

Blind Flanged Aluminum Anode

The Blind Flanged Aluminum Anode is a blind flange-mounted sacrificial anode cast from Al-Zn-In (Aluminum-Zinc-Indium) series aluminum alloy. Designed for internal cathodic protection of boilers, heat exchangers, seawater storage tanks, and salt-containing cooling water equipment, the anode protects carbon steel substrates from corrosion by preferentially consuming itself through electrochemical corrosion.

KEY FEATURES

- 1.Highest current output per unit weight
- 2.Lightweight, ideal for large marine structures
- 3.Moderate driving voltage, safer operation
- 4.Relatively controllable cost, suitable for mass production of large castings
- 5.Stable potential in seawater and brine

PRODUCT SPECIFICATIONS

Flange Size: 4-inch 150# or 300# flange
 Anode Core:Carbon steel
 Length: Customizable
 Cable:1×4mm²,PVC,3meters length

APPLICATIONS

- 1.Boilers
- 2.Heat exchangers
- 3.Seawater storage tanks
- 4.Salt-containing cooling water equipment



Aluminum Anode

Chemical Composition(%)			
Executive Standard	DNV RP B401	GB/T4948-2025:A21	BS EN12496-2013: A3
Zn	2.5-5.75	4.0-7.0	4.75-5.75
In	0.015-0.040	0.020-0.050	0.016-0.020
Cd	≤0.002	/	≤0.002
Si	≤0.12	≤0.10	0.08-0.12
Cu	≤0.003	≤0.01	≤0.003
Fe	≤0.09	≤0.15	≤0.06
Mg	/	0.50-1.50	/
Ti	/	0.01-0.08	/
Other	≤0.10	/	/
Each Impurity	/	/	≤0.02
Total Impurity	/	/	≤0.05
Al	Remainder	Remainder	Remainder

Electrochemical Property			
Executive Standard	DNV RP B401	GB/T4948-2002:A21	BS EN12496-2013:A3
Open Potential(-V,vs SCE)	/	1.10-1.18	/
Closed Potential(-V,vs SCE)	≥1.05	1.05-1.12	1.05-1.12
Actual Capacitance(A·h/kg)	≥2500	≥2600	≥2500
Current Efficiency(%)	/	≥90	/