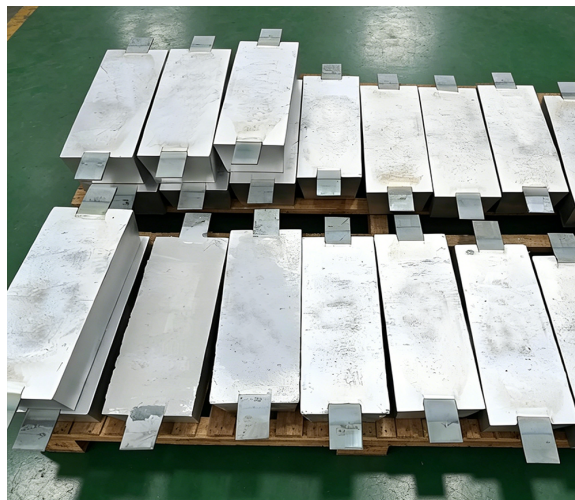


Zinc Anode for Harbor/Marine Engineering Facilities

Zinc anodes for harbor and offshore engineering facilities utilize the characteristic that zinc has a more negative potential in seawater or seabed mud, forming a macroscopic galvanic cell with the steel structure to be protected. As the anode, zinc preferentially dissolves, and the released electrons polarize the steel surface to the cathodic protection potential, thereby inhibiting electrochemical corrosion.

These anodes are widely used in steel structures that are long-term exposed to seawater or tidal zones, such as port terminal steel pipe piles, sheet piles, offshore wind turbine foundations, cross-sea bridge piers, jacket platforms, submarine pipelines, and buoy mooring systems.



KEY FEATURES

1. Moderate driving voltage, not prone to overprotection
2. Low self-corrosion, high current efficiency
3. Low operation and maintenance cost
4. Easy to retrofit / replace
5. Good compatibility with coating systems

APPLICATIONS

1. Port terminal steel pipe piles
2. Sheet piles
3. Offshore wind turbine foundations,
4. Cross-sea bridge piers
5. Jacket platforms and submarine pipelines

PRODUCT SPECIFICATIONS

Chemical Composition(%)		
Executive Standard	ASTM-418-type I	ASTM-418-type II
Al	0.1-0.5	≤0.005
Cd	0.025-0.07	≤0.003
Fe	≤0.005	≤0.0014
Pb	≤0.006	≤0.003
Cu	≤0.005	≤0.002
Zn	Remainder	Remainder

Electrochemical Property		
Executive Standard	ASTM-418-type I	ASTM-418-type II
Open Potential(-V,vs SCE)	≥1.05	≥1.10
Closed Potential(-V,vs SCE)	≥1.0	≥1.05
Actual Capacitance(A·h/kg)	≥780	≥740
Current Efficiency(%)	≥95	≥90