

CORROSION RATE MONITORING PROBES - Concrete Cathodic Protection

Corrosion rate monitoring probes are designed for installation during the construction of structures to provide information on the corrosion of the reinforcement and the condition of the concrete. This is done in the form of the following measurements:

- Corrosion potential (E_{corr}) of the probe working electrode and the main reinforcement with respect to the probe reference element.
- Corrosion rate (I_{corr}) of the probe working electrode and the main reinforcement using the linear polarization resistance (LPR) method
- Concrete Resistivity
- Concrete temperature



Major Applications – Concrete Cathodic Protection

We can provide this product to suit your specification and requirements

MMO RIBBON ANODE - Concrete Cathodic Protection

Anode Ribbon Mesh is a key component for Cathodic Protection systems in new reinforced concrete structures. It is composed of a precious metal oxide catalyst sintered onto an expanded titanium mesh substrate.

MATERIAL SPECIFICATIONS

Anode Performance:

Maximum anode concrete interface current density:

BS EN 12696 / FHWA limit 110 mA/m²

Short-term limit 220 mA/m²

Current Rating at 110 mA/m² (BS EN 12696)

Type	Width	Current Output	Anode Surface Area
A	10mm	2.8 m.Amps / m	0.027m ² / m
B	12.7mm	3.5 m.Amps / m	0.032m ² / m
C	19mm	5.28 m.Amps / m	0.048m ² / m

Expected life (NACE Standard TM02944-94) 75 years
 Catalyst Mixed Metal Oxide
 Dimensions common to all types
 Coil length 76 m
 Expanded thickness 0.9-1.0 mm
 Diamond dimensions 2.5 mm x 4.6 mm x 0.6 mm

Substrate:

Composition Titanium, Grade 1, per ASTM B265
 Coefficient of thermal expansion 8.7 x 10⁻⁵/°K
 Thermal conductivity at 20°C 15.6 W/m °K
 Electrical resistivity 0.000056 ohm-cm
 Modulus of elasticity 105 GPa
 Tensile strength 245 MPa
 Yield strength 175 MPa
 Elongation 24% minimum

CORROSION RATE MONITORING PROBES



MMO TITANIUM MESH RIBBON ANODES

