

# Cathodic Protection

**EPCM** designs, monitors, constructs, tests, and maintains Cathodic Protection Systems. These systems protect assets such as cross-country pipelines, buried plant piping, storage tanks, pressure vessels, and marine infrastructure from costly corrosion damages.

Cathodic Protection (CP) is an electrochemical process where Direct

Current (DC) is applied to a metal to slow or stop corrosion currents. When properly used, CP stops the corrosion reaction from occurring.

Our team has extensive experience along the complete value chain of CP systems on successful projects in some of the most remote and harshest conditions.

## Services:

- Study and dimensioning of cathodic protection systems
- Engineering (Conceptual, Feasibility, Pre-FEED and FEED, Detailed Design)
- Installation, Construction, and Commissioning
- Routine Inspections and Maintenance (CP review, Instrumentation Repair, Rectifier Monitoring & Repair, Foreign Contact Locating, Holiday Detection, Coating Integrity Survey)
- Failure Investigations (visual examination and inspection, microbial or chemical analysis, microscopic investigation, AC mitigation surveys)
- CP System Audits
- Direct current voltage gradient (DCVG) surveys and Close Interval Potential Survey (CIPS) surveys
- External Corrosion Direct Assessment (ECDA)
- Systems and safety manuals for the operation of CP systems
- Organization of field surveys records, repairs, and modifications
- Coating Integrity Surveys (DCVG, ACVG, CIS)
- Power supplies (Transformer – rectifiers, Solar power systems, Thermoelectric generators)
- Interference Control Systems (Bond stations, Auxiliary drainage systems, AC and DC interference mitigation, Fault current protection)

All Cathodic Protection systems follow NACE, International Standards, and best engineering practices.