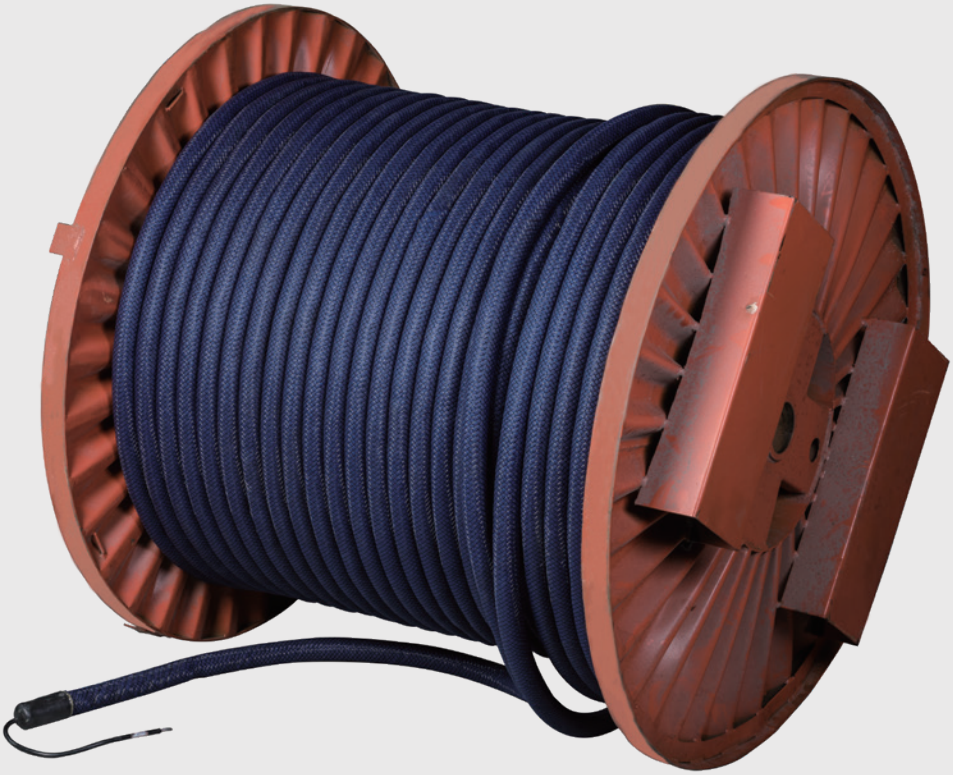
YUXI



MMO LINEAR ANODES

PRODUCT DATA SHEET

AMPP CORPORATE MEMBER

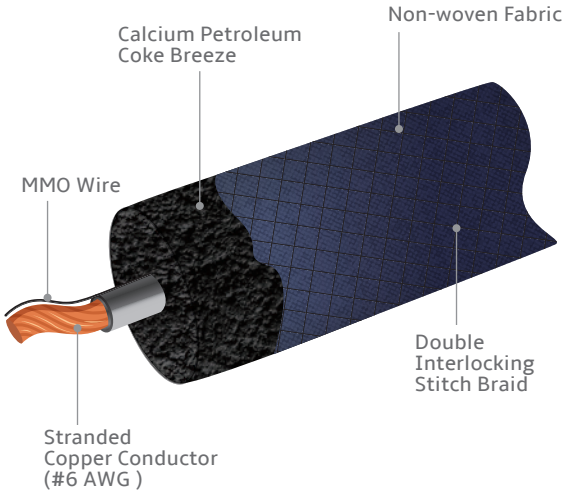
www.yuxi-anode.com

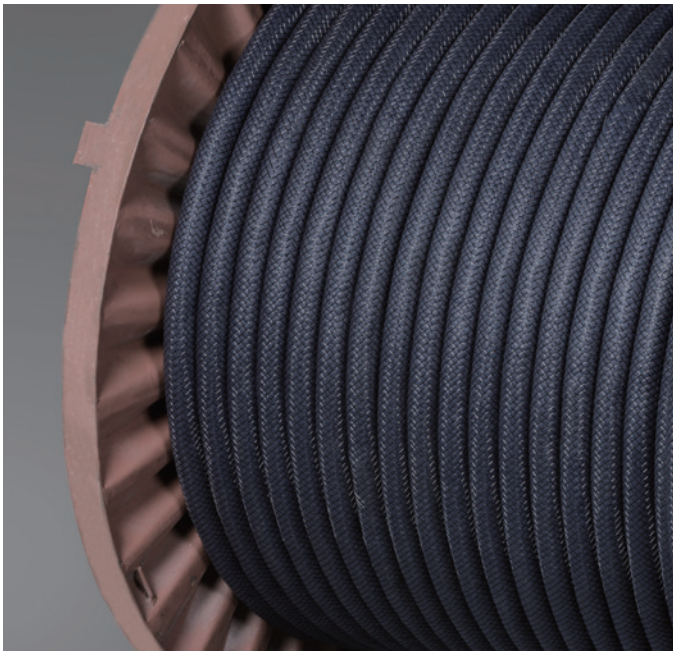
PRODUCT DATA SHEET

MMO Linear Anodes

The flexible anode is a kind of anode which is prepackaged in a porous, non-woven fabric “sock” that contains high conductivity calcined petroleum coke breeze —— enhancing the abrasion and damage resistance. It improves the current distribution efficiency and helps prevent over-voltage problems such as hydrogen generation and associated rapid coating disbondment.

Our MMO linear anode consists of titanium wire coated with Ir-Ta mixed metal oxide catalyst, running in parallel with an insulated copper conductor.





Quality Copper Conductor

Our power cable delivers the required current over considerable distance without incurring substantial longitudinal voltage drop. The choice of the cable can be made from HMWPE, XLPE/PVC, Kynar/HMWPE or as per specification.

High-grade MMO Wire

The core of the anode is composed of high-tensile titanium wire, which meets ASTM B348 Grade I/II. The iridium-tantalum mixed metal oxide catalyst demonstrate high chemical stability for use in soil or fresh water, where low chloride ions present.

Evenly Backfill Filling

High performance calcined petroleum coke breeze is tightly pre-packaged and evenly distributed all around the anode, serving as the active matrix in which the electrochemical reactions take place.

- **Carbon Content:** 98.5% Min.
- **Ash:** 0.6%
- **Moisture:** 0.05%
- **Volatiles:** Nil(950°C)
- **Resistivity:** 0.1 Ω.cm [per G.L.C.-C-12A, 10 bar (145psi) @23°C (73°F)

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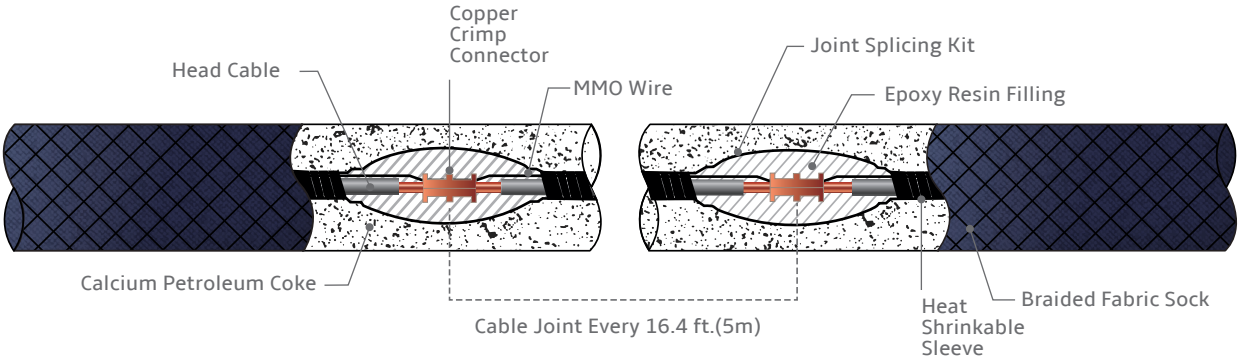
PRODUCT DATA SHEET

MMO Linear Anodes



Tight Joint Sealing

The MMO wire and the copper conductor are crimped together. Besides, the connection joint is sealed in a splice kit with epoxy resin to prevent water intrusion — Helium Leak Test passed.

Connections are nominally made at 5m(16.4 ft.) intervals to ensure uniform current distribution along the length of the anode. Different connection intervals can be accommodated as required.

- **Copper Cable Connection Resistance:** 3.08x10-3 Ω.m
- **MMO Wire Volume Resistivity:** 9~11 mΩ.cm
- **Cable Joint Resistivity:** 1.0 mΩ Max.

Acid-resistant Braid Fabric Jacket

The anode is prepackaged with porous, non-woven synthetic sleeve. This tough sleeve is sewn using a poly two or four-thread double interlocking stitch, which prevents the seam from separating during installation, or when stored in high temperature conditions.

- **Bursting Strength:** 500 N [per ISO 3303]
- **Abrasion Resistance:** 100 Cycles to Failure [per ASTM D-4157]
- **Fluid Resistance:** Pass [6-month Immersion Test]
- **Chlorine Resistance:** Pass [6-month Immersion Test]
- **UV Resistance:** 55% Tear Strength Loss [per ASTM G-53: 8 hrs @ 60°C (140°F), 4 hrs condensation @ 50°C (122°F)]

Reel Packing

Our MMO linear anode can be packed on wooden or steel reel as required. It is normally installed right from the factory provided reel into the trench for easy transportation.

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MMO Linear Anodes

PRACTICAL APPLICATION

Typical uses for our MMO linear anode include the impressed current cathodic protection of in-plant piping, buried oil (gas) pipelines, petrochemical container, tank bottoms and other underground structures.The linear anode can be easily field cut to appropriate lengths, or it can be spliced to other segments. This tough anode can be buried directly in the soil. Thus it simplifies field installation and saves labor cost.

SPECIFICATIONS

Item No.	MMO Wire	Cable Conductor	Sock Diameter	Reel Length	Current Output	Lifetime
YX-MMO-FLA100-S	Φ1.5mm(Φ0.06")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	152m (500 ft.)	327mA/m (100mA/ft.)	25 yrs.
YX-MMO-FLA100-M	Φ1.5mm(Φ0.06")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	305m (1000 ft.)	327mA/m (100mA/ft.)	25 yrs.
YX-MMO-FLA100-L	Φ1.5mm(Φ0.06")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	457m (1500 ft.)	327mA/m (100mA/ft.)	25 yrs.
YX-MMO–FLA300-S	Φ3.0mm(Φ0.12")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	152m (500 ft.)	983mA/m (300mA/ft.)	25 yrs.
YX-MMO–FLA300-M	Φ3.0mm(Φ0.12")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	305m (1000 ft.)	983mA/m (300mA/ft.)	25 yrs.
YX-MMO–FLA300-L	Φ3.0mm(Φ0.12")	#6 AWG (HMWPE)	Φ38mm (Φ1.5")	457m (1500 ft.)	983mA/m (300mA/ft.)	25 yrs.

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Industrial Corrosion Control Solutions Provider

Established in 2003, YUXI has over a 20-year heritage of innovation in corrosion control science and technology. We're a spirited team of ambitious thinkers and pioneer sheeps with a common goal in mind: protect our clients' assets from corrosion with cost-saving measures.

We have the most comprehensive catalog of cathodic protection materials including anodes, transformer rectifiers, backfills, coatings, etc. Our anodes and supplies are manufactured to strict quality standards through an ISO 9001 quality management system and are guaranteed to offer excellent performance in the industry.

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