

Available Tests for Corrosion

1. General Corrosion Tests (Room temperature up to 200oC)
2. Electrochemical Tests for Corrosion and Surface Chemistry:
 1. Potentiodynamic Polarization
 2. Electrochemical Impedance Spectroscopy (EIS)
 3. Cyclic Voltammetry
 4. Electrochemical Noise Measurements
 5. Autoclaves and pressure balanced reference electrodes for electrochemical tests up to 200°C
3. Erosion Corrosion – Rotating Cylinder Tests
4. Stress Corrosion Cracking and Corrosion Fatigue Testing
 1. Slow Strain Rate Test rigs for room temperature and high temperature stress corrosion cracking tests at temperatures up to 350°C.
 2. Corrosion Fatigue test facility (MTS Model 810 machine with Teststar II® control system with environmental chamber) for crack growth and endurance limit study
5. High Temperature Gaseous Corrosion (Oxidation/Sulfidation Tests of Metallic Alloys)
 1. Single and mixed gases over a range of temperatures, cyclic gases, and cyclic temperature capabilities (up to 1100°C)