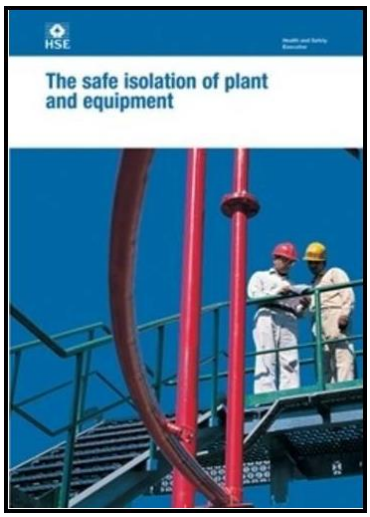
0730 – 0900	***Process Disaster Prevention & Safety Management***
0900 – 0915	*Break*
0915 – 1145	***Process Disaster Prevention & Safety Management (cont'd)***
1145 – 1215	***Video***
1215 – 1230	*Break*
1230 – 1345	***Open Forum***
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 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:-

Book(s)

As part of the course kit, the following e-book will be given to all participants:



Title : The Safe Isolation of Plant and Equipment
ISBN : 978-0717661718
Author : Health and Safety Executive of the UK
Publisher : HSE Books

Course Coordinator

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