

Magnesium Sacrificial Anodes For Desalters

In crude oil desalters, water washing generates a highly saline aqueous phase (rich in Cl^-/HCl), creating a corrosive environment where exposed carbon steel is prone to pitting once coating failures occur. Magnesium sacrificial anodes leverage magnesium's significantly more negative electrochemical potential compared to steel, forming a galvanic cell. Corrosion current flows from the anode through the electrolyte to the steel surface, polarizing the steel to a safe, non-corrosive potential range. This causes the magnesium to dissolve preferentially, protecting the vessel and internals. Strategically installed in the bottom water phase or at oil-water interfaces as a backup to coatings, these anodes require regular consumption monitoring and scheduled replacement.



KEY FEATURES

- 1.High construction convenience
- 2.Maintenance cost is low
- 3.Scope of application is extensive
- 4.Environmental protection and safety

APPLICATIONS

- 1.Water Storage Tank Protection
- 2.Refinery Water Pipe Protection
- 3.Long Transmission Pipeline Protection

PRODUCT SPECIFICATIONS

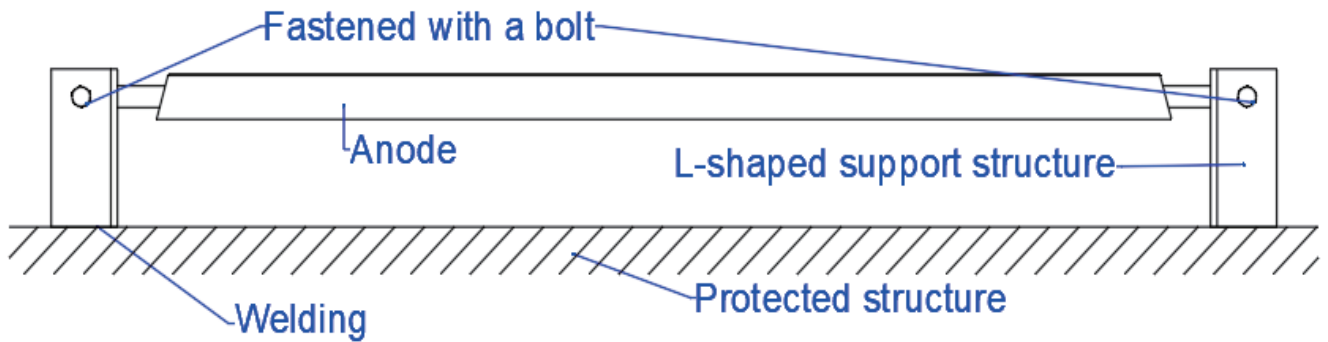
Chemical Composition									
Element	Al	Mn	Zn	Si	Cu	Fe	Ni	Impurity	Mg
%	5.300~6.700	0.150~0.700	2.500~3.300	≤ 0.100	≤ 0.020	≤ 0.030	≤ 0.002	≤ 0.30	Remainder

Electrochemical Property			
Open Potential(-V,vs SCE)	Closed Potential(-V,vs SCE)	Actual Capacitance(A·h/kg)	Current Efficiency(%)
1.50~1.55	1.45~1.50	1230A.h/kg	≥ 55



Product weight: Gross weight: 11.6kg, Net weight:11.0kg

■ PRODUCT INSTALLATION



Installation Drawing

