

Silicon Iron Solid Anodes[®]

Ferroline Anodes, produced by Corrpro Companies Europe Limited, are designed for the effective protection of steel structures and pipelines from corrosion by the impressed current method. They are manufactured from high silicon cast iron alloy, one of the most important anode materials used by the corrosion engineer to protect steel in a variety of situations.

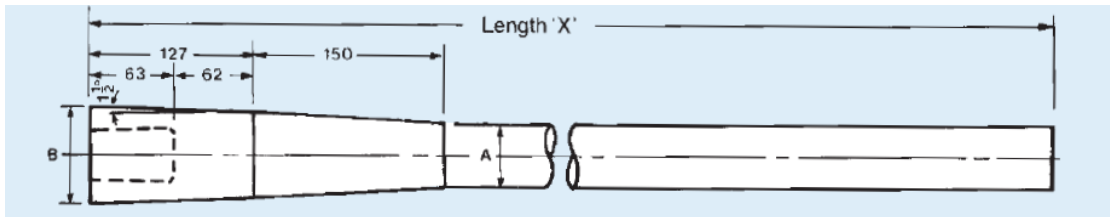
Specification

Composition		
Typical analyses of ferroline are		
	Ferroline N	Ferroline C
Silicon	14.25-15.25%	14.25-15.25%
Manganese	1.0% max	1.0% max
Carbon	1.0% max	1.4% max
Chromium	-	4.0-5.0%
Iron	Balance	Balance
Other compositions available to specification		
These specifications conform with ASTM A518-80 & BS 1591 Grade Si 14		
Typical Ferroline Consumption Rates		
Environment	Current density	Consumption Rate
	Amps/m²	kg/amp year
Fresh Water	10	0.11
Sea Water	15	0.31
	50	0.47
Sea Water 200F	10	0.41
Buried Sea Water/sand	8	0.68
Carbonaceous backfill	15	0.10

Anode Types

Ferroline anodes are cast in several shapes and sizes to meet a variety of requirements. The drawings following show details of the range available. Other special head configuration, shapes and weight anodes can also be made to order.

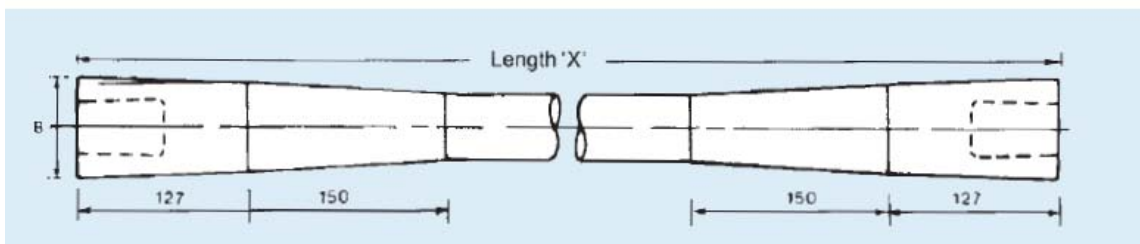
Single Headed Anode



Anode No.	Anode Dia 'A' mm (inch)	Head Dia 'B' mm (inch)	Overall Length 'X' mm (inch)	Weight kg (lb)
W75S (3")	76 (3)	100 (4)	910 (36)	32 (71)
	76 (3)	100 (4)	1220 (48)	33 (73)
	76 (3)	100 (4)	1525 (60)	50 (110)
W65S (2 1/2")	65 (2 1/2)	90 (3 1/2)	910 (36)	24 (53)
	65 (2 1/2)	90 (3 1/2)	1220 (48)	31 (68)
	65 (2 1/2)	90 (3 1/2)	1525 (60)	38 (84)
W50S (2")	50 (2)	74 (3)	910 (36)	15 (33)
	50 (2)	74 (3)	1225 (48)	19 (42)
	50 (2)	74 (3)	1525 (60)	23 (51)
W40S (1 1/2")	39 (1 1/2)	64 (2 1/2)	910 (36)	10 (22)
	39 (1 1/2)	64 (2 1/2)	1220 (48)	13 (29)
	37 (1 1/2)	64 (2 1/2)	1525 (60)	15 (33)
W25S (1")	30 (1)	40 (1 1/2)	300 (12)	2 (4)

Weights and Dimensions are nominal

Double Headed Anode



Specification

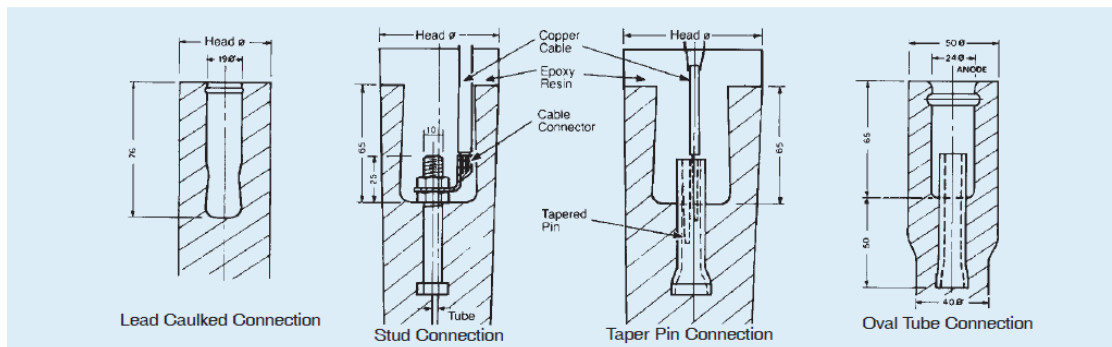
Corrpro Companies Europe Limited supply a range of tubular anodes in both Ferroline N and Ferroline C grades. Tubular anodes have a centre cable connection which in certain applications can prevent end effects and result in more uniform consumption.

DS1 Anodes

The Durichlor 51 Anode company (Durichlor™) is wholly owned by Corrpro Companies and the full Durichlor range of silicon iron anodes (WCD, WD, WM, WE, WQ & WSM) are available on request.

Anode Cable Connection

There is a choice of four types of cable connection available with the Lead Caulk as standard. Whenever necessary, special requirements can be catered for. The standard formats are detailed below.



Anode Caps

3M anode caps may be factory fitted to cabled anodes. They are designed to counteract 'end effect' when single end anode connections are specified. The caps have protective polymeric lining capable of withstanding corrosive environmental conditions including chlorine and sulphate attack. They are manufactured from cross-linked polyethylene and shrink fitted over the end of the anode. The dielectric strength of the end caps is 10kV per mm.

Cables

Ferroline Anodes can also be supplied complete with cables connected to the casting and resin encapsulated. Various sizes and types of cable can be supplied, standard sizes in 6, 10, and 16 x 25 mm sq with cable to suit all environments. Standard cable insulation is XLPE/PVC. Cable technical data sheets are available on request.

Cannistered

Ferroline Anodes can also be supplied in galvanised steel canisters c/w backfill. Details available upon request.

Canisters			
Material: Galvanised Steel			
Diameter (mm)	Length (mm)	Volume (m3)	Canister Code
75	1500	0.0066	75x1500
50	1524	0.0030	50x1524
76	2000	0.0091	76x2000
100	1524	0.0120	100x1524
120	2000	0.0226	120x2000
125	1500	0.0184	125x1500
125	2000	0.0245	125x2000
150	1750	0.0309	150x1750
150	2000	0.0353	150x2000
152	1500	0.0272	152x1500
200	1830	0.0575	200x1830
200	2000	0.0628	200x2000
200	2130	0.0669	200x2130
203	1500	0.0485	203x1500
224	1800	0.0709	224x1800
250	2200	0.1080	250x2200
250	2438	0.1197	250x2438
300	1000	0.0707	300x1000
300	2000	0.1414	300x2000
500	3500	0.6872	500x3500

Quality Assurance

Corrpro Companies Europe Limited operates a quality assurance management system conforming to ISO 9001:BS EN 2008. Full quality procedures applied to the manufacture of silicon iron anodes and other products result in full materials traceability and ensure reliability and consistency of anode performance. All anodes conform to the requirements of BS 1591 Grade Si 14 & ASTM A518-80 and can be supplied with materials test certificates required. Alternative requirements can be fulfilled on request.