

Materials & Corrosion

An Awareness Course



Image courtesy of ChampionX

Wednesday 31 July - Thursday 1 August 2024

TBC, Perth CBD

ARE YOU NEW TO SUBSEA OR UNFAMILIAR WITH CORROSION CONSIDERATIONS?

This two-day course has been specifically designed for people new to subsea or unfamiliar with the various corrosion considerations which need to be applied during design, construction and operation of subsea assets. The course will cover the following topics:

- ▶ Overview of corrosion issues
- ▶ Corrosion & Erosion Modelling
- ▶ Chemical Selection, Injection & Inhibition
- ▶ Specification, Fabrication & Welding
- ▶ Cathodic Protection & Coatings
- ▶ Operational Integrity & FFS
- ▶ Planning and Implementation of Inspection & Monitoring

WHY WILL THIS COURSE BENEFIT YOU?

The aim of this course is to provide an overview of the various materials and corrosion issues which are applicable to subsea structures. The choices made which impact one area of corrosion and integrity will often impact the choices in other areas, and also affect the long term inspection and monitoring which may be required to ensure the design life is met.

Having a general overview of the interaction between the various factors and the impact that certain choices make and the equipment used in inspecting and monitoring the structures will provide attendees with a broad knowledge on the interaction which needs to be considered in any installation.

PRESENTERS

The course will be presented by experienced personnel from both the supply and subsea industries. Most of the course will be held in a classroom environment, with the session being interactive, with every opportunity to ask questions and discuss the material presented.



Image courtesy of ChampionX

Thank you to the presenting companies:

COURSE SCHEDULE

WEDNESDAY 31ST JULY

- 08.30 **Registration**
- 09.00 **Introduction & Overview**
 Grahame Strong, CCE
 Overview & setting the scene.
 Operating conditions for equipment.
 Basic mechanisms of corrosion.
 Effects of elevated temperature, CO₂, H₂S, sand, seabed topography & choice of material.
- 09.45 **Corrosion & Erosion Modelling**
 Chris Selman, Wood
 Models available to model effects of CO₂, H₂S & sand production on internals of pipelines.
 Advantages, disadvantages & limitations of models.
- 11.15 **Morning Tea**
- 11.30 **Chemical Selection, Injection & Inhibition**
 Steve Davoren, ChampionX
 Types of inhibitors for oil & gas subsea production systems.
 Selection & qualification of inhibitors.
 Top of line corrosion management
 Downstream process impacts.
- 13.00 **Lunch Break**
- 13.45 **Specification, Fabrication & Welding**
 Matt Lancien, SPEC
 Materials used in subsea & welding related issues
 Types of welds / Heat treatment / Metallurgy of welds
 Differences between fabrication for subsea & topsides
 Limitations imposed on welding offshore pipelines
 Testing welds
- 15.15 **Afternoon Break**
- 15.30 **Cathodic Protection & Coatings**
 John Grapiglia, CCE
 Codes & standards in design of CP systems
 Factors affecting performance of CP systems
 Issues related to CP & the interaction with coating systems
- 17.00 **End Day 1**
- 17:30 Course Networking event, TBC

THURSDAY 1ST AUGUST

- 08.30 **Operational Integrity & FFS**
 Colin Radici, Rosen
 Pipeline pigging
 Codes & standards for defect assessment/repair
 Types of pigs, their benefits
 Data collection & how it's processed
 Limitations affecting intelligent pigging & pipeline design
- 10.00 **Morning Tea**
- 10.15 **Planning & Implementation of Inspection & Monitoring**
 Brian Matthews & Andrew McGregor, Sonomatic
 Issues affecting subsea structures
 Types of inspection
 ROV types, inspections & tooling
 ROV capabilities & regulatory requirements for inspection
 What data is required to perform thorough inspections?
 Other forms of inspection (divers etc)
- 11.45 **Lunch**
- 12.30 **Depart for Site Visit**
 Baker Hughes
 Delegates will be taken on a guided tour of the Baker Hughes subsea service facility. They will have the opportunity to view various items of subsea production equipment and gain insight into material selection and corrosion control applied to equipment operating in a subsea environment.
- 14.30 **Arrive Back in Perth CBD (time is approximate)**
 ** SUT reserve the right to amend the course programme as required.

REGISTRATION FORM

Please submit your registration to:

Jade Melville
 Tel: + 61 (0) 8 9481 0999
 Email: perthevents@sut.org

SUT Membership Number _____

Full name _____

Job title _____

Organisation/company _____

Address _____

City _____

County _____ Postcode _____

Telephone _____

Email _____

Signature _____

Course fees: (please tick)

Early Bird* Member	\$1200 AUD	<input type="checkbox"/>
Early Bird* Non-member	\$1430 AUD	<input type="checkbox"/>
Member	\$1495 AUD	<input type="checkbox"/>
Non-Member	\$1780 AUD	<input type="checkbox"/>
Student Member	\$ 480 AUD	<input type="checkbox"/>

*Early Bird rates apply to all bookings paid by 24 July 2024.
 All bookings received from 25 July 2024 will be charged at the standard rate. Rates include GST at standard rate.

Terms & Conditions 2024: Refunds will be made on written cancellation received up to 10 working days prior to the event, but will be subject to a 15% administration charge. Cancellations received 9–4 working days prior to the event will be charged a 50% cancellation fee. Cancellations received 3–0 working days prior to the event will not be refunded. Delegates may send a substitute in their place at no charge. Should there be any COVID related shutdowns that impact this course it will be run online instead of in person. Please note, direct competitors of site inspection hosts will be unable to participate in this component of the course.

PAYMENT INFORMATION:

Please invoice (PO NO.)
 or
 Credit Card

Credit card Mastercard, Visa or AMEX* ONLY.
 *Payment by AMEX will carry a 2.75% surcharge, Visa & mastercard 1.5% surcharge

Amex Mastercard Visa

Card number

Card holder's name _____

Signature _____ Expiry date _____

Start date _____ Issue number _____

Security Code (last 3 digits on the back of your card)

Email address to send receipt _____

Please tick here if you do not want to receive our weekly newsletter.

Onsite parking available at the venue for \$15/day



Images courtesy of ChampionX