

Condenser Magnesium Anode

The potential of magnesium alloy (-1.5 to -1.7 V vs. CSE) is much more negative than that of carbon steel. In cooling water, it preferentially dissolves and releases electrons, polarizing carbon steel components such as the condenser water chamber and tube sheet to the protection potential, thereby inhibiting electrochemical corrosion. Its greatest advantage is its strong driving force, making it particularly suitable for high-resistivity freshwater systems where zinc or aluminum anodes cannot deliver sufficient current. Its application is mainly limited to all-carbon-steel freshwater-cooled condensers.



KEY FEATURES

- 1.Strong driving force
- 2.More suitable for high-resistivity cooling water
- 3.Fast activation, more favorable for "large local cathodes"
- 4.No external power supply required, simplest structure

PRODUCT SPECIFICATIONS

Magnesium Alloy Components:

Al: $\leq 0.010\%$, Mn: $0.5-1.3\%$, Si: $\leq 0.05\%$, Cu: $\leq 0.02\%$, Fe: $\leq 0.03\%$, Ni: $\leq 0.001\%$, Total impurity: $\leq 0.3\%$, Mg:Remainder

Electrochemical Property:

Open Voltage: $1.7V \sim 1.75V$ (vs. SCE)

Closed Voltage: $1.58V \sim 1.62V$ (vs. SCE)

Actual Capacitance: ≥ 1100 A.h/kg

Efficiency: $\geq 50\%$

Execution Standard: ASTM B843, ASTM G97

Anode Type: Square / rectangular / cylindrical

Anode Weight: 1lb/2lbs