

Impressed Current Anode (ICCP)

High Silicon Cast Iron Tubular Anode in Water



High Silicon (Hi Si-Fe) Cast Iron Anode has been used successfully in the cathodic protection industry as one of the most reliable anodes. High silicon iron anode can be utilized a variety of electrolytes, soil, fresh water, and brackish water environments. It is also suitable for use in deep and conventional ground bed applications. Since the tubular anode is produced by Centrifugal Casting Technology, the quality of the alloy is high, and the composition is highly uniform.

Chemical Compositions

<u>Elements</u>	<u>Compositions</u>
Silicon (Si)	14.20 – 15.75 %
Manganese (Mn)	1.5 % Max
Carbon (C)	0.70 – 1.10 %
Chromium (Cr)	3.25 – 5.00 %
Molybdenum (Mo)	0.20 % Max
Copper (Cu)	0.5 % Max
Iron (Fe)	Balance

ASTM A518-86 Grade 3 and BS. 1591

Standard Sizes

Type	OD (mm)	Wall Thickness (mm)	Length (mm)	Weight (kg)	Surface Area (m ²)
MUI-56	56	10 Min.	2133	21	0.37
MUI-67	67	10 Min.	2133	28	0.46
MUI-95	95	10 Min.	2133	38	0.64
MUI-121	121	10 Min.	2133	50	0.81

Dimensions and weights shown are nominal of +/- 5 per cent.

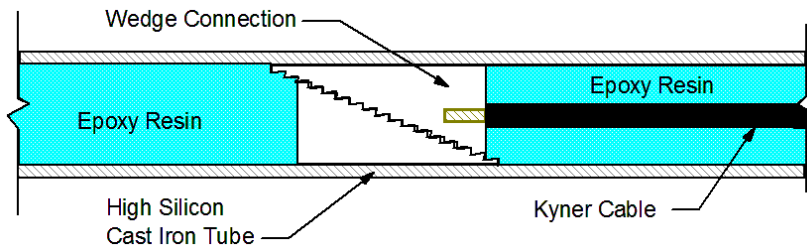
Non-standard sizes and weights of anode are available upon request.

High Silicon Cast Iron Tubular Anode in Water

Typical Consumption Rates

Environment	Current Density (Amp/m ²)	Consumption Rate (Kg/Amp-Year)
Fresh Water	10 - 30	0.15
Seawater	10 - 50	0.50

Cable Connection



Cable Information

Insulation Type	Application
XLPE/PVC	Suitable for underground and underwater application. The cable is flexible and easy to handle.
HMWPE	Suitable for underground and underwater application. The cable is not flexible.
PVDF Fluoropolymer (Kyner) /HMWPE	Insulation is super durable for soil, water and concrete application. This insulation is used as deep anode lead wires where chlorine and hydrogen gases are generated. The cable can be directly installed in fresh, brackish, or salt waters.
ECTFE Fluoropolymer (Hayler)/HMWPE	Fluoropolymer material that has exceptional chemical resistance in the presents of chlorine, sulfuric acid, hydrochloric acid. The outer insulating layer is high molecular weight polyethylene (HMWPE) it exhibits superior dielectric and tensile strength and provides mechanical protection.

Note: Wire-armored insulated cables are also available upon request for requiring extra protection.



Cable Size (mm ²)	AWG Cable Size	Approx. Max. Current Capacity (Amp)
10	8	40
16	6	55
25	4	70
35	2	85