

# **COURSE OVERVIEW FE0200 Pipeline Pigging - Technical & Operational Aspects**

#### **Course Title**

Pipeline Pigging - Technical & Operational Aspects

# **Course Date/Venue**

Session 1: April 06-10, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zaved Road, Dubai, UAE

Session 2: October 05-09, 2025/Business Meeting, Crowne Plaza Al Khobar, Al Khobar, KSA



Five days/3.0 CEUs/30 PDHs

## **Course Reference**

FE0200

## **Course Description**





This practical and highly-interactive course includes various practical sessions exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course provides an in-depth understanding of the technical and operational aspects of pipeline pigging. It also provides a programmatic approach pipeline assessment, maintenance monitoring as it relates to pipeline pigging.

The course is both technical and practical. Its primary goal is to present the information in such a manner those participants from all walks of industry will easily be able to understand and apply the concepts and pigging techniques. It will also help the participants make the right decisions for the development of new pipeline pigging systems, the operation of existing systems and in the selection of cleaning pigs and In Line Inspection (ILI) tools. The course details the required follow up from ILI runs in terms of defect disposition and prioritization as well as repair options considering cost efficiencies and regulatory requirements.

Throughout the course, there are practical class exercises to apply the concepts learned to operational case histories in oil, gas and multiphase pipelines.



















The experienced engineer will find an in-depth exploration of pig selection, pigging sequences, preparation for and running an In Line Inspection and above all ensuring safe pigging operations. The new engineer will find an excellent opportunity to learn in a structured and logical sequence of course material as well as from the knowledge and experience of other course participants.

The course includes calculation techniques for making quantitative decisions in the design and development of pipeline pigging programs and pipeline defect assessments. Please bring a calculator.

# **Course Objectives**

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

- Apply the technical and operational aspects of pipeline pigging process and identify its strategic role in pipeline inspection, integrity assessment and commissioning.
- Implement the process of pigging during construction and operation of pipelines, utilize the techniques of pigging for general maintenance and repair and identify the procedures of pigging during renovation, rehabilitation and decommissioning
- Recognize the functions of specialist pigs and determine the pig role in pipeline isolation
- Identify intelligent pigs and ILI tools, characterize the various types of pigging equipments including its functions and discuss the launch and receive procedures in pipeline pigging
- Design and operate a pipeline cleaning programme, apply several techniques on troubleshooting stuck pigs, determine the aspects of pigging velocity in liquid and gas lines and employ the methods of cleaning and inspecting unpiggable lines

## 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, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a Tablet PC.

# **Who Should Attend**

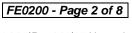
This course provides a wide understanding and deeper appreciation of pipeline pigging in technical and operational aspects for those personnel who are involved in pipeline integrity, corrosion control, project management, ongoing pipeline operations and pipeline inspection, repair or rehabilitation. It is also of benefit to service providers or those seeking to enhance their knowledge of pipeline pigging.















## 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) 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.

# Accommodation

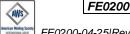
Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.













# **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. Marian Copilet, MSc, BSc, is a Senior Pipelines, Piping & Subsea Umbilicals Engineer with over 25 years experience and extensive knowledge of upstream and downstream sectors, particularly in pipelines, pipework, pressure vessels and storage tanks, from design to construction, installation, commissioning, testing, pigging, hot tapping, isolation, repair by hot and cold work

methods, **integrity assessment and life extension**, as well as topsides and subsea equipment, **umbilicals and associated hardware**.

Mr. Copilet has worked with major international clients including Shell, BP, Chevron, ExxonMobil, Total, British Gas, Statoil, Saudi Aramco, ADMA, PD Oman, Qatar Petroleum, QGPC, RasGas, ENPPI, Petrojet, Sonatrach, Kala, National Iranian Gas, China Petroleum, Marathon Oil, Petronas, Woodside, etc.

Mr. Copilet is currently the **Technical Solution Manager** at the **Oceaneering Umbilical Solutions** offices in Rosyth, Scotland. Prior to joining Oceaneering, Mr. Copilet worked for **STATS**, a specialist engineering company based in Aberdeen, Scotland, which provides a full service capability for **repair and shutdown services**, reducing system or plant downtime and **extending the operational life** for **onshore**, **topsides and subsea locations**, including **piping and pipeline isolation** and **hot tap intervention**. Before joining STATS, Mr. Copilet was one of the **Directors** of **Durham Pipeline Technology** (DPT), a British company developing **innovative technical solutions for pipeline access**, **inspection and cleaning** based on **patented bristle tractor technology**.

Prior to DPT, Mr. Copilet worked in a variety of technical and managerial positions for GD Engineering, the world leader in the supply of pipeline pigging equipment and technology, including Bandlock 2, the world's safest quick opening closures, pig signallers, scraper launchers and receivers, automated pig and sphere launching and receiving systems.

In addition, he also worked as a **University Lecturer**, **Proposals Engineer**, **QA/QC Engineer** and **Welding Engineer**.

Mr. Copilet has **Master** and **Bachelor** degrees with **Honors** in **Mechanical Engineering**.

# Course Fee

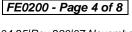
**US\$ 5,500** per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.















# 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 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 I	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0900	Participant Survey
	Course Overview & Objectives
0900 - 0930	Introduction to Pipeline Pigging
0930 - 0945	Break
0945 - 1030	Conventional Pigs: Introduction
1030 - 1115	Conventional Pigs: Type of Pigs
1115 – 1130	Break
1130 - 1245	Conventional Pigs: Type of Pigs (cont'd)
1245 - 1420	Case Study
1420 - 1430	Recap
1430	Lunch & End of Day One

#### Day 2

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0730 - 0800	Recap & Discussion
	Overview of Day 2 & Course Objectives
0800 - 0900	Conventional Pigs - Practical Applications
0900 - 0915	Break
0915 - 1045	Pigging During Construction
1045 - 1145	Pigging During Operation
1145 - 1230	Pigging for General Maintenance & Repair
1230 - 1245	Break
1245 - 1330	Pigging During Renovation, Rehabilitation & Decommissioning
1330 - 1420	Case Study
1420 – 1430	Recap
1430	Lunch & End of Day Two

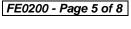






















# Day 3

0730 – 0800	Recap & Discussion
	Overview of Day 3 & Course Objectives
0800 - 0900	Specialist Pigs
0900 - 0915	Break
0915 - 1045	Pigs for Pipeline Isolation
1045 - 1230	Intelligent Pigs - ILI Tools
1230 - 1245	Break
1245 - 1420	Intelligent Pigs - ILI Tools (cont'd)
1420 - 1430	Recap
1430	Lunch & End of Day Three

# Day 4

Day 7	
0730 – 0800	Recap & Discussion
	Overview of Day 4 & Course Objectives
0800 - 0900	Pigging Equipment
0900 - 0915	Break
0915 - 1045	Pigging Equipment (cont'd)
1045 - 1230	Launch & Receive Procedures
1230 - 1245	Break
1245 - 1420	Case Study
1420 - 1430	Recap
1430	Lunch & End of Day Four

# Day 5

0730 - 0800	Recap & Discussion
	Overview of Day 5 & Course Objectives
0800 - 0900	Designing & Running a Cleaning Programme
0900 - 0915	Break
0915 - 1000	Troubleshooting Stuck Pigs
1000 - 1100	Pigging Velocity in Liquid Lines
1100 - 1200	Pigging Velocity in Gas Lines
1200 - 1215	Break
1215 - 1345	Cleaning & Inspecting Unpiggable Lines
1345 - 1400	Course Conclusion
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course





















# **Simulator (Hands-on 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 various exercises using the simulators "IntegriWISE<sup>TM</sup>", "Corrosion Data Management Software (CDMS)" and "Electronic Corrosion Engineer (ECE®) 5".

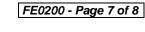




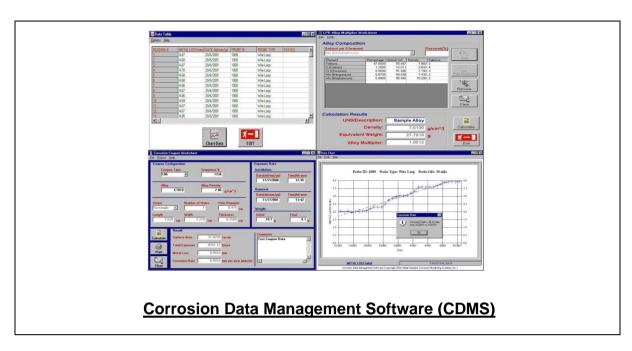


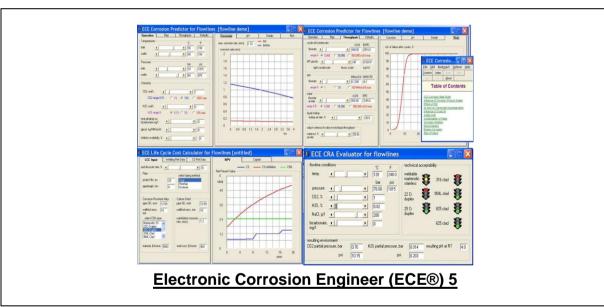












# **Course Coordinator**

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