

MMO Disc-shaped Anode

MMO Disc-shapes Anode is an insoluble auxiliary anode manufactured by sintering a stable, highly electrocatalytic mixed metal oxide coating (e.g., IrO_2 , RuO_2 , Ta_2O_5) onto a titanium substrate (TA1/TA2). It features high electrocatalytic activity, high current efficiency, and long service life, specifically designed for impressed current cathodic protection (ICCP) systems on ship hulls in seawater, brackish water, and freshwater environments.

KEY FEATURES

- 1.High efficiency, long lifespan
- 2.Strong environmental resistance
- 3.Excellent shielding performance
- 4.Uniform current distribution

PRODUCT SPECIFICATIONS

Product Model: Circle / Ellipse / Rectangle

Enclosure: PVC

Sealing Material: Epoxy resin

Product Size: customization

Anode Substrate: Titanium-ASTM B265 Grade 1

Coating:

Composition: $\text{IrO}_2/\text{RuO}_2$ or $\text{IrO}_2/\text{Ta}_2\text{O}_5/\text{RuO}_2$

Thickness: $\geq 8\mu\text{m}$

Crystallite Density: $6\sim 12\text{g}/\text{cm}^3$

Resistivity: $9\sim 11\mu\Omega\cdot\text{cm}$

Consumption Rate: $\leq 2\text{ mg}/(\text{A}\cdot\text{a})$

Operating Current Density: In seawater, up to $600\text{ A}/\text{m}^2$; in freshwater, up to $100\text{ A}/\text{m}^2$.

Service Life: ≥ 25 years

APPLICATIONS

- 1.Cathodic protection for ship hulls.
- 2.Cathodic protection for steel structures in freshwater, brackish water, and seawater environments, such as gates and tank interiors.

