ZINC RIBBON ANODES

REVISION 1

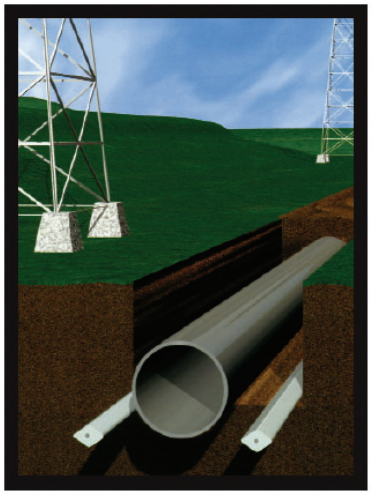
APPLICATION

Zinc ribbon anodes provide a very simple, cost effective, maintenance-free method of corrosion control for buried or immersed metals such as iron, steel. aluminium, copper, etc. It is especially useful for unattended applications; those where other cathodic protection systems requiring monitoring and/or frequent maintenance cannot be possible.

It can also be used as a temporary system prior to the installation of an impressed current system and as a method of providing AC mitigation.

TYPICAL USES

- External areas of steel pipe, especially in difficult environments such as below grade in rocky and mountainous terrain, thawed zones in permafrost, etc.
- Interior bottom areas of oil storage tanks where salt water settles out.
- Exterior bottoms of oil storage tanks.
- Interstitial spaces between old, corroded and new storage tank bottoms.
- In the limited space between inner and outer casings of wells of various kinds.
- For grounding steel tower footings of overhead power systems.
- To provide cathodic protection as well as to dissipate induced A.C. current on coated steel pipe.
- For personnel safety, as well as corrosion protection. To ground valves and test stations of pipe lines which are subject to induced A.C. current and fault currents.



Typical installations on pipelines and tank bottoms

Venture Way, Grantham, Lincs NG31 7XS UK. Tel: +44 (0)1476 590666 Fax: +44 (0)1476 570605
Email: cpc@cathodic.co.uk Website: www.cathodic.co.uk
Registered Office: Minalloy House, Regent Street, Sheffield S1 3NJ, UK VAT No. 116 8408 71, Reg'd in England No. 478098

ZINC RIBBON ANODES

REVISION 1

ELECTROCHEMICAL PROPERTIES OF ZINC RIBBON ANODES	TYPE I	TYPE II
Open Circuit Potential (-V)*	1.05 min.	1.10 min.
Closed Circuit Potential (-V)*	1.00 min.	1.05 min.
Current Capacity (amp-hrs/lb)	819	819
Galvanic Efficiency (%)	95	90
Consumption-Actual (lb/amp•yr)	54.63	57.71

* wrt Ag/AgCl Reference Electrode

STANDARD SIZES AND TYPES AVAILABLE

Specification Chart				
Product Size	Super	Plus	Standard	Small
Cross Section:				
Inches	1"x1-1/4"	5/8"x7/8"	1/2"x9/16"	11/32"x13/32"
Millimeters	25.4x31.75	15.88x22.22	12.7x14.28	8.73x10.32
Weight/foot, Pounds[1]	2.4	1.2	0.6	0.25
Weight/kg., Meters	3.570	1.785	0.8925	0.372
Diameter of wire core[2]				
Inches	0.185	0.135	0.130[3]	0.115
Millimeters	4.70	3.43	3.30	2.92
Standard Coil Length[4]				
Feet	100^{+10}_{-0}	200^{+20}_{-0}	500^{+30}_{-0}	1000^{+50}_{-0}
Meters	30.5^{+3}_{-0}	$61^{+6.1}_{-0}$	152^{+9}_{-0}	305^{+15}_{-0}
Standard Coil I.D.				
Inches	36	36	12	12
Centimeters	91.44	91.44	30.5	30.5
Packaging	Steel-banded random-wound open coils	Steel-banded random-wound open coils	Wood Reels	Wood Reels

[1]All dimensions and weights are nominal.

[2]Galvanized steel.

[3]"Arctic" standard size has nominal core diameter of .163"

[4]Longer coil lengths are available on special order. Standard size also available in reels of 1000ft and 3600ft.

Venture Way, Grantham, Lincs NG31 7XS UK. Tel: +44 (0)1476 590666 Fax: +44 (0)1476 570605
Email: cpc@cathodic.co.uk Website: www.cathodic.co.uk
Registered Office: Minalloy House, Regent Street, Sheffield S1 3NJ, UK VAT No. 116 8408 71, Reg'd in England No. 478098