Corrosion Solutions

GalvaJacket™ Anode System

Galvanic Cathodic Protection

Product Datasheet

structural TECHNOLOGIES
structuraltechnologies.com
+1-410-859-6539

Description

The GalvaJacket™ Cathodic Protection System uses a zinc mesh anode placed directly against the inside face of a stay-in-place fiberglass form and is proven to stop corrosion by providing an electrical current to the affected region. This current is produced through a galvanic process and thus, does not require a remote power supply.

The custom fabricated fiberglass jackets are designed and manufactured to fit a wide range of infrastructure shapes and sizes for rapid installation. Along with providing the attachments and components of a cathodic protection system, GalvaJacket™ also creates a stay-in-place form that is used for a “form and pump” repair of the concrete structure that is being repaired and protected.

Application

- Structures subject to chloride contamination
- Prestressed concrete piling
- Steel H piles
- Bridge columns
- Pile Caps and Beams

Features and Benefits

- Over 20,000 units installed with zero defects
- Repairs and protects concrete structures with severe corrosion damage and spalling.
- Rigid output GRP shell.
- Stay-in-place form for placement of cementitious repair materials
- Site installation friendly - jackets are fully assembled ready to install on site.
- Does Not require remote power supply - Low maintenance costs.
- Self-adjusts to temperature, humidity and concrete resistivity.
- Custom built to fit any structural element size and shape.
- Life expectancy 25 years minimum*

Material Specification

Zinc Anode Electrical Conductivity	27% IACS
Zinc Mesh Weight	7.8 kg/m² (1.6 lb/ft²)
Zinc Mesh Average Open Area	53%
Zinc Current Capacity	738 A-hr/kg (335 A-hr/lb.)
GRP Water Absorption (ASTM D570)	1% max.
GRP Ultimate Tensile Strength (ASTM D638)	103 MPa min. (15,000 psi min.)
GRP Flexural Strength (ASTM D796)	172 MPa min. (25,000 psi min.)
GRP Flexural Modulus of Elasticity (ASTM D790)	4.8 GPa min. (700 ksi min.)
GRP IZOD Impact (ASTM D4812)	15ft-lb/inch min. (unnotched)
GRP Barcol Hardness (ASTM D2583)	45 min
Complete full assembled system weight	17.1 kg/m² (3.5 lb./ft²)

*As with all galvanic protection systems, service life and performance is dependent upon many factors including reinforcing steel density, concrete conductivity, chloride concentration, humidity and anode spacing.