

## Chemical Analysis

Alloy Chemistry  
Trace Element Analysis  
Cleanliness Testing  
Material Identification  
Plating Analysis  
On-Site Positive Material  
Identification (PMI)  
Polymer & Composite Analysis  
Contaminant Analysis  
OES, ICP-AES  
C, S, O, N, H



Four Cell Electrochemical  
Corrosion Analysis

## Corrosion Testing

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, environmental stress cracking, and many other mechanisms.

Corrosion Failure Analysis  
Electrochemical Corrosion  
Simulation  
Slow Strain Rate  
Corrodent Identification

## Not just data, *knowledge*

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### Coming - Summer 2012

### IMR Test Labs - Suzhou

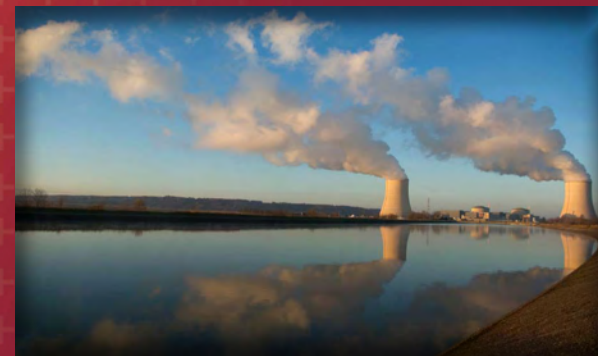
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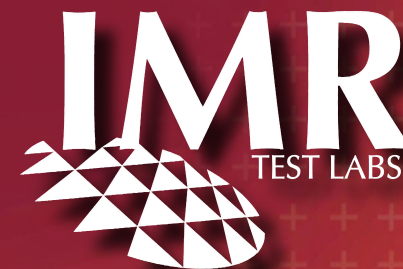
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## Commercial Grade Dedication

### Analytical Services for the Nuclear Power Industry



Not just data, *knowledge*



## Mechanical Testing

Fracture Mechanics Testing  
Tensile/High Temperature Tensile  
Hardness (Brinell, Rockwell)  
Fatigue (LCF, HCF, RBF)  
Creep and Stress Rupture  
Impact Testing  
Dimensional  
Torsion  
Bend Testing (including wraparound)  
Resistance Weld Peel Testing  
Full Machining Capabilities



## Metallography

AWS Certified Weld Inspection  
Macroetch  
Microhardness (Weld, HAZ, Base Metal)  
Failure Analysis  
Defect Detection  
Cross Sectional Analysis  
Braze Procedure/Process Analysis

The nuclear industry is experiencing a renaissance, driven by the rising cost of competing fuels, as well as ever-tightening government controls over carbon emissions. This brings new challenges for plants old and new, including the availability of parts due to the shortfall of approved nuclear vendors.

A critical characteristics analysis is the first step in the process, using guidelines established by EPRI's Joint Utilities Task Group on Commercial Grade Items. Critical characteristics constitute those which need to be identified and verified during product acceptance as part of the procurement process.

The second step is letting us assist you in qualifying your commercial parts and materials to meet these critical characteristics for the nuclear power industry.

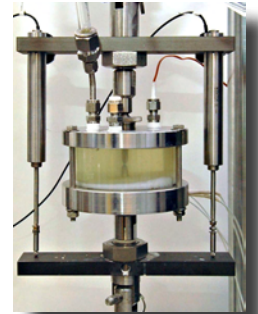
At IMR Test Labs, we have the equipment, certifications, analytical techniques and a knowledgeable staff to help you. This also includes a quality assurance program in compliance with 10CFR50 Appendix B, 10CFR Part 21, ASME III Subsection NCA 3800, ASME NQA-1 and ISO 17025.

We regularly serve dozens of NQA-1 customers and have performed commercial grade dedication work on many different materials.

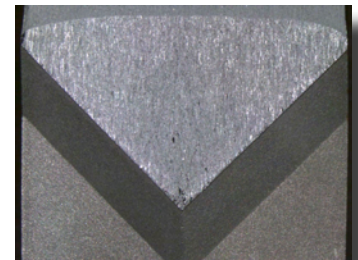
We are compliant with the relevant sections of the following:

- ISO 17025
- ASME NQA-1
- 10CFR50 Appendix B
- ASME III Subsection NCA 3800
- 10CFR Part 21

*Hot Caustic Stress Corrosion Cracking Test*



*Fracture Mechanics Specimens After Fatigue and K1c Testing*



At IMR Test Labs we are accessible and responsive. We understand that you need the right answer, on time. We are technical professionals, with all of the requisite qualifications and accreditations. Our analytical reports are comprehensive and written in understandable terms. We strive to create long term working relationships and would like to earn your business.