

Ti MMO Electrode™



Ti MMO Electrode™ is a permanent embeddable pseudo-reference electrode for corrosion monitoring in reinforced concrete structures.

The electrode is *Titanium* activated with an *Iridium Enriched Mixed Metal Oxide*, cast in a specially developed pH-constant cementitious filler which guarantees long term stability of the electrochemical potential.

The probe and the filler are protected by a robust non-metallic case.

ADVANTAGES

- Stable potential
- No durability limits
- Rugged and mechanically resistant
- Electrical potential calibrated



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APPLICATION

- Monitoring of rebar corrosion.
- Monitoring of stray current interference in concrete.
- Regulation and monitoring of cathodic protection systems.

OPERATING

Potential measured after half an hour soaking in saturated Ca(OH)_2 at 25°C: -60 ± 50 mV Vs. SCE (Saturated Calomel Electrode).

Potential in concrete $+50 \pm 20$ mV Vs. SCE (average based on a statistical analysis of a 5 year testing of electrodes embedded in concrete blocks). The shift between above values is the junction potential which arises when the concrete is in contact with Ca(OH)_2 solution.

Temperature range: 0 to 50 C°.

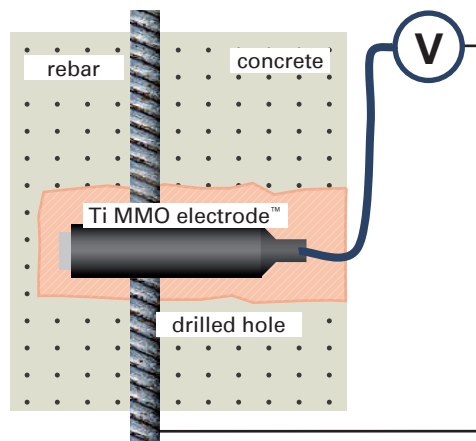
For potential measurements a high impedance voltmeters ($> 1 \text{ G}\Omega$) is required.

CABLE

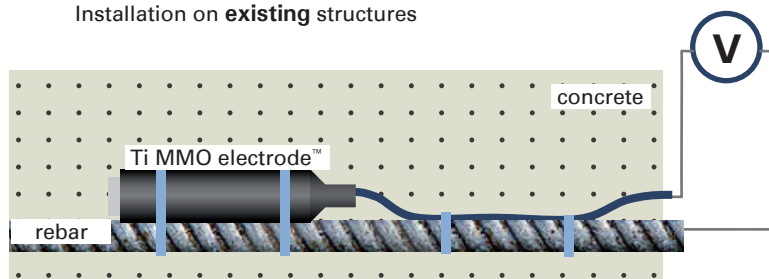
Type FG7 1 x 2.5 mm (AWG 13).

LIFE EXPECTANCY

No limitation.



Installation on **existing** structures



Installation on **new** structures



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