# **Corrosion Failure Analysis**

Corrosion, in its myriad forms, costs industry and manufacturing in the neighborhood of \$3.5 billion annually. The experts at IMR Test Labs can provide testing and consultation to provide failure and root cause analysis to identify and mitigate costly field and plant failures or on materials selection designed to preempt corrosion effects on metal, plastic and composite components.

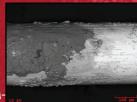


We can identify corrodents and other environmental variables that are directly responsible for corrosion attack. We

have a history of addressing complicated corrosion issues including stress corrosion cracking, microbial induced corrosion, environmental stress cracking, and many other mechanisms.

Our engineering expertise covers a diverse

spectrum of industries.
Whether it's an exotic
prosthetic material
or petroleum storage
tank, our broad array of
analytical capabilities (SEM-



EDS, Ion Chromatography, GC/MS, FTIR and more) ar

GC/MS, FTIR and more) and a talented team of experienced failure analysts who know what's at stake, we are committed to preventing or solving your corrosion problem and providing you with the answers you need....on time!

That is our commitment.





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Nadcap Accreditation: Ithaca (MTL, NMTL), Louisville (MTL), Portland (MTL), Singapore (MTL), Suzhou (MTL) A2LA Accreditation: Ithaca (1140.01 / 1140.02), Louisville (1140.03/1140.04), Portland (1140.07), Singapore (1140.10), Suzhou (1140.09)



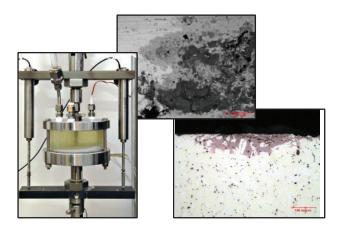
# Salt Spray Testing and Corrosion Analysis



www.imrtest.com

# **Corrosion Testing**

- General and Pitting Corrosion Testing
- **Corrosion Cracking** Testing of Metals (SCC) and Plastics (ESC)
- Heat & Fluid Aging
- Dezincification Testing of Brasses
- Residual and Assembly Stress Testing of Copper Alloys
- Sensitization Testing of Austenitic and Ferritic **Stainless Steels**
- Passivation Testing of **Medical Components**
- Determining Corrosion Rates of Metals and Corrosiveness of Fluids Using **Electrochemical and Immersion Test Techniques**
- **Evaluation of Duplex Stainless Steels**
- Formicary (Ant's Nest) Corrosion of Copper **Tubing**
- Mercurous Nitrate Testing
- Some of the ASTM corrosion tests offered are: A262, A763, A923, B154, B858, G28, G34, G48, G66, G67 & G110





## **Accelerated Weathering & Salt Spray**

We offer a variety of corrosion methods to standards from B117 salt spray, GMW14872 cyclic corrosion to all five annexes of ASTM G85 and more.

- **Salt Spray Testing**
- Temperature & Humidity Chambers
- Water Fog
- Cyclic Corrosion
- CASS Testing
- **QUV/UV** Exposure
- SO<sub>2</sub> Exposure
- SO<sub>2</sub>/CO<sub>2</sub> Exposure
- Solvent Exposure
- Taber Abrasion/Wear Resistance
- Chip Resistance
- Tape Adhesion
- **Peel Testing**
- **Electrical Resistivity**



