

With increased operating costs, dynamic economic environments and aging plants and equipment, the implementation or optimisation of an asset integrity programme to extend service life of infrastructure may seem challenging, however serves invaluable. Asset integrity management is regarded, in many best-practice organisations, as critical.

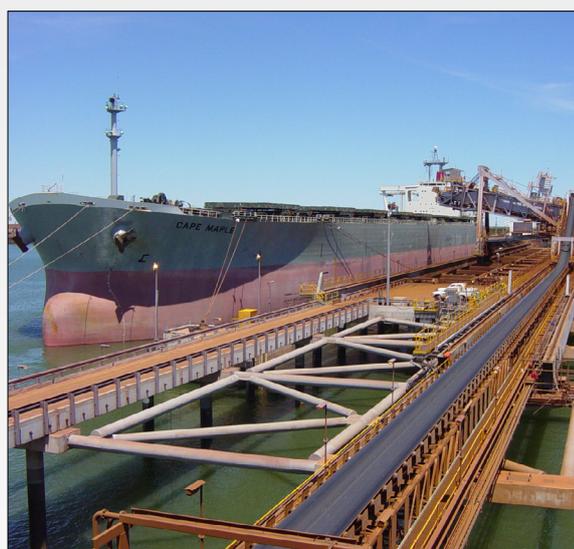
As outlined in Extrin's article: "Setting up a Corrosion Management System" in Corrosion and Materials - June 2013, by optimising a current asset integrity programme, the client achieves:



-  **Reportable method for providing risk reduction**
-  **Optimisation of asset life from an economic, functional and safety viewpoint**
-  **Issue identification and deterioration mechanisms**
-  **Prioritisation and management options**
-  **Latest industry best practices**
-  **Demonstration of due diligence and duty of care**

At Extrin, we commonly use a Corrosion Management Audit (CMA) which provides a qualitative corrosion assessment of assets and critical infrastructure including: structural steel, concrete, electrical equipment, walkways etc. Assessment is conducted by qualified Engineers as per recommended practice in API 580 Risk Based Inspection and will examine the following criteria:

-  **Size of the problem-** in a defined and quantifiable form
-  **Corrosion mechanism and the cause(s)**
-  **Personalised criticality table**, allocating a specific rating to each individual site issue dependant on: safety, environmental, structural and financial impacts.
-  **Assessment of plant assets which are critical for ongoing safety and production**
-  **Recommendations on mitigating the probability of failure** (inc. changes in metallurgy, addition of inhibition, coatings/linings, cathodic protection).
-  **Budget Estimate for the repairs-** summarised in tabular form to assist in future budget allocation
-  **Extrin Corrosion Awareness handbook**



The CMA provides the client with a **five (5) year** prioritised maintenance activity schedule to assist with budgeting, and can be coordinated in time with site shut down works.



Analytical Services

- Water Analysis
- Corrosion Product Testing
- Metallurgical Testing
- Product Trials
- Concrete Testing

QA/QC

- Coating Inspections
- Project Management
- Repair Integrity Analysis
- Shutdown Planning and Maintenance Management



Microbial Investigation

- Site Inspections
- Analytical Testing Mechanism Determination
- Remediation

Cathodic Protection

- Complete System Design
- System inspections and testing
- Material Procurement
- Coordination of installation



Concrete Services

- Durability Assessments
- Mix Design Review
- Protective Coatings
- Refurbishment works
- Project Management

Corrosion Training Services

- Corrosion Awareness
- Corrosion Prevention
- Corrosion Detection
- Other Client-Specific Training Courses



Failure Analysis

- Failure Catalyst Analysis
- Review and Recommendations
- Asset inspection and testing

Design and Durability

- Durability Report
- Materials selection
- Concrete mix design
- Corrosion rate prediction
- Maintenance specifications



Visit our website for more information on our services and projects undertaken



“Consultants in Corrosion Management”

4/44 Vinnicombe Drive
Canning Vale
WA, 6155

T: +61 8 9456 0344
E: extrin@extrin.com.au
W: www.extrin.com.au