

# COURSE OVERVIEW EE0463 Cable Glanding & Termination

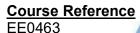
#### **Course Title**

Cable Glanding & Termination

#### **Course Date/Venue**

Session 1: June 23-27, 2025/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Session 2: December 07-11, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE



Course Duration/Credits AWAII

Five days/3.0 CEUs/30 PDHs

# **Course Description**



This practical and highly-interactive course includes practical sessions and exercises where participants carryout HV/MV/LV cable jointing, termination, splicing and testing. Theory learnt in the class will be applied using the latest heat-shrink jointing and termination methods suitable for in-class training.



This course is designed to provide participants with a detailed and an up-to-date overview of HV/MV/LV Cable Splicing, Jointing and Termination. It covers the different types of cables, their components and applications; the medium voltage (MV) and low voltage (LV) ratings; the various types of insulation materials and their properties; the basic procedures of cable splicing, jointing and termination and insulation resistance testing; the principles, techniques and different tools used in cable splicing; and the splicing procedure for low voltage cables and medium voltage cables.



During this interactive course, participants will learn the splice testing and cable jointing; the different tools and equipment used in cable jointing; the jointing procedure for low voltage cables and medium voltage cables and joint testing after cable jointing; the cable termination techniques and the different tools used in cable termination; the termination process for low voltage cables and medium voltage cables; the various tests performed after cable termination; the safety measures in cable splicing, jointing and termination; the safety precautions to be observed during these processes; and diagnosing and correcting common problems in cable splicing, jointing and termination.













#### **Course Objectives**

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

- Apply and gain a comprehensive knowledge on HV/MV/LV cable splicing, jointing and termination
- Identify the different types of cables, their components and applications
- Explain medium voltage (MV) and low voltage (LV) ratings including the various types of insulation materials and their properties
- Carryout basic procedures of cable splicing, jointing and termination and insulation resistance testing
- Discuss the principles and techniques of cable splicing and identify the different tools used in cable splicing
- Employ splicing procedure for low voltage cables and medium voltage cables
- Illustrate splice testing and cable jointing as well as recognize the different tools and equipment used in cable jointing
- Apply jointing procedure for low voltage cables and medium voltage cables and joint testing after cable jointing
- Carryout cable termination techniques and identify the different tools used in cable termination
- Illustrate termination process for low voltage cables and medium voltage cables
- including various tests performed after cable termination
- Implement safety measures in cable splicing, jointing and termination including the safety precautions to be observed during these processes
- Diagnose and correct common problems in cable splicing, jointing and termination

## **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 HV/MV/LV cable splicing, jointing and termination for electrical engineers, instrumentation and control engineers, project engineers, maintenance engineers, power system protection and control engineers, data systems planners and managers as well as electrical, instrumentation and control technical staff.

#### **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:



#### 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 Fee

US\$ 5,500 per Delegate + VAT. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.











#### 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. Ken Steel is a Senior Electrical & Instrumentation Engineer with over 30 years of extensive experience. His expertise widely covers Electrical Motors Testing, Heat Tracing & Insulation Installation & Testing, HV Terminations, High & Low Voltages on Overhead Cranes, HV/MV Cable Splicing, Cable & Over Head Power Line, HV/MV Switchgear, HV Cable Design, Medium & High Voltage Equipment, High Voltage Circuit Breaker Inspection & Repair, High Voltage Power System, HV Equipment Inspection & Maintenance, HV

Switchgear Operation & Maintenance, Resin / Heat Shrink & Cold Shrink Joints, HV/LV Equipment, LV & HV Electrical System, Cable Splicing & Termination, High Voltage Electrical Safety, LV, MV & HV Cable Installations & Properties, LV Substation, MV & LV Cable, UPS Systems, MV & LV Direct on Line Motor Drives, MV & LV VSD Motor Drives, MV & LV Soft Starter Motor Drives, LV Two Speed Motor Drives, Underground Transformer Oil Containment Tank, Electrical & Instrumentation Construction Installation, 1500KW, 1000KW, 1752KW Diesel Power Plant Installation, 110KV Overhead Line, 110KV Outdoor Switchgear, 110KV/10KV 6500KVA Transformer, Transformer Substation, 1600KVA 10KV/0.4KV & 2 Off 1000KVA Diesel Generators, 1600KVA 10KV/0.4KV & 1650KVA Diesel Generator, 110KV/35KV/10KV Substation, 110KV/10KV Transformers,110KV & 2 Off 6KV Overhead Lines, 34.5KV,13.8KV ,4.16KV & 480V Switchgear, 4.16KV & 480V MCC, Transformers & Motor Drives Substations, Diesel Driven Generators, Overhead Cranes, Overhead Cranes & HVAC Units, AC & DC Drives, Data Logger, Electrical, Instrumentation & Mechanical Installation Maintenance, Slab Mills, Pre Heat Ovens, Hydraulic Shears, Stamping Machine, Gearboxes, Rollers, Pumps, Valves, Electro Magnets & Pump House Operation, Boilers Construction And Commissioning, Valve Calibration & Testing, Level Gauges, Pressure & Flow Transmitters Installation & Calibration, Pressure & Leak Testing of Boilers, Leak Testing, SMP, Elect, I&C, F&G, HVAC & Utility Services, Nitrogen Leak Test Operations, Steam Blowing Activities, SMP, Elect, I&C, F&G, HVAC & Utility Services, PTW Issue (PA/AC), Installation & Mechanical Piping and Hydro Testing & Leak Testing of Lines Installation.

During Mr. Steel's career life, he has gained his practical experience through several significant positions and dedication as the 3GP PBF & Boilers SC Commission Support. SC Site Execution Superintendent, E&I Construction Superintendent, High Voltage Construction Supervisor, Control & Power Construction Supervisor, Electrical & Instrumentation Supervisor, Electrical Technician, Construction Support Electrical Engineer, E&I Engineer, Electrical/Instrumentation Site Supervisor, Q.A/Q.C Inspector, Electrical/ Instrumentation Technician, Maintenance Fitter Instrumentation Technician, Millwright, Apprentice Millwright and Senior Instructor/Lecturer for Tengiz Chevron Oil Kazakhstan, Al Jubail Saudi Arabia, Escravos Delta state Nigeria, Lurgi S.A. SuD Chemie Sasol Catalysts, J C Groenewalds Construction (LTA), Tycon (Goodyear S.A.), Dragline Construction and Iscor Vanderbijlpark.

Mr. Steel has a Diploma in Electronics Mechanic. Further, he is a Certified Instructor/Trainer and delivered numerous trainings, courses, workshops, seminars and conferences internationally.









## 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

Day 1	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Cable Basics: Learning About Different Types of Cables, their Components & Applications
0930 - 0945	Break
0945 - 1100	<b>Understanding Voltage Ratings:</b> Detailed Explanation of Medium Voltage (MV) & Low Voltage (LV) Ratings
1100 – 1200	<b>Cable Insulation Materials:</b> Discuss Various Types of Insulation Materials & their Properties
1200 – 1215	Break
1215 - 1330	<b>Basics of Cable Splicing, Jointing &amp; Termination:</b> Explanation of these Procedures & their Importance
1330 - 1420	<b>Insulation Resistance Testing:</b> Introduction to Insulation Resistance Testing & its Significance
1420 - 1430	Recap
1430	Lunch & End of Day One

Day 2

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0730 - 0830	Splicing Basics: Introduction to the Principles & Techniques of Cable Splicing
0830 - 0930	Splicing Tools & Equipment: Overview of the Different Tools used in Cable
	Splicing
0930 - 0945	Break
0945 - 1100	Splicing Procedure for LV Cables: Step-by-Step Walkthrough of the Splicing
	Process for Low Voltage Cables
1100 - 1200	Splicing Procedure for MV Cables: Explanation of How Medium Voltage
	Cable Splicing Differs from Low Voltage
1200 - 1215	Break
1215 - 1330	Splice Testing: Understanding the Tests Performed After Cable Splicing
1330 - 1420	Hands-On Exercise: Participants will Practice Splicing a Low Voltage Cable
	Under Supervision
1420 - 1430	Recap
1430	Lunch & End of Day Two











Day 3

0730 - 0830	Cable Jointing Basics: Introduction to the Principles & Techniques of Cable
	Jointing
0830 - 0930	Jointing Tools & Equipment: Review of the Different Tools Used in Cable
	Jointing
0930 - 0945	Break
0945 - 1100	Jointing Procedure for LV Cables: Detailed Walkthrough of the Jointing
	Process for Low Voltage Cables
1100 – 1200	<b>Jointing Procedure for MV Cables:</b> Explanation of How Medium Voltage
	Cable Jointing Differs from Low Voltage
1200 – 1215	Break
1215 - 1330	Joint Testing: Overview of the Tests Performed After Cable Jointing
1330 - 1420	Hands-On Exercise: Participants will Practice Jointing a Low Voltage Cable
	Under Supervision
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4

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0730 - 0830	Cable Termination Basics: Introduction to the Principles & Techniques of
	Cable Termination
0830 - 0930	<b>Termination Tools &amp; Equipment:</b> Review of the Different Tools Used in Cable
	Termination
0930 - 0945	Break
0945 - 1100	Termination Procedure for LV Cables: Step-by-Step Walkthrough of the
	Termination Process for Low Voltage Cables
1100 – 1200	<b>Termination Procedure for MV Cables:</b> Explanation of How Medium Voltage
	Cable Termination Differs from Low Voltage
1200 - 1215	Break
1215 - 1330	<b>Termination Testing:</b> Overview of the Tests Performed After Cable Termination
1330 – 1420	Hands-On Exercise: Participants will Practice Terminating a Low Voltage
	Cable Under Supervision
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5

0730 - 0830	Safety Measures in Cable Splicing, Jointing & Termination: Recap of the
	Safety Precautions to be Observed During these Processes
0830 - 0930	Troubleshooting Common Issues: Learn to Diagnose & Correct Common
	Problems in Cable Splicing, Jointing & Termination
0930 - 0945	Break
0945 - 1100	Hands-On Exercise: Participants will Perform Splicing, Jointing &
	Termination of an MV Cable Under Supervision
1100 - 1200	Written Test: A Written Test Covering all Course Material
1200 – 1215	Break
1215 – 1300	Course Wrap-up & Feedback: Concluding the Course, Discussion on Further
	Learning Resources & Collecting Participant Feedback
1300 - 1315	Course Conclusion
1315 - 1415	COMPETENCY EXAM
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course





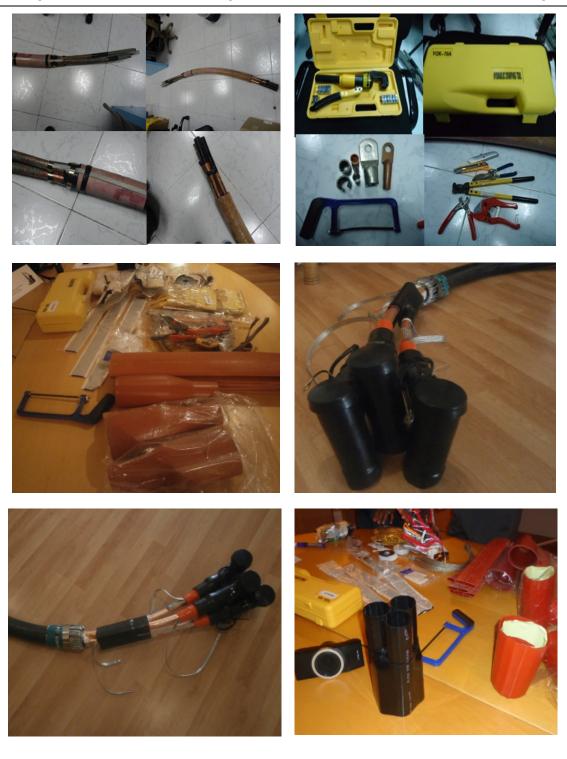






# **Practical Sessions**

Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout splicing and jointing, termination exercises using heat-shrink kits, suitable for classroom training.



# **Course Coordinator**

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