



Pipeline & Asset Integrity - Cathodic Protection - Protective Coatings - Corrosion Failure Investigation

Corrosion Control Engineering (CCE) is Australasia's leading corrosion engineering company specialising in all aspects of Corrosion Prevention & Investigation. The CCE Group commenced operation in 2001 and has grown to 8 offices and 90 staff located throughout Australia and New Zealand.

Our engineers and technicians are experts in the area of corrosion mitigation and asset preservation for buried, immersed and steel reinforced concrete structures. Each of CCE's regional offices has a Principal Engineer with between 30-40 years' experience in cathodic protection and we are proud of the fact we have more NACE Certified Cathodic Protection Technicians, Technologists & Specialists than any other company in Australasia.

In addition to our core business of **Cathodic Protection**, CCE has a team of senior engineering specialists with a vast amount of knowledge and experience in the following fields:

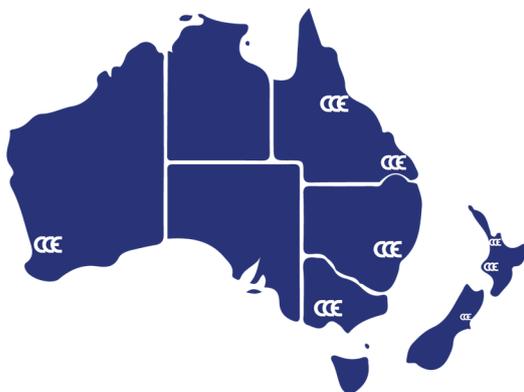
- **Pipeline & Asset Integrity Management**
- **Protective Coatings Consultancy**
- **Materials & Corrosion**

CCE's Services Include:

- Asset & Pipeline Integrity Engineering
- Pipeline Integrity Management
- Inline Inspection
- Electrical Hazard Assessments for Pipelines
- Corrosion Management Plans
- Remaining Life Reviews
- Condition Assessment
- Risk Based Inspection
- Independent Corrosion Inhibitor Consultancy
- Independent Protective Coatings Consultancy
- Specifying Corrosion & Chemical Monitoring Equipment
- Corrosion failure investigations & assessing fitness for service of equipment damaged by corrosion
- Subject Matter Experts in all areas of corrosion
- Cathodic Protection (CP) design, materials supply, installation and commissioning for pipelines and a variety of civil, marine and steel reinforced concrete structures including bridges, piles, wharves, jetties and offshore structures.
- CP consulting, auditing, troubleshooting and routine maintenance.
- Independent review of third party CP designs, specifications and reports.
- CP system remote monitoring.



**LEARN MORE ABOUT THESE
SERVICES AND MEET OUR
EXPERTS OVER THE PAGE...**



Sydney · Melbourne · Brisbane · Perth · Townsville · New Plymouth · Christchurch · Auckland

Email us at contact@cceng.com.au or visit our Australian or New Zealand websites for further contact information.

www.cceng.com.au / www.cceng.co.nz

Our mission...

Is to provide our customers with quality engineering solutions to ensure the safety, reliability and longevity of their assets.

As Australasia's leading corrosion prevention specialist, we are committed to the ongoing training and development of our staff to ensure the highest level of service is delivered.

Pipeline & Asset Integrity · Cathodic Protection · Protective Coatings · Corrosion Consultancy · Failure Investigation



While **Corrosion Control Engineering** is best known for its expertise and experience in Cathodic Protection, the CCE Group also employs a number of senior engineers specialising in a range of complementary corrosion and asset integrity related services.

Our corrosion professionals have many years' experience in their chosen fields. This knowledge and expertise is available to CCE's customers all over Australia and New Zealand.

Alan Bryson - Principal Corrosion & Integrity Specialist. Alan is a corrosion, cathodic protection, coatings and pipeline integrity specialist with over 40 years' experience in the oil and gas industry. Alan is an industry advisor to the APGA Research & Standards Committee and has excellent knowledge and expertise in the following areas:

- Cathodic protection, particularly for buried pipelines.
- Pipeline coatings for both below and above ground service.
- Pipeline integrity management including pipeline anomaly assessment, specification & review of inline inspection programs.
- Pipeline regulatory requirements including Pipeline Integrity Management Plans & Remaining Life Reviews.
- DC stray current mitigation & electrolysis.
- Electrical hazard assessments for pipelines.
- Cathodic protection regulations and industry standards.
- CP remote monitoring & data logging.



Alan Bryson

Dr. Grahame Strong - Principal Corrosion Engineer & Engineering Manager. Grahame is a qualified chemist with 27 years' experience specialising in corrosion engineering covering the following:

- Asset Integrity Management:
 - * Preparing Corrosion Management and Integrity Management Plans for offshore and onshore equipment, during design, pre commissioning, operations and abandonment.
 - * Specifying and reviewing corrosion and chemical monitoring equipment.
 - * Reviewing corrosion and chemical monitoring data and reporting requirements to meet the needs of engineering codes and Regulators.
 - * Assessing the fitness for service of equipment damaged by corrosion.
- Independent corrosion inhibitor consultant proposing chemical inhibitors and nominating and reviewing chemical qualification programs.
- Subject matter expert for managing microbial influenced, CO₂, H₂S, top of the line, and under deposit corrosion, and mothballing equipment.
- Inline Inspection of pipelines.
- Risk Based Inspection – Implementing RBI programs and generating inspection strategies to optimise safety, equipment performance and costs.



Grahame Strong

Edgar Mendez - Group Consultant - Materials & Corrosion. Edgar is a Materials Engineer who has been working in the inspection/testing industry for 16 years, most of which has been in metallurgy. Edgar's area of expertise includes:

- Condition Assessment – Providing technical support on a wide range of issues related to corrosion and materials selection/metallurgy.
- Failure investigations – Including corrosion issues, fractured/overload, heat treatment and material issues; for a wide range of structures and materials.
- Visual examinations – Including fractured shafts, pressure vessels, corroded structures, internal examination of safety fire system pipes and screws/components exposed to hydrogen embrittlement.
- Microstructural examination.
- Standards review – Interpretation of various standards and comparison against Australian standards for compliance.
- Various onsite testing – Ferrite content testing, XRF positive material identification testing, portable hardness testing and coating thickness measurements. Onsite sample removal for chemical analysis and alloy identification.
- Material Selection & Coatings – Provide technical support related to metallurgy review and material selection for existing and new plant and infrastructure.



Edgar Mendez