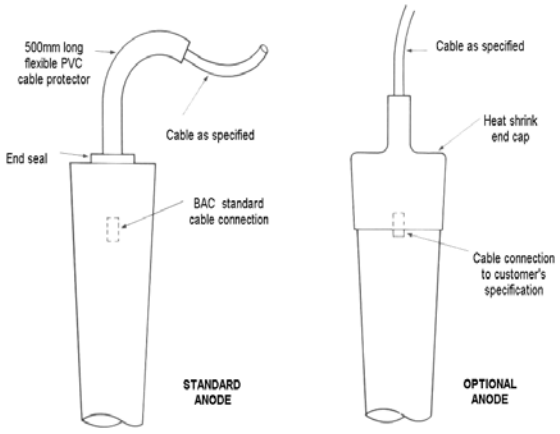
BAC®
CORROSION CONTROL

Technical Datasheet

SILICON IRON ANODES



Alloy Composition
The alloy contains chromium which is better suited to situations where chlorine or other aggressive agents may be generated by electrolysis (e.g. in seawater or in deep well groundbeds).

Analysis to ASTM A518-86 Grade 3

Silicon	14.5%
Chromium	4.5%
Manganese	0.75%
Carbon	0.95%
Molybdenum	-
Copper	-
Iron	Balance

Consumption rates
The rate of consumption of Silicon Iron Anodes will vary with current density, environment and method of installation. The following figures are for guidance only:

Environment	Current Density	Consumption Rate
Fresh Water	10-30 A/m^2	0.15 kg/Ampere/Year
Salt Water	10-50 A/m^2	0.50 kg/Ampere/Year
Wet Carbonaceous backfill	10-30 A/m^2	0.10 kg/Ampere/Year
Dry Carbonaceous backfill	10-30 A/m^2	Negligible

Length		Diameter (bottom)		Diameter (top)		Nominal Surface Area	Amps Output at Varying Current Densities				Approximate Weight
mm	ins	mm	ins	mm	ins	m^2	10 A/m^2	20 A/m^2	30 A/m^2	40 A/m^2	kg
915	36	51	2	76	3	0.16	1.6	3.2	4.8	6.4	14.5
1220	48	51	2	76	3	0.2	2	4	6	8	19.1
1525	60	51	2	76	3	0.25	2.5	5	7.5	10	22.7
Other shapes and sizes of anode available.											

Cable connection are made in the end cavities and sealed with epoxy resin and covered with a heat shrink sleeve to form a high quality seal against moisture penetration and provide a good electrical insulation and mechanical strength.