Description
The LifeJacket® Cathodic Protection System uses a proprietary 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 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, LifeJacket® also creates a stay-in-place form that is used for “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 is 25 years minimum.**

Material Specification
**Patent US 08748524
**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.

- 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)

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