

COURSE OVERVIEW HE1969
Risk Assessment in Maintenance Workshops

Course Title

Risk Assessment in Maintenance Workshops

Course Date/Venue

Session 1: January 26-30, 2025/Business Meeting, Crowne Plaza Al Khobar, Al Khobar, KSA
 Session 2: September 14-18, 2025/Business Meeting, Crowne Plaza Al Khobar, Al Khobar, KSA



Course Reference

HE1969



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 provide participants with a detailed and up-to-date overview of Risk Assessment in Management Workshops. It covers the types of risks in workshops and the common hazards in maintenance settings; the key factors influencing risk in maintenance activities; the principles of risk assessment, legal and regulatory requirements and risk assessment terminology; the safety culture in maintenance workshops, hazard identification basics and job hazard analysis (JHA); the routine inspections and work processes; documenting findings from inspections; and using inspection data for preventive actions.



Further, the course will also discuss the incident and accident investigation, hazard identification checklists and employee involvement in hazard identification; the risk analysis techniques, likelihood and severity assessment; the risk matrices and probability and consequence analysis; the cost-benefit analysis of risk controls; recording findings and recommendations; and communicating risk levels to stakeholders.

During this interactive course, participants will learn the hierarchy of controls in maintenance workshops, engineering controls, administrative controls and personal protective equipment (PPE); the emergency preparedness and response; evaluating the effectiveness of controls and monitoring and reviewing risk assessments; the feedback loops in safety processes; using incident reports continuous improvement; assessing employee input in refining risk assessments; the risk management system and developing training and awareness programs; and the use of technology in risk assessment.

Course Objectives

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

- Apply and gain a comprehensive knowledge on risk assessment in management workshops
- Identify the types of risks in workshops, the common hazards in maintenance settings and the key factors influencing risk in maintenance activities
- Discuss the principles of risk assessment, legal and regulatory requirements and risk assessment terminology
- Apply safety culture in maintenance workshops, hazard identification basics and job hazard analysis (JHA)
- Conduct routine inspections, observe work processes, document findings from inspections and use inspection data for preventive actions
- Carryout incident and accident investigation, develop hazard identification checklists and encourage employee involvement in hazard identification
- Employ risk analysis techniques, likelihood and severity assessment, risk matrices and probability and consequence analysis
- Apply cost-benefit analysis of risk controls, record findings and recommendations and communicate risk levels to stakeholders
- Discuss the hierarchy of controls in maintenance workshops, including engineering controls, administrative controls and personal protective equipment (PPE)
- Carryout emergency preparedness and response, evaluate the effectiveness of controls and monitor and review risk assessments
- Create feedback loops in safety processes, use incident reports continuous improvement and assess employee input in refining risk assessments
- Implement a risk management system, develop training and awareness programs and use technology in risk assessment

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 provides an overview of all significant aspects and considerations of risk assessment in management workshops for risk management professionals, project managers, operations and departmental managers, human resources (HR) managers, senior executives and leadership teams, legal and compliance teams, safety and environmental officers and other technical staff.

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. Raymond Tegman is a **Senior HSE Consultant** with extensive experience within the **Oil & Gas, Petrochemical and Refinery** industries. His broad expertise widely covers in the areas of **Rigging Safety Rules, Machinery & Hydraulic Lifting Equipment, Handling Hazardous Chemicals, Spill Containment, Fire Protection, Fire Precautions, Incidents & Accidents Reporting, HSEQ Audits & Inspection, HSEQ Procedures, Environmental Awareness, Waste Management Monitoring, Emergency Planning, Emergency Management, Working at Heights, Root Cause Analysis, HSE Rules & Regulations, Process Safety Management (PSM), Process Hazard Analysis (PHA), Techniques, HAZOP, HSE Risk, Pre-Start-up Safety Reviews, HSE Risk Identification, Assessments & Audit, HSE Risk Assessment & Management Concepts, HSE Management Policy & Standards, HSSE Emergency Response & Crisis Management Operations, Confined Space Entry, Quantitative Risk Assessment (QRA), Hazardous Materials & Chemicals Handling, Safety Precaution & Response Action Plan, Hazard & Risk Assessment, Task Risk Assessment (TRA), Incident Command, Accident & Incident Investigation, Emergency Response Procedures, Job Safety Analysis (JSA), Behavioural Based Safety (BBS), Fall Protection, Work Permit & First Aid, Lock-out/Tag-out (LOTO), Emergency Response, Construction Supervision, Scaffolding Inspection, HAZCHEM, Manual Material Handling, Road Traffic Supervision, ISO 9001 and OHSAS 18001.**

During his career life, Mr. Tegman has gained his practical and field experience through his various significant positions and dedication as the **Operations Manager, Safety Maintenance Manager, Safety Manager, Road/Traffic Supervisor, Assessor/Moderator, SHE Practitioner, Senior Instructor/ Trainer, Technician Trainer, Safety Consultant, Safety Advisor, Safety Officer and Liaison Officer** from Zero Harm, SHRA Training & Services (Health & Safety), Road Crete, Balwin Property Development, DEME International, Gladstone Australia, Godavari Gas Pipeline and Newcastle NCIG.

Accommodation

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

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\$ 7,000 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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 – 0930	Understanding Risk in Maintenance Workshops Definition & Types of Risks in Workshops • Common Hazards in Maintenance Settings • Importance of Risk Assessment for Workshop Safety • Key Factors Influencing Risk in Maintenance Activities
0930 – 0945	Break
0945 – 1030	Principles of Risk Assessment Definition & Purpose of Risk Assessment • Overview of Risk Management Process • Key Elements of a Risk Assessment • Role of Risk Assessment in Incident Prevention
1030 – 1130	Legal & Regulatory Requirements Health & Safety Regulations for Workshops • Compliance with Industry Standards • Employer & Employee Responsibilities • Importance of Documentation for Compliance
1130 – 1230	Types of Risks in Maintenance Workshops Physical Risks (e.g., Slips, Falls, Machinery Hazards) • Chemical Risks (e.g., Exposure to Hazardous Substances) • Ergonomic Risks (e.g., Lifting, Repetitive Motions) • Electrical & Fire Risks
1230 – 1245	Break
1245 – 1330	Risk Assessment Terminology Defining Hazard, Risk, & Control Measures • Understanding Risk Likelihood & Severity • Terminology for Assessing Risk Levels • Importance of Clear Communication in Risk Assessment

1330 - 1420	Safety Culture in Maintenance Workshops <i>Building a Proactive Safety Culture • Encouraging Employee Involvement in Safety • Reporting & Addressing Unsafe Behaviors • Continuous Improvement in Workshop Safet</i>
1420 - 1430	Recap <i>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</i>
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0900	Hazard Identification Basics <i>Purpose & Importance of Hazard Identification • Methods of Hazard Identification in Workshops • Identifying Hazards in Daily Operations • Tools for Tracking & Recording Hazards</i>
0900 – 0915	<i>Break</i>
0945 – 1030	Job Hazard Analysis (JHA) <i>Steps in Performing a JHA • Breaking Down Tasks to Identify Hazards • Assessing Risk for Each Task Step • Using JHA Results for Risk Reduction</i>
1030 – 1130	Walkthrough Inspections & Observations <i>Conducting Routine Inspections • Observing Work Processes for Potential Risks • Documenting Findings from Inspections • Using Inspection Data for Preventive Actions</i>
1130 – 1230	Incident & Accident Investigation <i>Importance of Investigating Incidents • Root Cause Analysis in Accident Investigations • Using Incident Data to Identify Hazards • Preventing Recurrence through Corrective Actions</i>
1230 – 1245	<i>Break</i>
1245 - 1330	Hazard Identification Checklists <i>Developing & Using Hazard Checklists • Checklist Customization for Different Tasks • Benefits of Checklist-Based Identification • Integrating Checklists with JHA & Inspections</i>
1330 - 1420	Employee Involvement in Hazard Identification <i>Encouraging Employees to Report Hazards • Training Employees to Recognize Hazards • Using Feedback for Hazard Prevention • Role of Safety Committees in Workshops</i>
1420 - 430	Recap <i>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</i>
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0900	Risk Analysis Techniques <i>Overview of Qualitative & Quantitative Risk Analysis • Tools & Techniques for Risk Analysis • Risk Matrix for Evaluation • Comparing Analysis Methods</i>
0900 – 0915	<i>Break</i>

0945 – 1030	Assessing Likelihood & Severity <i>Defining Risk Likelihood Categories • Determining Severity Levels for Risks • Factors Affecting Likelihood & Severity • Balancing Likelihood & Impact in Evaluation</i>
1030 – 1130	Using Risk Matrices for Assessment <i>Structure of a Risk Matrix • Assigning Risk Levels Based on Matrix Results • Interpreting & Prioritizing Risks • Adjusting Matrices for Workshop-Specific Needs</i>
1130 – 1230	Probability & Consequence Analysis <i>Understanding Probability in Risk Assessment • Evaluating Consequences of Hazards • Integrating Probability with Consequence • Analyzing Low-Probability, High-Impact Events</i>
1230 – 1245	Break
1245 – 1330	Cost-Benefit Analysis of Risk Controls <i>Assessing the Cost of Risk Controls • Balancing Risk Reduction with Financial Investment • Prioritizing Cost-Effective Safety Measures • Measuring ROI on Safety Investments</i>
1330 – 1420	Documenting & Reporting Risk Levels <i>Standardized Formats for Risk Assessment Reports • Recording Findings & Recommendations • Communicating Risk Levels to Stakeholders • Importance of Transparent Reporting in Safety</i>
1420 – 430	Recap <i>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</i>
1430	Lunch & End of Day Three

Day 4

0730 – 0900	Hierarchy of Controls in Maintenance Workshops <i>Overview of Control Types (Elimination, Substitution, Etc.) • Prioritizing Controls for Effective Risk Reduction • Implementing Multiple Layers of Controls • Evaluating Control Effectiveness Over Time</i>
0900 – 0915	Break
0945 – 1030	Engineering Controls <i>Definition & Examples of Engineering Controls • Use of Barriers & Containment Systems • Implementing Automated & Remote Systems • Regular Maintenance of Engineering Controls</i>
1030 – 1130	Administrative Controls <i>Setting Policies for Safe Work Practices • Developing Standard Operating Procedures (SOPs) • Training Requirements for Employees • Role of Supervision in Enforcing Controls</i>
1130 – 1230	Personal Protective Equipment (PPE) <i>Selection of Appropriate PPE for Specific Tasks • Ensuring Correct Use & Fit of PPE • Limitations of PPE as a Control Measure • Routine Inspection & Maintenance of PPE</i>
1230 – 1330	Emergency Preparedness & Response <i>Developing an Emergency Action Plan • Conducting Regular Emergency Drills • Communicating Procedures to Employees • Reviewing & Updating Emergency Plans</i>

1330 - 1420	Evaluating the Effectiveness of Controls Setting Benchmarks for Control Effectiveness • Monitoring Control Performance • Adjusting Controls as Hazards Evolve • Documenting Control Outcomes & Feedback
1420 - 430	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 Four

Day 5

0730 – 0830	Monitoring & Review of Risk Assessments Importance of Periodic Reviews • Setting Intervals for Reassessment • Analyzing Trends in Risk & Incidents • Adapting Assessments for Changing Conditions
0830 – 0930	Feedback & Reporting Mechanisms Creating Feedback Loops in Safety Processes • Using Incident Reports Continuous Improvement • Employee Input in Refining Risk Assessments • Reporting to Management & Stakeholders
0930 - 0945	Break
0945 – 1030	Implementing a Risk Management System Integrating Risk Assessment with Safety Management • Elements of an Effective Risk Management System • Role of Leadership in System Implementation • Continuous Improvement in Risk Management
1030 – 1230	Training & Awareness Programs Importance of Ongoing Risk Assessment Training • Developing Targeted Training Sessions • Refresher Courses for Maintaining Awareness • Tracking Training Outcomes & Effectiveness
1230 - 1245	Break
1245 - 1300	Using Technology in Risk Assessment Overview of Digital Risk Assessment Tools • Advantages of Real-Time Monitoring & Reporting • Integrating Mobile & Software Solutions • Enhancing Data Accuracy through Technology
1300 - 1345	Case Studies & Best Practices Reviewing Real-World Risk Assessment Cases • Lessons Learned from Successful Implementations • Sharing Best Practices Within the Industry • Continuous Learning & Adaptation
1345 – 1400	Course Conclusion Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course
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

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