

# COURSE OVERVIEW FE0124-3D Material Certification & Inspection Levels

18 PDHs)

AWAR

#### Course Title

Material Certification & Inspection Levels

#### Course Date/Venue

June 16-18, 2025/Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference

# Course Duration

Three days/1.8 CEUs/18 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 Field Quality Control Inspection. It covers the importance of FQC and the key concepts in quality assurance and control; the quality standards and regulations and field inspection methods covering visual inspection techniques, non-destructive testing (NDT) methods, sampling and testing procedures and documentation of field inspection findings; the types of inspections in the field and common quality control tools; the safety in field quality inspections and material quality control: the construction quality control, nondestructive testing (NDT) in the field and inspection of equipment and machinery.

During this interactive course, participants will learn the managing of defects and non-conformities by identifying and reporting defects, corrective actions and rework procedures, handling non-conformance reports, documentation and tracking of defect resolution; the field testing, sampling procedures and documentation of inspection results; the quality control checklists and protocols, communication with project teams and stakeholders and quality audits and inspections; developing action plans based on findings; the root cause analysis for recurring quality issues; and monitoring the effectiveness of corrective actions.



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# Course Objectives

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

- Apply and gain an in-depth knowledge on field quality control inspection
- Discuss the importance of FQC and the key concepts in quality assurance and control
- Explain quality standards and regulations and apply field inspection methods covering visual inspection techniques, non-destructive testing (NDT) methods, sampling and testing procedures and documentation of field inspection findings
- Identify the types of inspections in the field and common quality control tools and apply safety in field quality inspections and material quality control
- Carryout construction quality control, non-destructive testing (NDT) in the field and inspection of equipment and machinery
- Manage defects and non-conformities by identifying and reporting defects, corrective actions and rework procedures, handling non-conformance reports, documentation and tracking of defect resolution
- Apply field testing, sampling procedures and documentation of inspection results
- Employ quality control checklists and protocols, communication with project teams and stakeholders and quality audits and inspections
- Develop action plans based on findings and apply root cause analysis for recurring quality issues
- Employ preventive measures to avoid future issues and monitor the effectiveness of corrective actions

#### Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK**<sup>®</sup>). The **H-STK**<sup>®</sup> 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 field quality control inspection for quality control inspectors/technicians, project managers/engineers, construction supervisors, contractors/subcontractors, compliance officers, safety managers, production supervisors, maintenance engineers, government inspectors and other technical staff.

#### Course Fee

**US\$ 3,750** 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.



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# 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: -

• BAC

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 **1.8 CEUs** (Continuing Education Units) or **18 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.



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# 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. George Poulos, MBA, MSc, BSc, CEng, is a Senior Corrosion & Metallurgical Engineer with over 45 years of extensive experience within the Oil & Gas, Petrochemical, Refinery, Construction, Aircraft & Shipbuilding Industry. His wide experiences cover in the areas of Pressure Vessels, Piping Inspection, Risk-Based Inspection, Fitness-for-Service (FFS), Metallurgical Failure, Metallurgy & Metallurgical Processes.

Metallurgical Lab, Corrosion and Metallurgy, Analysis & Prevention, Corrosion Fabrication & Inspection, Fabrication & Repair, Corrosion Prevention, Corrosion Engineering, Corrosion Control, Corrosion Inhibition, Corrosion Management in Process Operations, **Corrosion** & Prevention of Failures, **Material** Selection, Steel Metallurgy, Cathodic Protection Systems, Steel Structure Weldina. Steelmaking Slag, Steel Making Application, Steel Making Process, Steel Manufacturing, Steel Forging, Steel Manufacturing & Process Troubleshooting, Hot Rolling Process, Hot Strip Mill, Mill Operations, Roll Mill, Electric Arc Furnace (EAF), Slit Rolling, Carbon Steel Pipe Wall Thickness & Grade Selection, Ferro-Allovs. Heat Treatment & Prevention Techniques and Post Weld Heat Treatment. Further, he is also well-versed in Welding Inspection, Welding & Machine Techniques, TIG & Arc Welding, Shielded Metal Arc Welding, Gas Tungsten & Gas Metal Arc Welding, Welding Procedure Specifications & Qualifications, Aluminium Welding, Hot Work-Safety, SMAW, GTAW, Welding Techniques, Pipeline Welding Practices, Welding Engineering, Welding Fatigue & Fracture Mechanics, Welding Inspection Technology, Welding Safety, Welding Defects Analysis, Welding Technology, Welding Problems, Welding & Non Destructive Testing and Metallurgy Techniques.

During his career life, Mr. Poulos has gained his practical and field experience through his various significant positions and dedication as the **Chief Executive**, **Head of Technical Studies**, **Manager**, **Senior Consultant**, **Lead Welding Engineer**, **Senior Welding Engineer**, **Design Engineer**, **Sales Engineer**, **Author**, **Welding Instructor**, **Visiting Lecturer** and **Technical Proposal Research Evaluator** from various international companies such as Greek Welding Institute, Hellenic Quality Forum and International Construction Companies such as Shipbuilding, Aircraft Industry and Oil and Gas Industry.

Mr. Poulos is a **Registered Chartered Engineer** and has a **Master's** degree in **Naval Architecture**, a **Bachelor's** degree in **Welding Engineering** and a Master of Business Administration (**MBA**) from the **Sunderland University**, **Aston University** and **Open University**, **UK**, respectively. Further, he is a **Certified Trainer/Instructor**, an active Member of Chartered Quality Institute (**CQI**), The British Welding Institute (**TWI**), The Royal Institution of Naval Architects (**RINA**) and American Welding Society (**AWS**), a Registered **EWF/IW** (European Welding Federation-International Welding Institute W/E) and an **IRCA** Accredited External Quality Systems Auditor through BVQI. He is an **Author** of Technical Book dealing with Protection/Health/Safety in the Welding/Cutting domain and delivered various trainings, seminars, conferences, workshops and courses globally.



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# Training Methodology

All our Courses are including Hands-on Practical Sessions using equipment, Stateof-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 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:	Monday, 16 <sup>th</sup> of July 2025
0730 – 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
	Overview of Field Quality Control (FQC)
0830 - 0930	Definition & Importance of FQC • Roles & Responsibilities in FQC • Key Concepts in Quality Assurance & Control • FQC in the Context of Construction & Manufacturing
0930 - 0945	Break
0945 – 1030	<b>Quality Standards &amp; Regulations</b> International Standards (ISO, ASTM, etc.) • National & Local Regulations • Industry-Specific Quality Standards • Compliance & Documentation Requirements
	Field Inspection Methods
1030 - 1130	Visual Inspection Techniques • Non-Destructive Testing (NDT) Methods • Sampling & Testing Procedures • Documentation of Field Inspection Findings
	Types of Inspections in the Field
1130 – 1215	Incoming Material Inspection • In-Process Inspection • Final Inspection • Post-Installation & Maintenance Inspections
1215 - 1230	Break
1230 - 1330	<i>Common Quality Control Tools</i> <i>Calibration &amp; Measurement Tools</i> • <i>Inspection Software &amp; Data Management Tools</i> • Use of Checklists & Templates • Reporting Tools & Techniques
1330 – 1420	Safety in Field Quality InspectionsPersonal Protective Equipment (PPE)• Safe Work Practices DuringInspections• Hazard Assessment & Risk Management• EnvironmentalConsiderations
1420 - 1430	<b>Recap</b> 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 One



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Day 2:	Tuesday, 17 <sup>th</sup> of July 2025
0730 - 0830	Material Quality Control
	Inspections for Raw Materials & Components • Documentation & Certification
	of Materials • Compliance Checks for Material Specifications • Testing
	Methods for Material Quality
0830 - 0930	Construction Quality Control
	Inspection of Foundations & Structures • In-Process Monitoring of
0000 0000	Construction Activities • Use of Measurement Tools for Quality Control •
	Ensuring Adherence to Engineering Drawings & Plans
0930 - 0945	Break
	Non-Destructive Testing (NDT) in the Field
0945 - 1100	Types of NDT: Ultrasonic, Radiography, Eddy Current, etc. • Selection of
0010 1100	Appropriate NDT Methods • Performing & Interpreting NDT Results •
	Reporting & Documenting NDT Findings
	Inspection of Equipment & Machinery
1100 - 1215	Inspection of Mechanical, Electrical & Structural Systems • Preventive
1100 1210	Maintenance Inspections • Alignment & Calibration of Equipment •
	Functional Tests & Performance Verification
1215 - 1230	Break
	Managing Defects & Non-Conformities
1230 - 1330	Identifying & Reporting Defects • Corrective Actions & Rework Procedures •
	Handling Non-Conformance Reports (NCRs) • Documentation & Tracking of
	Defect Resolution
	Field Testing & Sampling Procedures
1330 - 1420	Conducting Field Tests for Quality Verification • Sample Collection Methods
	& Protocols • Field Testing Equipment & Calibration • Interpreting Test
	Results & Ensuring Accuracy
1420 - 1430	
	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
1420	Lunch & End of Day True
1430	Lunch & Enu of Day Two

Day 3:	Wednesday, 18 <sup>th</sup> of July 2025
0730 - 0830	Documentation of Inspection Results
	Creating Detailed Inspection Reports • Capturing Photographic Evidence •
	Maintaining Accurate Records of Inspections • Compliance with Legal &
	Contractual Documentation Standards
0830 - 0930	Quality Control Checklists & Protocols
	Development of Standardized Checklists • Using Checklists for Systematic
	Inspections • Adapting Checklists for Different Types of Inspections •
	Ensuring Consistency & Thoroughness
0930 - 0945	Break
	Communication with Project Teams & Stakeholders
0045 1030	Reporting Issues & Findings to Project Managers • Coordinating with
0945 - 1050	Engineers, Contractors & Suppliers • Handling Client & Stakeholder
	Communication • Effective Use of Meetings & Documentation for Resolution
1030 - 1130	Quality Audits & Inspections
	Internal Audits of Quality Control Processes • Conducting External Quality
	Audits • Preparation & Participation in Audits • Continuous Improvement
	through Audit Feedback



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1130 – 1230	Corrective & Preventive Action Plans
	Developing Action Plans Based on Findings • Root Cause Analysis for
	Recurring Quality Issues • Preventive Measures to Avoid Future Issues •
	Monitoring the Effectiveness of Corrective Actions
1230 - 1245	Break
1245 - 1345	Closing the Inspection & Final Reporting
	Closing Out Inspection Activities • Final Inspections & Certification •
	Summarizing Findings in Final Reports • Handover & Follow-Up on
	Unresolved Issues
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:-



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