MARINE CATHODIC PROTECTION CASE STUDIES

A. Investigation and quantification of reinforced concrete corrosion damage

Site: Harbour Structure, Devon, UK
Structure Type: Reinforced concrete beams, columns and deck.

Investigation, assessment, quantification of repairs; corrosion risk assessment of structural elements.

Recommend ing remedial concrete repair and corrosion protection systems according to required life extension and assessed risk.
MARINE CATHODIC PROTECTION CASE STUDIES

B. Protection of Steel Piling from Accelerated Low Water Corrosion (ALWC) Using Galvanic Anodes

Site: Container Terminal, UK
Structure Type: Sheet piled steel piles and tubular piles

Design of galvanic anode cathodic protection system using aluminium anodes to provide protection of sheet piles structures over 1km in length.

Design of anode support frames enabling multiple anodes to be installed in single lifting and installation operations to reduce time during construction.
C. Protection of Steel Gates Using Impressed Current Cathodic Protection

Site: Tidal Defence, UK
Structure Type: Steel Lock Gates

Investigation and design of replacement CP system for lock gates using titanium based anodes and impressed current.

Design of galvanic anode CP system for protection of the sheet piling on associated structures.
D. ALWC Investigation Works and Cathodic Protection Consultancy Services

Site: Ferry Port, UK  
Structure Type: Various Steel Structures

Provision of consultancy services to design cathodic protection systems and anode mounting systems for steel structures.
Compilation of contract documents and tender review.
Project management and on-site support during installation phase.
On-going assessment of corrosion risk for unprotected structures and development of port wide corrosion protection strategy.