

Materials & Corrosion

An Awareness Course



Image courtesy of ChampionX

Wednesday 6 August - Thursday 7 August 2025

Wood, Level 1, 240 St Georges Terrace, Perth WA, 6000

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 for one area of corrosion and integrity will often have knock-on impact in other areas, and also affect the long term inspection and monitoring which may be required to ensure the design life is met.

The combination of underlying corrosion mechanisms, design considerations and inspection and monitoring requirements over the life of the equipment provided by the course will provide attendees with a broad knowledge of materials and corrosion factors that need to be considered for subsea equipment design and operation.

PRESENTERS

The course will be presented by personnel from the materials & corrosion and subsea and pipeline 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 6TH AUGUST

- 08.30 **Registration**
- 09.00 **Introduction & Overview**
John Grapiglia, 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**
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 at the Terrace Hotel

THURSDAY 7TH AUGUST

- 08.30 **Operational Integrity & FFS**
Cameron Sheppard, 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 Visits**
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.

Champion X
Delegates will be taken on a guided tour of the Champion X subsea service facility.
- 16.30 **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:

Sylvia Ibrahim

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 6 July 2024.

All bookings received from 7 July 2024 will be charged at the standard rate. Rates include GST at standard rate.

Terms & Conditions 2025: 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

