

# The Grid™

*Impressed current system for aboveground storage tank bottoms*

ENERGY & MINING



For over 25 years, Corrpro has been a leading provider of corrosion services and products, including engineering, pipeline integrity, construction, coating inspection and cathodic protection materials. We offer corrosion solutions for every market, including pipeline, refinery, water, wastewater, concrete, infrastructure, offshore, marine, above and underground storage tanks. With operating facilities and warehouses worldwide, we are there when you need us.

## The Grid™

For new storage tanks with secondary containment liners and older tanks retrofitted with an additional tank bottom, Corrpro offers The Grid™—a revolutionary impressed current system that will make a significant impact on the life of your aboveground storage tank.

The Grid™ is a patented design that offers proven corrosion protection and extends the life of tank bottoms, thereby reducing liabilities and maintenance costs.

## Highlights of The Grid

- Design life of 20 to 50 years
- Even distribution of current
- Turnkey service including engineering, materials and installation



*(continued on back)*

**corrpro**®  
An Aegion® Company

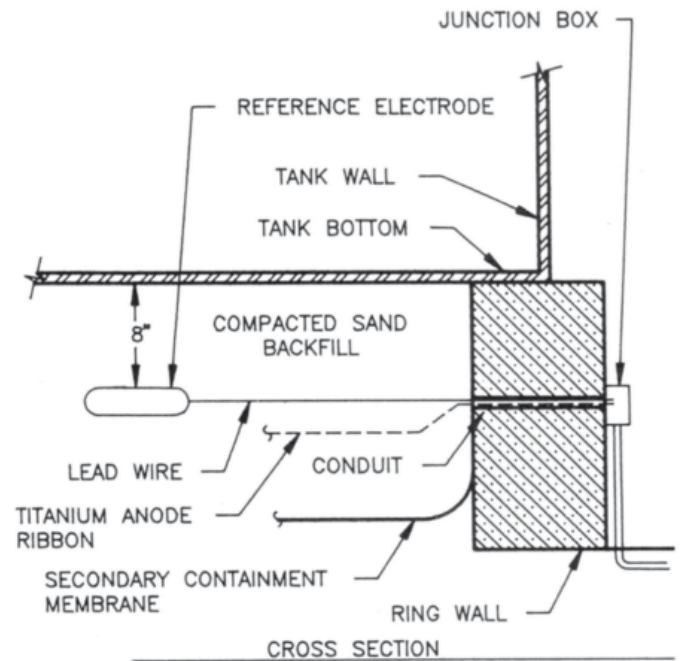
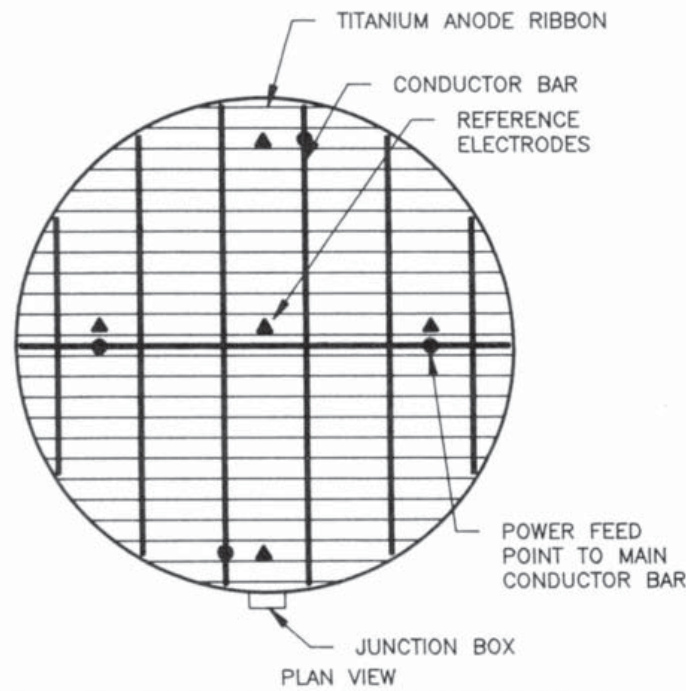
## Protection for Aboveground Storage Tank Bottoms

Cathodic protection is an economical method for controlling corrosion on the bottoms of aboveground storage tanks. While sacrificial systems can be used, impressed current systems have proven to be more effective and easier to install. For new storage tanks with secondary containment liners and older tanks retrofitted with an additional tank bottom, Corrpro offers The Grid™, an impressed current system with a design life of 20 to 50 years, depending on project requirements. The system is comprised of ribbon anodes evenly spaced in a parallel configuration typically on 5-foot centers. Through resistance welding, the anodes are attached to multiple distributor bars to create a grid shaped pattern. The close anode spacing and redundant electrical connections created by this design ensure uniform current distribution to all areas of the tank bottom.

The ribbon anodes used in this system are made from a titanium substrate, which is coated with a mixed metal oxide catalyst. Because the titanium substrate is naturally protected by an oxidizing film, the ribbon anode remains dimensionally stable over the life of the system. Direct current transfer is accomplished through the mixed metal oxide catalyst, which is highly conductive and fully oxidized so that higher current outputs are possible.

On new tank installations, the anodes are placed in a layer of sand above the secondary containment liner. For older tanks that are being retrofitted with a secondary tank bottom, the anodes are again placed above the liner in a layer of sand, and may be covered with a plastic isolation mat to protect against shorting.

No field splices are necessary with The Grid™ system. The connection between the lead wire and the main power distributor bar is made at the factory. It is encased in an epoxy tube and is completely water tight. Reference cells used in the system include Corrpro's Permacell Plus, a copper sulfate cell. Junction boxes are offered with either cast aluminum cases, for areas requiring explosion-proof equipment or in fiberglass cases, which are NEMA Type 4X rated. Rectifiers are available to meet specific project requirements.



**corrpro**®

*An Aegion™ Company*

**Corrpro Companies, Inc.**

800.443.3516 United States  
 800.661.8390 Canada  
 44.1642.614106 Europe  
 966.3.808.9637 Middle East

[www.corrpro.com](http://www.corrpro.com)