

SMART ZINC® Hybrid Anode

Self-powered dual phase anodes for incipient anode prevention and global corrosion protection

Impressed Current Cathodic Protection (ICCP) is a proven method for protecting reinforced concrete from corrosion, delivering strong performance in marine environments and in structures with high concrete resistivity.

Galvanic protection uses alkali-activated zinc anodes that naturally drive protective current to the steel, providing a simple, maintenance-free solution across many exposure conditions.

The Smart Zinc® Hybrid Anode combines ICCP-level performance with the long-term simplicity of galvanic protection. This compact unit requires no complex wiring or external power and installs directly into the concrete with a direct connection to the reinforcing steel.

After installation, the impressed-current phase delivers a high-charge treatment to protect and passivate active corrosion (phase 1). The anode then automatically shifts to long-term galvanic prevention, maintaining steel passivity with continuous, maintenance-free protection (phase 2).

For most structures, chloride concentration is highest within the concrete cover, so the system is primarily intended for installation in this zone. Where installation in the cover is not feasible, an anode with an octagon profile may be installed in drilled holes as an alternative placement method.

For concrete elements with low to medium corrosion activity, Smart Zinc® Hybrid Anode **SZ 2.5/100-C** or **SZ 2.5/100-H** may be installed either within the concrete cover or in drilled holes to provide effective corrosion protection.

For concrete elements with medium to high corrosion activity, Smart Zinc® Hybrid Anode **SZ 16/200-C** and **SZ 16/200-H** may be installed in the same configurations to deliver higher-capacity corrosion protection.

Anode selection, configuration, and confirmation of suitability for a particular application shall be determined by the design engineer. Parameters such as concrete resistivity, chloride concentration, steel density, and overall structural condition may influence anode type, spacing, and expected system performance. The anodes must be fully embedded in low resistivity repair mortar.

Anode Type:	Dimensions (mm):	ICCP Capacity and Installation:	Galvanic Zinc Mass:
SZ 2.5/100-C	30 x 30 x 160	2.5 Ah – Installed in concrete cover	100 g Zinc
SZ 16/200-C	46 x 46 x 200	16 Ah – Installed in concrete cover	200 g Zinc
SZ 2.5/100-H	Ø32 x 135	2.5 Ah – Installed in hole Ø45 ± 5 mm and depth 155 ± 5 mm	100 g Zinc
SZ 16/200-H	Ø46 x 200	16 Ah – Installed in hole Ø55 ± 5 mm, and depth 220 ± 5 mm	200 g Zinc

Notes:

C: Cover installation

H: Hole installation

Ah: Amp-hour

Exclusive distribution in Australia by Savcor Products Australia Pty Ltd
Call:1800SAVCOR

