

High Silicon Cast Iron Rod Anode



High Silicon (Hi Si-Fe) Cast Iron Anodes are one of the effective impressed current anodes and suitable in underground application. It is suitable for use in deep and conventional ground bed applications.

The anode composition meets ASTM A518 Grade 3 and BS 1591.

Specification

Elements

Silicon (Si)
Manganese (Mn)
Carbon (C)
Chromium (Cr)
Molybdenum (Mo)
Copper (Cu)
Iron (Fe)

Compositions

14.20 – 15.75 %
1.5 % Max
0.70 – 1.10 %
3.25 – 5.00 %
0.20 % Max
0.5 % Max
Balance

Standard Sizes

Type	Diameter (mm)	Length (mm)	Surface Area (m ²)	Weight (Kg)
1.5" x 60"	38	1520	0.20	12.7
2" x 60"	51	1520	0.25	22.5
2.5" x 60"	63	1520	0.32	34.0
3.0" x 60"	75	1520	0.36	49.0

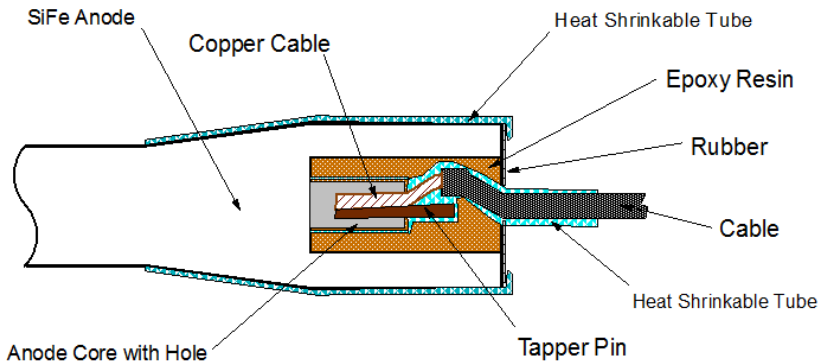
Dimensions and weights shown are nominal of ± 5 percent. Other sizes and weight are available upon request.

Anode Consumption Rate

Environment	Current Density (Amp/m ²)	Consumption Rate (Kg/Amp-Year)
Coke Backfill	10 - 30	0.1
Soil	10 - 30	0.30

Typical consumption figures is 88 % to 93%.

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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 (Kynar) /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