

## MMO-Ti WIRE ANODE

### Application

MMO coated titanium wire anode is suitable for direct burial in fine sand, carbonaceous backfill or immersion in fresh or saline waters. MMO-Ti wire anode can be connected to a feed cable at one end or 'piggybacked' to form a continuous anode suitable for installation under storage tanks or to provide continuous close protection for pipelines. Wire anodes can also be used to protect the internal surfaces of water tanks where their malleable shape permits even current distribution in areas where there can be large variations in water level.



### Availability

Our standard anode has the following characteristics:

Diameter (mm)	Resistance ( $\Omega$ )/m	Substrate
1.5	0.023	Solid Ti
3.0	0.006	Solid Ti
1.5	0.017	Cu Cored Ti
3.0	0.003	Cu Cored Ti

The anode consists of a proprietary mix of Iridium and Tantalum oxides on a Titanium substrate conforming to ASTM specifications.

Environment	Output (A/m)		Life (years)
	1.5 mm	3.0 mm	
Metallurgical Coke	0.25	0.5	20
Petroleum Coke	0.5	1.0	20
Sand	0.14	0.28	20
Fresh Water	0.5	1.0	20
Sea Water	3.0	6.0	20

## Note

Longer life can be obtained by increasing the coating thickness or reducing the current density. Resistance and Amperage is at 25°C. Wire volt drop should not normally exceed 10% for proper current distribution.

Product from other manufacturers may not have the same life characteristics and that the depth of anode placement should also be considered when calculating anode quantities.

The MMO coating and substrate are not considered to release hazardous chemicals during normal use. No MSDS is therefore required.

## Quality Assurance

Strict quality procedures are followed throughout the coating process to ensure proper adhesion and loading. Each batch is subject to thorough testing including:

- Review of Mill certs for Titanium substrate
- Accelerated life testing in 150g/l H<sub>2</sub>SO<sub>4</sub> at 15000A/m<sup>2</sup>
- Coating thickness verification with X-ray

## Disclaimer

The information provided in this document was accurate at the time it was published, however, we reserve the right to revise this document without prior warning.