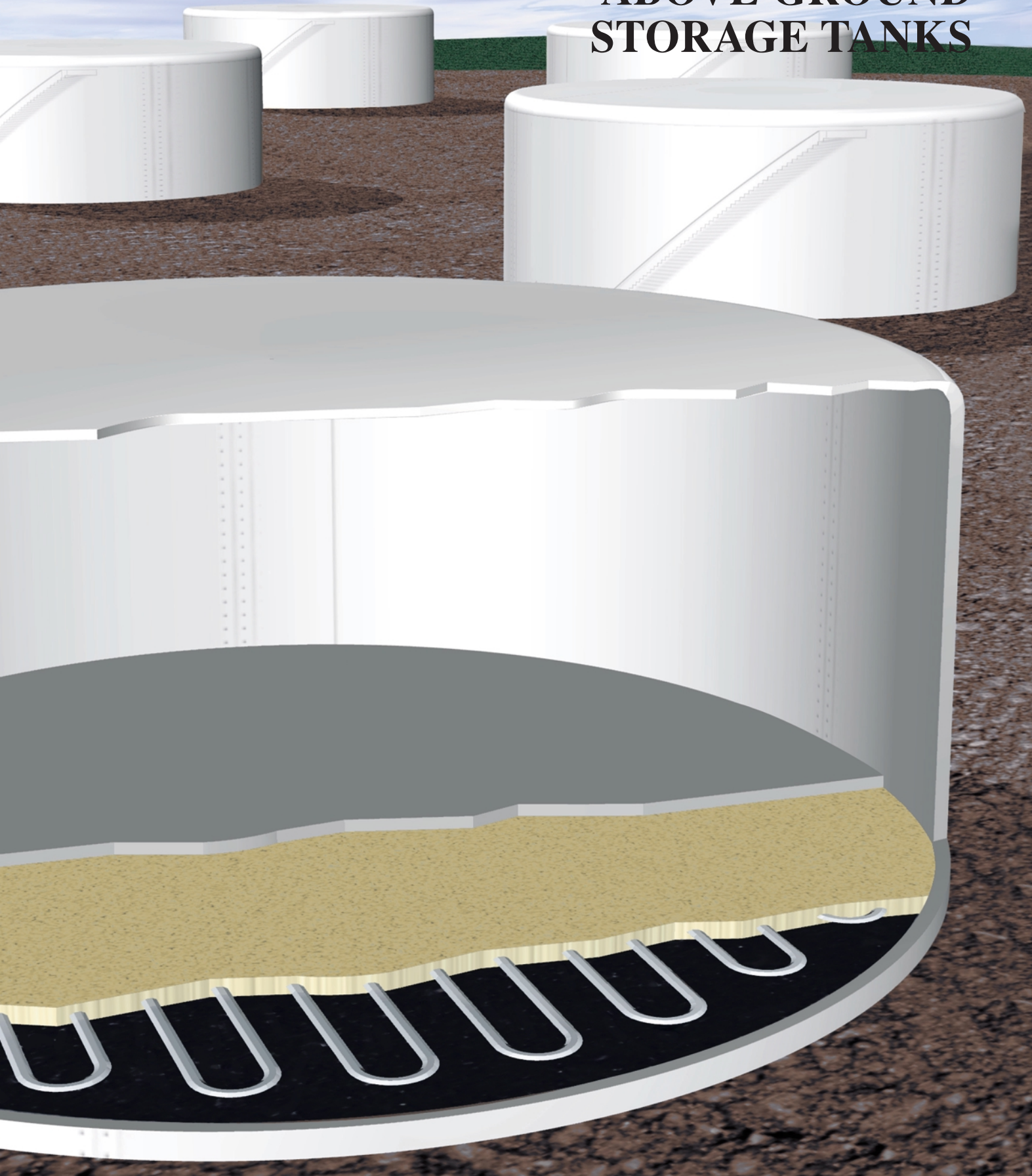


**PLATLINE™**  
**ZINC RIBBON ANODES FOR**  
**ABOVE GROUND**  
**STORAGE TANKS**



# PLATTLINE™ ZINC RIBBON ANODES

Cathodic Protection (CP) is the application of direct current to reverse the natural tendency for metals to return to their natural condition as metal oxides (rust). CP prevents the corrosion process from occurring.

Corrosion occurs in the presence of moisture. In Above Ground Storage Tanks, it is important, both economically and environmentally, to protect tank bottoms from corrosion. The area under the tank bottom can become moist and can remain moist from ground moisture, under-tank condensation or seam leakage.

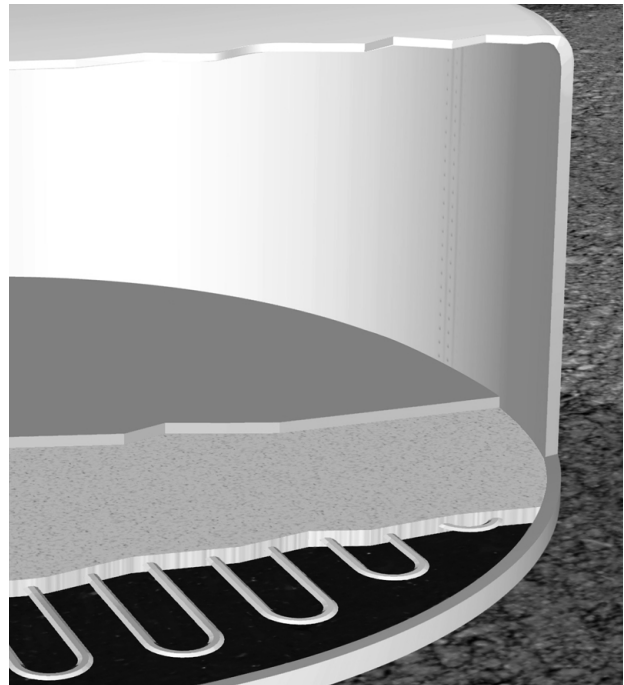
Present regulations make protection of the tank bottom desirable. Whether the tank bottom is the initial bottom of a new tank, a replacement bottom, or a double bottom, proper corrosion protection is important.

In the past, replacement bottoms were installed over the old bottom and welded to the old bottom at the tank wall. This procedure closes the corrosion circuit, making the new steel anodic to the old tank bottom, and in the process accelerating the corrosion process of the new metal.

Experience has shown that a properly designed and installed zinc ribbon anode system in the interstitial space between new and old tank bottoms is very effective at providing cathodic protection. This system has been recognized throughout the industry as the most cost effective and efficient method of corrosion control today.

Plattline™ Zinc Ribbon Anodes provide a simple and cost effective method of corrosion control for Above Ground Storage Tank bottoms. The zinc ribbon is self regulating which means that it will protect the steel tank bottom when the electrolyte (the sand) is conductive (moist) only on demand. When the demand decreases, the zinc ribbon output will decrease as well. No external power source is required.

Plattline™ is a continuous zinc ribbon and simple to install. No special tools are required and there is no need for constant monitoring or maintenance once the system is installed.



*Figure 1 – Plattline™ Zinc Ribbon Anodes are used to protect above ground storage tank bottoms.*

## Features

- Easy to install.
- Even distribution of current density.
- Self-regulating current output.
- Continuous lengths enable a variety of designs.
- Normal design life of 20 years or more.
- Anode configuration is ideal for use in small or limited spaces.

## Installation

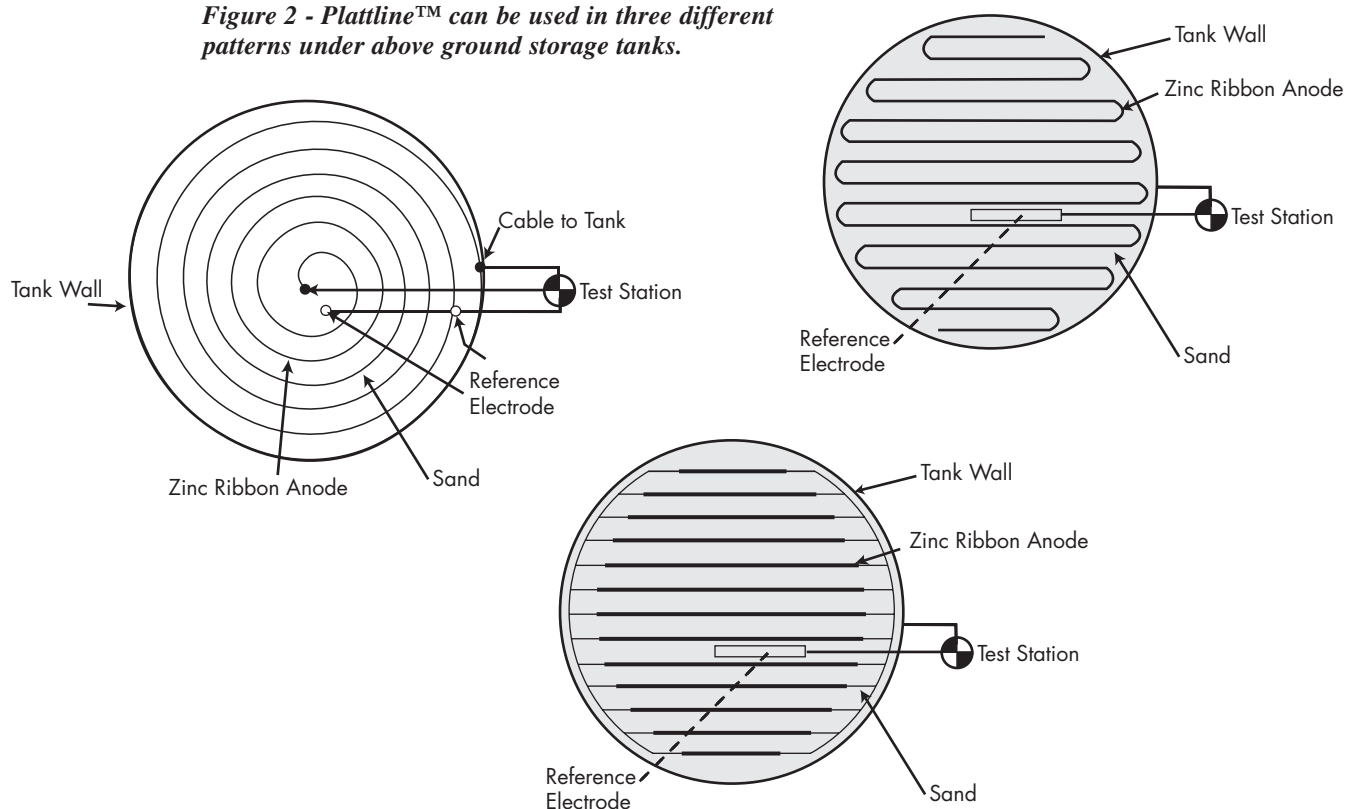
Plattline™ Zinc Ribbon Anode can be installed in several ways. It can be cut into lengths and connected by a lead wire along the tank bottom or it can be laid out in a spiral or serpentine fashion in a continuous length along the tank bottom. Each of these installation patterns is illustrated in Figure 2 on the next page and takes place in the sand electrolyte which is approximately four to six inches deep.

### ELECTROCHEMICAL PROPERTIES OF ZINC:

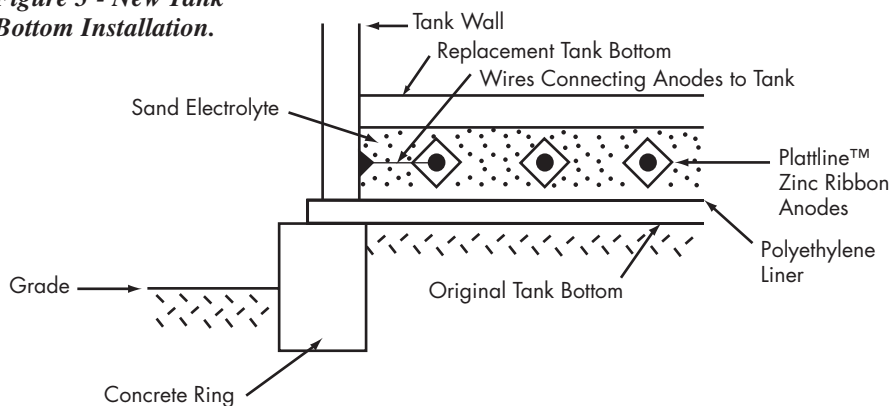
Galvanic Efficiency: 90% to 95%  
Current Capacity-Ampere-Hours/Lb. 372  
Consumption-Actual-Lbs./Amp. Year  
Plattline II: 26.2\*  
Solution Potential, volts to saturated  
Copper/Copper Sulphate Electrode -1.1  
\*At 90% Efficiency

# FOR ABOVE GROUND STORAGE TANK BOTTOMS

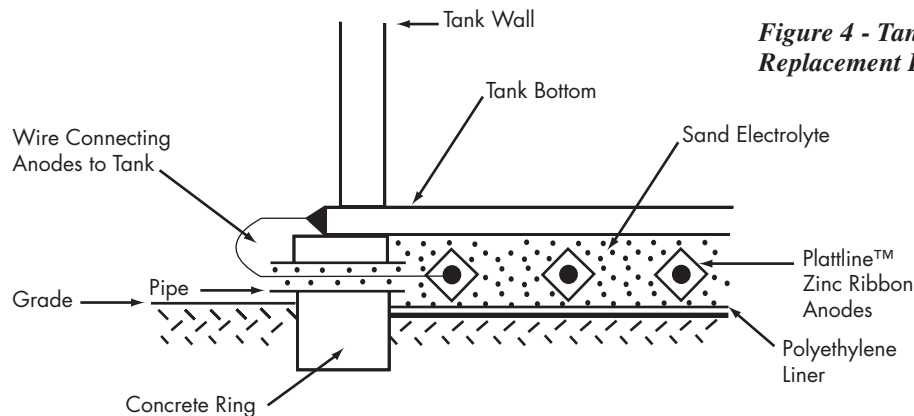
**Figure 2 - Plattline™ can be used in three different patterns under above ground storage tanks.**



**Figure 3 - New Tank Bottom Installation.**



**Figure 4 - Tank Bottom Replacement Installation.**









# PLATTLINE™ ZINC RIBBON ANODES

## Product Data Sheet

Plattline™ zinc ribbon anodes are used in a variety of applications. They are used for cathodic protection on buried pipelines, for A.C. mitigation on pipelines, for sacrificial cathodic protection of secondary bottoms on above-ground storage tanks, for A.C. mitigation grounding mats and for other corrosion protection applications.

Specification Chart				
Product Size	Super	Plus	Standard	Small
Cross Section: Inches Millimeters	1" x 1-1/4" 25.4 x 31.75	5/8" x 7/8" 15.88 x 22.22	1/2" x 9/16" 12.7 x 14.28	11/32" x 13/32" 8.73 x 10.32
Weight/Foot, Pounds <sup>1</sup> Weight/Kg., Meters	2.4 3.570	1.2 1.785	0.6 .8925	0.25 .372
Diameter of wire core <sup>2</sup> Inches Millimeters	0.185 4.70	0.135 3.43	0.130 <sup>3</sup> 3.30	0.115 2.92
Standard Coil Length <sup>4</sup> Feet Meters	100 <sup>+10</sup> <sub>-0</sub> 30.5 <sup>+3</sup> <sub>-0</sub>	200 <sup>+20</sup> <sub>-0</sub> 61 <sup>+6.1</sup> <sub>-0</sub>	500 <sup>+30</sup> <sub>-0</sub> 152 <sup>+9</sup> <sub>-0</sub>	1000 <sup>+50</sup> <sub>-0</sub> 305 <sup>+15</sup> <sub>-0</sub>
Standard Coil I.D. Inches Centimeters	36 91.44	36 91.44	12 30.5	12 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 inches (4.140 mm.)

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



**Plattline I** is an alloyed zinc product and is generally used in seawater or brackish water systems. It meets the chemical requirement of MIL-A-18001K and ASTM B418-95a Type I.

**Plattline II** is a high purity product and generally used in underground and fresh water systems. It meets the chemical requirements of ASTM B418-95a Type II.

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