MARINE STRUCTURE REPAIR & PROTECTION:

ElectroTechCP™ Metalized Cathodic Protection

structural TECHNOLOGIES

Utilizing commercially available and patented anode alloys, STRUCTURAL TECHNOLOGIES' metalized cathodic protection systems are designed to deliver corrosion protection to embedded reinforcing steel in concrete through the galvanic process.

When connected to reinforcing steel in concrete, a metalized anode system delivers a uniform protective current. Simple to operate, these systems do not require external power and offer lower lifecycle costs compared to other methods of cathodic protection. A metalized surface may also be coated for aesthetic purposes or to provide additional protection.

Installation Method

These systems are typically installed using the wire arc method, a process where two wires of metal are energized and melted, then propelled towards a prepared surface at a high speed to create a dense coating that adheres strongly to the substrate.

STRUCTURAL TECHNOLOGIES provides installation support to qualified contractors which includes equipment, materials, expert technical field support, as well as quality assurance / quality control.

ElectroTechCP™ MCP Features:

Adaptable

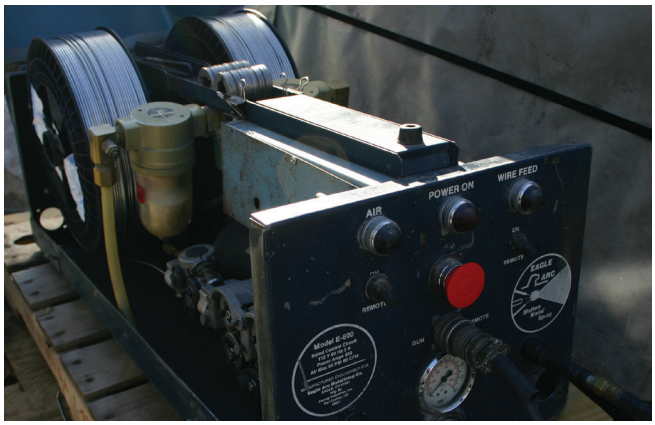
Sprayed anode coating conforms to any concrete structure, and is available in an array of alloys

Robust

Adheres strongly to the concrete substrate, anode stays in place for the life of the system

Easy to Maintain

Self-powered systems are visually inspectable and allow for future application of additional coating materials without disrupting the structure



Corrspray® Galvanic Anode for Reinforced Concrete

Thermally sprayed galvanic anode for the cathodic protection of reinforced concrete structures. The anode consists of an Aluminium-Zinc-Indium* (Al-Zn-In) wire, which is thermally sprayed onto the concrete surface.

Features & Benefits:

- Higher current output and protection levels; up to 2 to 3 times of zinc.
- More effective in drier, less humid climates in comparison with pure zinc.
- More effective over a wider ambient temperature range in comparison with pure zinc.
- Low maintenance costs.
- Aesthetically pleasing – gray/silver color resembling concrete.
- Adhesion strength of 150 to 350 psi – depending on concrete substrate.
- Life expectancy is up to 20 years.**

Corrspray® Material Specification	
Nominal Chemical Composition	Proprietary blend of Al-Zn-In
Maximum Cu Content	100 PPM
Solid Wire Outer Diameter	3.175mm (1/8in) OR 2.00mm (0.0787in)
Coating Density	3.24g/cm^3
Plastic Spool Dimensions	10cm wide x 30cm dia. (4in x 12in)
Nominal Weight per Spool	10 kg (22 lbs)
Estimated Life – Marine Environment	10-15 years
Estimated Life – Northern Deicing Salt Environment	15-20 years
Open Circuit Potential in Simulated Pore Water Solution	-1.6 V (CSE)

Corrspray® Application Data	
Surface Preparation	Brush Blast
Minimum Recommended Thickness	300 microns (12mils)
Estimated Coverage at 300 microns	1.0kg/m^2 (0.2lb/ft^2)
Typical Application Rate at 300 microns (arc spray)	10-15 m^2/hr (100-150 ft^2/hr)

**Patent US 6673309*

***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.*

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