



Corrosion Mechanisms in Stainless Steels

Wednesday 27th November 10am – 4pm

Village Hotel Aberdeen, Prime Four, Kingswells Aberdeen, AB15 8PJ

Corrosion causes plant shutdowns, waste of valuable resources, loss or contamination of product, reduction in efficiency, costly maintenance, expensive over design and jeopardises safety. This course addresses the various corrosion mechanisms which can occur

various corrosion mechanisms which can occur when using stainless steel materials in various industries.

Real-life case studies and solutions from our vast experience in Failure Analysis will be presented.

Course cost: £425 + VAT for BSSA & ICORR members, £475 + VAT for non-members



The course structure will include the following:

- 1. Introduction
- 2. Overview of corrosion
- 3. Sensitisation
- 4. Tea Staining
- 5. Rouging
- 6. General/uniform corrosion
- 7. Pitting corrosion
- 8. Selective attack
- 9. Chloride stress corrosion cracking
- 10. High temperature corrosion
- 11. Polythionic Acid stress corrosion cracking
- 12. Microbial corrosion
- 13. Crevice corrosion
- 14. Corrosion under insulation
- 15. Hydrogen Induced Stress Cracking
- 16. Galvanic corrosion
- 17. Caustic stress corrosion cracking
- 18. Erosion Corrosion
- 19. Corrosion Fatigue

Each mechanism will include the following:

- A description of the failure mechanism and critical factors.
- · How to identify the mechanism.
- Locations affected within the industry.
- Affected material types.
- Recommendations on how to prevent the damage mechanism. including inspection and monitoring.
- 1 or 2 case studies related to the mechanism.



Handouts will be provided on completion of the course.