NMTELECTRODES (PTY) LTD
www.nmtelectrodes.com

JETTY ANODES

NMT® Electrodes Jetty Anodes are designed for use in jetties and harbours where high current output and long design life is required in these installations. The Jetty Anode design integrates all the requirements for close surface fitting of plate anodes, tubular or rod anodes to piling. Provisions are made in the PVC Jetty Anode Housing to accommodate various forms of attachment to piles.

The anodes consist of a solid titanium plate, rod or tubular substrate coated with a Mixed Metal Oxide coating of IrO_2/Ta_2O_5 and are suitable for use in seawater.

The inert (dimensionally stable) Mixed Metal Oxide coated titanium anodes possess a large current density, a low consumption rate, good conductivity, long life in extreme environments and are low in cost. The Mixed Metal Oxide coated titanium anode has conductive metal oxides which act as catalysts, tailored to cater for the requirements of different working environments. In seawater, the chemical reactions taking place at the anode surface are primarily chlorine evolving. At high over-potentials an environment of low pH may be created around the anode, however, MMO coating is resistant to acid attack.

Platinised titanium jetty anodes are also available for the cathodic protection of jetties and wharves. A thin layer of platinum is applied to the titanium metal substrate through a plating process. Platinised anodes perform extremely well in seawater environments exhibiting a large current density and an extremely low consumption rate; therefore, the substrate remains nearly constant throughout the design life of the anode. This provides a consistently low resistance anode.

All anodes are connected to cable (as specified) and then mounted in the insulated PVC assembly, which is sealed at both ends ensuring that the anode-to-cable connection is protected from water ingress. This is tested by means of a Helium Leakage Test and all anode-to-cable connection resistance is less than 0.001 Ohms.

Anode Type	Maximum Design Current Density	Standard Anode Life
MMO	600 A/m^2	20 years
Platinised Titanium	1000 A/m^2	20 years