

Technical Data Sheet

Zinc Discrete Anode (ZDA) ML10

Zinc sacrificial anodes for corrosion control
of steel in concrete



Description

Zinc Discrete Anodes ML10 (ZDA) are sacrificial zinc anodes embedded in an ion-conductive, self-moistening paste, designed to provide galvanic cathodic protection to reinforcing steel in new and existing concrete structures.

Typical features

Galvanic corrosion occurs when two different metals are electrically connected in the presence of a conductive environment, such as moisture within concrete. The less noble metal will corrode preferentially and, by doing so, helps protect the more noble metal.

ZDA anodes use this same galvanic principle to protect reinforcing steel in concrete. The zinc anode is electrically connected to the reinforcement and acts as a sacrificial anode. As the zinc corrodes, it supplies protective current to the steel, helping to reduce ongoing corrosion without the need for an external power supply.

Each ZDA anode consists of a specially designed zinc core surrounded by an ion-conductive, self-moistening paste. This paste helps maintain reliable activation of the zinc throughout the service life of the anode.

The protective current generated by each anode is distributed through the surrounding concrete to the electrically connected reinforcement. The effective protection area depends on factors such as concrete resistivity, anode spacing, reinforcement geometry and the condition of the concrete. Thanks to the relatively simple and rapid installation, ZDA anodes can be applied efficiently on site, which can help reduce installation costs.

Features of application

- in combination with concrete patch repair
- bridge deck or beam supports and columns
- balcony facings and concrete facades
- floorings
- precast concrete structures
- zones of newly cast concrete bonded to an existing structure

Application

The ZDA ML10 anodes feature a specially designed zinc core coated with a patented, ion-conductive, self-moistening overlay paste, ensuring consistent activation throughout their entire service life.

These anodes are typically used in areas with elevated corrosion risk. They help reduce corrosion activity and limit the development of new corrosion sites.

The service life of the anodes is directly related to the following variables: total zinc weight per unit surface area, steel surface area (steel density), presence and availability of oxidizing agents (O₂, H₂O) to maintain the cathodic reactions on the steel structure, and the anode's capacity.

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ZINC DISCRETE ANODE ML10

DIMENSIONS	100 X 50 X 20 MM
PACKAGING	20PC PER BOX
ZINC WEIGHT	175 g
GROSS WEIGHT	280 g
STOCK CONDITIONS	< 30°C < 50% RH
MAXIMUM STORAGE TIME	36 MONTHS (ORIGINAL PACKING)
TARIFF NR.	7905 00 00



All technical data stated in this Technical Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. The information, and, in particular, the recommendations relating to the application and end-use of CorrPRE's products, are given in good faith based on CorrPRE's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with CorrPRE's recommendations.

CorrPRE - Special Anodes Manufacturing, Zuidbaan 509, 2841MD, Moordrecht, Netherlands

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Approved by: R. Giorgini