Materials Selection and Materials Analysis

WebCorr has NACE certified Corrosion Specialist providing efficient and proficient corrosion advisory services, corrosion consulting, in-house training, online and distance learning corrosion courses, corrosion diagnosis, failure analysis and expert witness in litigation and arbitration cases related to corrosion, materials, metallurgy, paints and metallic coatings including electroplating, electroless plating, galvanizing, anodizing, chromating, phosphating, thermal spray metallizing, mechanical plating, and sheradizing or diffusion coating.

- Selection of materials, coatings and paints to meet your project requirements
- Materials analysis, identification and characterization
- Verification of chemical composition, microstructure and mechanical property
- Verification of conformity to specifications, designated grades, and relevant industry standards
- Reviews of design and specifications on materials, processes and coatings to identify potential corrosion failures and any clauses in the specification that may lead to potential dispute, arbitration or litigation between the contractors and and facility owners. Corrosion liability can be avoided through proper specifications.
- Materials and coatings inspection, performance evaluation, and assessment of remaining life.

Typical Services Provided to Clients:

- Selection of coatings for offshore structures
- Materials analysis and identification of gray cast iron, ductile iron and wrought iron
- Microstructure analysis of an Inconel 600 alloy
- Determining the degree of sensitization in 304 stainless steel

Corrosion Training Courses Related to Materials Selection & Materials Analysis:

The following corrosion short courses are relevant to materials selection & materials analysis. They can be conducted at any time for you as in-house training, online or distance-learning courses.

- Corrosion, Metallurgy, Failure Analysis and Prevention
- Materials Selection and Corrosion
- A Basic Course in Corrosion Control and Prevention
- Stainless Steels and Alloys: Why They Resist Corrosion and How They Fail
- Protective Coatings: Inspection, Maintenance and Repair

Public short courses, seminars and workshops are also conducted regularly. The contents and schedules of public short courses for the current year is available here.