

Deep Well Anode

Deep well anode is a deep-buried auxiliary anode impressed current cathodic protection device, usually buried over 15 meters deep. It is assembled with MMO titanium anodes or high silicon cast iron anodes, coke backfill, vent pipes and steel casings. It can penetrate high-resistivity dry topsoil and reach low-resistivity aquifers deep underground to greatly reduce grounding resistance and deliver stable anti-corrosion current. The vent pipe discharges electrolytic hydrogen timely to prevent failure caused by gas blockage. Covering a tiny ground area, it suits urban pipelines, long-distance desert pipelines and tank farms with limited space or high soil resistivity. Deep burial distributes protective current evenly and minimizes stray current interference to surrounding buried metals. It can serve for 15 to 30 years, acting as mainstream supporting equipment for long-term anti-corrosion of underground steel structures.



KEY FEATURES

- 1.Low grounding resistance by reaching deep low-resistivity aquifer.
- 2.Small footprint, ideal for limited-space urban and plant areas.
- 3.Minimal stray current interference to adjacent buried metal structures.
- 4.Even distribution of protective current for pipelines and tank groups.
- 5.Long service life up to 15–30 years with stable underground environment.
- 6.Low maintenance, free from surface construction damage.

PRODUCT SPECIFICATIONS

Anode Material:High silicon cast iron anode / MMO titanium anode

Steel Casing: Seamless steel pipes ,Φ 219 / 273 mm × 3000/4000/6000mm length

Current Density: 50–100 A/m²

Consumption Rate:

MMO Anode: ≤2 mg/(A·a)

HSCI Anode:≤0.5kg/(A·a)

Backfill Material:Petroleum coke particles

Grounding Resistance:≤1Ω (stratum with sufficient groundwater)

Applicable Soil Resistivity:≤5000Ω·m

Output Current per Single Well:5 ~ 50A

Supporting Components:Vent pipe, steel casing, outgoing cable, connection terminal

Designed Service Life:15 ~ 30 years

APPLICATIONS

- 1.Cathodic protection for long-distance oil & gas pipelines,
- 2.Tank bottoms
- 3.Urban underground pipe networks