# Impress Current Anodes:

## Ti-Mixed Metal Oxide Anode

## MMO Solid Rod



Туре	MMO-1	MMO-2	MMO-3	MMO-4	MMO-5
Diameter	Dia3.2mm	Dia6.4mm	Dia12.7mm	Dia19mm	Dia25mm

The length of above anode can be supplied in any length between 0-1000mm, and the coating type can be matched to different environments.

### MMO Tube Anode



Titanium to ASTM standard B338 Standard Dimension:

Dimension	Current output	Life time
Dia 25mm ×1000mm long	8amps (based on 100amps/m sq)	20years
Dia 25mm ×500mm long	4amps (based on 100amps/m sq)	20years
Dia 19mm ×1200mm long	7amps (based on 100amps/m sq)	20years
Dia 32mm ×1200mm long	12amps (based on 100amps/m sq)	20years

The tubular anode can be supplied in string.

#### MMO Ribbon Anode

Titanium to ASTM 265, coated with IrO2/Ta2O5.

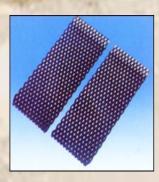
Standard dimension:

12.7mm wide x 0.6mm thickness x 152meters

Current output: 34mA/meter (10mA/ft). Life time: 50years (at 1.2A/m

sq)

#### MMO Mesh Ribbon Anode



Titanium expanded mesh substrate coated with IrO2/Ta2O5. Standard dimension:

a).32.5mm wide × 1250mm long

Current Output: In calcinated petroleum coke backfill: 5amps

Life time: 20years.

Dimension of canister: dia 50mm x 1500mm

b).20mm wide × 1000mm

Current Output: In calcinated petroleum coke backfill:

2amps

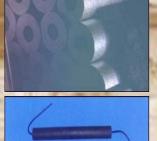
Life time:20years.

Dimension of canister: Dia 50mm x 1200mm

\*The dimension of the anode can be made according to customer's request.

## **Graphite Anode**





Yuxi's Graphite anodes are produced by high quality petroleum coke. The petroleum coke is mixed with petroleum tar and extruded into rod size. After being repeatedly sintered at very high temperature, the rod becomes high density, high carbon content, thus have a low consumption when it is being used.

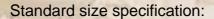
According to customer's request, Yuxi's graphite anodes are impregnated by linseed oil or by wax in order to protect the anode from moisture.

The graphite anodes can be supplied in following form:

- a). Rod, without processing
- b). Rod, Hole prepared for connection
- c). End connection
- d). Center connection

Properties:

Bulk Density g/cm <sup>3</sup>	Apparent Porosity %	Grain Size mm	Ash %	Sulphur %	Specific Resistance Ohms/mm sq
1.65 min	5 max	1.5 max	0.16 max	0.01 max	8.6





Туре	YG-01	YG-02	YG-03	YG-04	
Diameter 3 inch		4 inch	3 inch	4 inch	
Length	ength 30 inch 4		60 inch	80 inch	
Weight	13 lbs	35 lbs	27 lbs	70lbs	

## **High Silicon Cast Iron Anode**

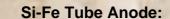
Si-Fe alloy with 14.5% Silicon content is a wide used corrosion control material. Si-Fe anodes have good corrosion resisting performance, as the surface of the anode can come into a stable SiO2 film. Si-Fe anodes are widely used in impressed current cathodic protection of offshore structures, underground pipelines, and buried cable and so on.

We supply Si-Fe anodes according to ASTM A518-86(grade 3) standard. The anodes are made by Chill Cast technology, than have more high quality and performance than normal sand mould casting. We supply the anodes in following specifications:

### Si-Fe Rod Anode:



11	A SECOND		76.092				
• Type	Dimension	Surface Area	Weight	Туре	Dimension	Surface Area	Weight
YS- R01	25×300	0.023	1.5	YS-R07	50×1500	0.25	20.5
YS- R02	38×900	0.12	7.5	YS-R011	75×900	0.28	34
YS- R03	38×1200	0.16	10	YS-R012	75×1200	0.30	40
YS- R04	38×1500	0.20	13	YS-R013	75×1500	0.38	48
YS- R05	50×900	0.16	13.5	YS-R014	100×1200	0.38	66
YS- R06	50×1200	0.20	16.5	YS-R015	100×1500	0.47	83



Compared with the solid rod anode, tube anodes can:



1. Minimize the resistance of anodes to electrolytes. 2. Increase the surface to weight ratio, thus reduce current density and distributing produced gases over larger areas. This is very important for deep layer installations. 3. Improve current distribution, relaxes end electric discharge, while the cable joint is located in the center of the tube.

Туре	Out Diameter	Wall thickness	Surface area	Length
YS-T01	75 mm	10 mm	0.35 m2	1500mm
YS-T02	100mm	10 mm	0.47 m2	1500mm