

WebCorr Corrosion Consulting Services Presents

Offshore Corrosion Inspection and Assessment

Date: As published on website Venue: As published on website



Course Overview

This 5-day course covers various forms of corrosion commonly encountered in offshore installations, the materials and methods for corrosion control and prevention. Risk-based inspection and assessment guide are also presented in this course.

This course is available for in-house training, online and distance learning worldwide. It can also be customized to meet the specific needs of your organization.

Who Should Attend

- Engineers and technologists who are in charge of offshore corrosion assessment;
- Technicians and maintenance personnel who deal with offshore corrosion inspection, assessment, maintenance and repair;
- Facility owners and users who are concerned with corrosion of offshore installations

Course Outline

- 1.1 Corrosion in offshore installations
 - 1.1.1 Overview of corrosion issues in offshore installations
 - 1.1.2 Threats to offshore asset integrity
 - 1.1.3 The corrosive nature of offshore environment
 - 1.1.4 Materials for offshore installations: topsides, pipelines, subsea
 - 1.1.5 Material and fabrication specifications
 - 1.1.6 Design and fabrication requirements
 - 1.1.7 Corrosion in the offshore environment
 - 1.1.8 Splash zone corrosion
 - 1.1.9 Rules and Regulatory

- 2.1 Corrosion issues in offshore installations
- 2.2 Process related corrosion
- 2.3 Factors influencing corrosion
 - 2.3.1 CO₂ and H₂S
 - 2.3.2 produced water
 - 2.3.3 temperature, pressure, and flow
- 2.4 Corrosion in utilities
 - 2.4.1 Seawater
 - 2.4.2 Cooling Chemicals Glycol
 - 2.4.3 Dehydration Injection water Fuel gas
- 2.5 External corrosion of offshore installations
 - 2.5.1 Vessels
 - 2.5.2 Heat Exchangers
 - 2.5.3 Pumps
 - 2.5.4 Pipework and Supports
 - 2.5.5 Compressors
 - 2.5.6 Packaged Units
- 2.6 Corrosion, integrity, and KPI's
- 3.1 Materials selection for offshore applications
 - 3.1.1 Carbon steel
 - 3.1.2 Austenitic Stainless Steel
 - 3.1.3 Copper – Nickel/Aluminium Bronze
 - 3.1.4 Duplex and Super Duplex Stainless Steel
 - 3.1.5 Super Austenitic Stainless Steel
 - 3.1.6 Titanium
 - 3.1.7 Nickel alloys: Alloy 400/K500, Alloy 625/825, C-276
 - 3.1.8 Glass reinforced epoxy (GRE)
- 3.2 CP design for offshore structures
- 3.3 Design exercise/practical
- 4.1 Coating standards specifically available for the oil and gas industry
- 4.2 Coating selection requirements
- 4.3 Protective coating systems for offshore applications

Course Outline

- 4.3.1 splash-zone systems
- 4.3.2 Coating specifications for offshore Installations
- 4.4 Corrosion failure modes and consequences
- 4.5 Corrosion and failure control philosophy
- 4.6 Corrosion prevention maintenance programs
 - 4.6.1 The Importance of preventive maintenance
 - 4.6.2 Preventive maintenance vs. reactive maintenance
- 4.7 Risk-based inspection
- 4.8 Corrosion/condition monitoring techniques
- 4.9 Corrosion risk management practice

- 5.1 Facility Breakdown
- 5.2 Condition Grading Systems
- 5.3 Data Collection & Management Systems
- 5.4 Assessment Standards
- 5.5 Safety
- 5.6 In-Service Evaluation Equipment
- 5.7 Inspection Planning
- 5.8 Data utilization and maintenance planning
- 5.9 Offshore corrosion assessment guide
- 5.10 Offshore corrosion failure case histories
- 5.11 End of course examination

Course Registration

Please register online at www.corrosionclinic.com
Or use the form below (photocopies of this form may be used for multiple bookings).

Dr/Mr/Ms _____
Organization _____
Contact Person _____
Contact Dept _____
Telephone _____ Fax _____
Email _____

Payment should be made by TT or online banking. Currencies in Australian Dollar, Canadian Dollar, US Dollar, Euro and Sterling Pound can be transferred directly without conversion. Our bank details can be found at the link below:

<https://www.corrosionclinic.com/payment.html>

Course Fee and Discount

Standard: \$3,500 **Discount:** \$3,150

The fee includes a hardcopy of course note, certificate, light lunch, coffee breaks each day during the course.

Discount applies to a group of 3 or more persons from the same organization registering at the same time, or early-birds making payment at least 8 weeks before the course commencing date.

Cancellation and Refunds

Cancellation or replacement should be conveyed to WebCorr in writing (email or fax). An administration charge of 50% of the course fee will be levied if the cancellation notice is received from 14 to 7 days before the course commencing date. No refund will be made for cancellation notice received 6 days and less. No refunds will be given for no-shows. Should WebCorr find it necessary to cancel a course, paid registrants will receive full refund. Refund of fees is the full extent of WebCorr's liability in these circumstances.



WebCorr has NACE certified Corrosion Specialist (#5047) providing customized in-house training, online and distance learning corrosion courses, corrosion seminars and workshops on corrosion, materials, metallurgy, paints and metallic coatings. Our corrosion courses are developed and taught by NACE certified Corrosion Specialist with over 30 years of practical experience in the field. Our training success is measured by your learning outcome.