### **Corrosion Solutions**

## ElectroTechCP™ CRM Anode

Impressed Current Cathodic Protection Anode system
Product Line Datasheet



structuraltechnologies.com + 1-410-859-6539

### **Description**

ElectroTechCP<sup>TM</sup> CRM Anodes are ideally suited for cathodic protection applications. The mixed metal oxide coating is sintered to the titanium substrate, providing a lightweight, durable anode. ElectroTechCP<sup>TM</sup> CRM Anodes are suitable for use in the widest range of cathodic protection applications for Impressed Current Cathodic Protection of reinforced concrete. The consumption rate of the mixed metal oxide coating is measured in milligrams per ampereyear. This low mass consumption rate combined with the unmatched strength-toweight ratio for the titanium substrate results in unique advantages for the ElectroTechCP<sup>TM</sup> CRM anodes.



#### **Features and Benefits**

- Lightweight A 250-foot coil of ribbon mesh weighs four to eight pounds, depending on the selected width.
- Ductile the composite material exhibits characteristics of the titanium substrate which is highly malleable.
- Dimensional stability assures excellent contact with the media and a stable surface for seals.
- Conveniently cut and welded in the field to suit various structures and geometries.

#### **Technical Details**

The mixed metal oxide anode is comprised of a commercially pure titanium ribbon with a mixed metal oxide catalyst sintered to the titanium substrate in a thermal decomposition process. The catalyst is a combination of iridium oxide (IrO2) and tantalum oxide (Ta2O5). When a solution of the coating is cured in the oven to convert it to the solid oxide, part of the titanium from the substrate diffuses into the matrix forming an integral bond between coating and substrate. The process requires temperature profile control and the amount of catalyst gained. The catalyst is applied in multiple steps until the desired loading is achieved.

#### **Quality Assurance**

- ASTM D3359 Measuring adhesion by tape test
- ASTM B265 Titanium Material certificates available
- Coating loading measurement XRF and weight gain



#### **Custom Orders**

STRUCTURAL TECHNOLOGIES can provide custom orders based on special specifications. If you have special requirements please contact us. We can accommodate special amperage requirements and special catalytic coatings, including platinum.

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ElectroTechCP™ CRM Anode 3.0 Ratings Coil length	
Width	
Resistance	
Current Rating @ 110mA/m <sup>2</sup>	3.0mA/m
ElectroTechCP™ CRM Anode 3.5 Ratings	
Coil length	
Width	
Resistance	30 ohms/250 feet
Current Rating @ 110mA/m <sup>2</sup>	
Curon raing a row w	
ElectroTechCP™ CRM Anode 4.1 Ratings	
ElectroTechCP™ CRM Anode 4.1 Ratings	
	250 feet (76.2 meters)
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width Resistance	
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width	
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width Resistance	
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width Resistance Current Rating @ 110mA/m²  ElectroTechCP™ CRM Anode 7.0 Ratings	
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width Resistance Current Rating @ 110mA/m²  ElectroTechCP™ CRM Anode 7.0 Ratings Coil length	
ElectroTechCP™ CRM Anode 4.1 Ratings Coil length Width Resistance Current Rating @ 110mA/m²  ElectroTechCP™ CRM Anode 7.0 Ratings	

#### Legal Notes

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. The purpose of this product data sheet is the description of the properties and applications of the ElectroTechCP<sup>TM</sup> CRM Anode System. The described properties and reported values may vary depending on the solicitude and processing on which we do not have any direct influence. Structural Technologies reserves the right to change the properties of its products. Users must always refer to the most recent issue of the product data sheet. The product data sheet does not contain a complete manual of use and application. Our advice and consultancy is required for the use of the ElectroTechCP<sup>TM</sup> CRM Anode. The information above is believed to be accurate and represents the best information currently available to us.

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