TITANIUM ELECTRODE PRODUCTS
AUSTRALIA (PTY) LTD

NMTELECTRODES
SOUTH AFRICA / AUSTRALIA (PTY) LTD

WIRE ANODES

NMT® Electrodes Wire Anodes are manufactured using titanium which meets ASTM B348 Grade 1 or 2 standards.

NMT® Electrodes' Mixed Metal Oxide coatings are electrically conductive which activates the titanium wire allowing it to function as an anode.

NMT® Electrodes Mixed Metal Oxide Anodes have an extremely low consumption rate, therefore, the titanium substrate remains nearly constant throughout the design life of the anode. This provides a consistently low resistance anode.

NMT® Electrodes Mixed Metal Oxide Anodes exhibit high chemical stability even when exposed to low pH (acidic) environments and are suitable for use in chlorine- or oxygen-evolving electrolytes or a combination of both.

Applications for NMT® Electrodes Mixed Metal Oxide Wire Anodes include use in tank bottoms, tank internals, pipeline internals, canistered anodes, sock anodes, electrical cable shielding, continuous horizontal groundbeds and discontinuous horizontal groundbeds.

NMT® Electrodes MMO Wire Anodes are available in two sizes, with two standard current ratings. Other sizes and ratings are available upon request.

ADVANTAGES

- Low internal resistance
- Dimensionally stable

Anode diameter	Rating
1.5 mm	0.136 ohm / m
3.0 mm	0.068 ohm / m

NOTES:

- Approximate electrical resistance @ 25°C. Mechanical properties are based on typical room temperature
- Operating temperature affects resistance and resistivity changes maximum ampacity of wire

SOCK ANODES

NMT® Electrodes produces Sock Anodes using NMT® Electrodes Wire Anodes which are manufactured using titanium meeting ASTM B348 Grade 1 or 2 standards and are available in 2 different diameters.

NMT® Electrodes Sock Anodes linear assemblies, comprise NMT® Electrodes Wire Anodes and cable contained in a cotton sock. The cotton sock is filled with Calcined Petroleum Coke backfill, with a particle size of less than 1mm.

Header cable supplied is typically 10 mm2 or 16 mm2 XLPE/PVC connected to the MMO/Ti wire anode every 10 m. The header cable or spacing between the connections is able to be adjusted to suit the particular soil resistivity of the operation. Spacing of the connections will be dependent on the anode used, cable size used and environment where assembly will be installed. This "piggybacking" aids the distribution of current and attenuation.

The cable tail can be provided either at one end or at both ends of the NMT® Electrodes Sock Anode to allow the connection to powerfeed from the TR.

NMT® Electrodes Mixed Metal Oxide Anodes exhibit high chemical stability even when exposed to low pH (acidic) environments and are suitable for use in chlorine- or oxygen-evolving electrolytes or a combination of both.

Applications for NMT® Electrodes Sock Anodes include use in above and below ground storage tanks, conventional groundbeds and alongside pipelines.

ADVANTAGES

- Even current distribution
- Ease of handling and installation
- Well proven performance

Dimension of Ti Wire	1.5 mm dia. or 3 mm dia.
Current Output of Sock Anode	1.5 mm dia. Ti wire = 0.5 A / m^2 3 mm dia. Ti wire = 1.0 A / m^2
Sock Diameter	50 mm
Sock Lengths	1 m - 50 m
Sock Weight	2.3 kg per m