

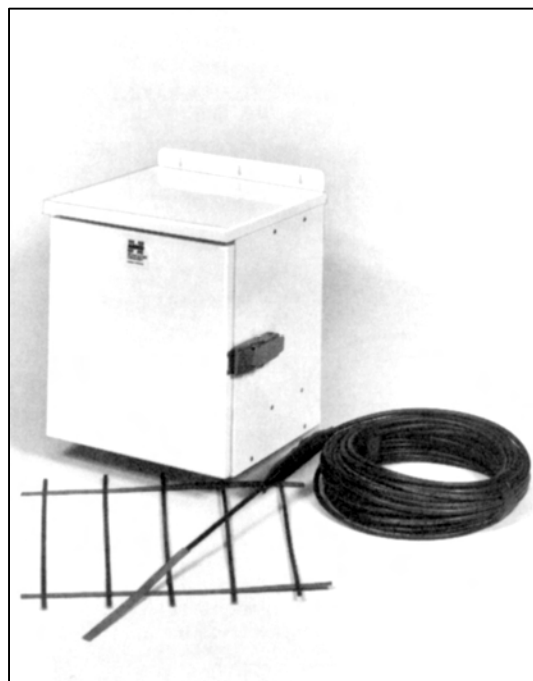
# The Grid<sup>™</sup>

## Impressed Current System

### 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, and impressed current system with a design life of 20 to 50 years, depending on project requirements. The system is composed of ribbon anodes spaced five feet apart in a parallel configuration. 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.



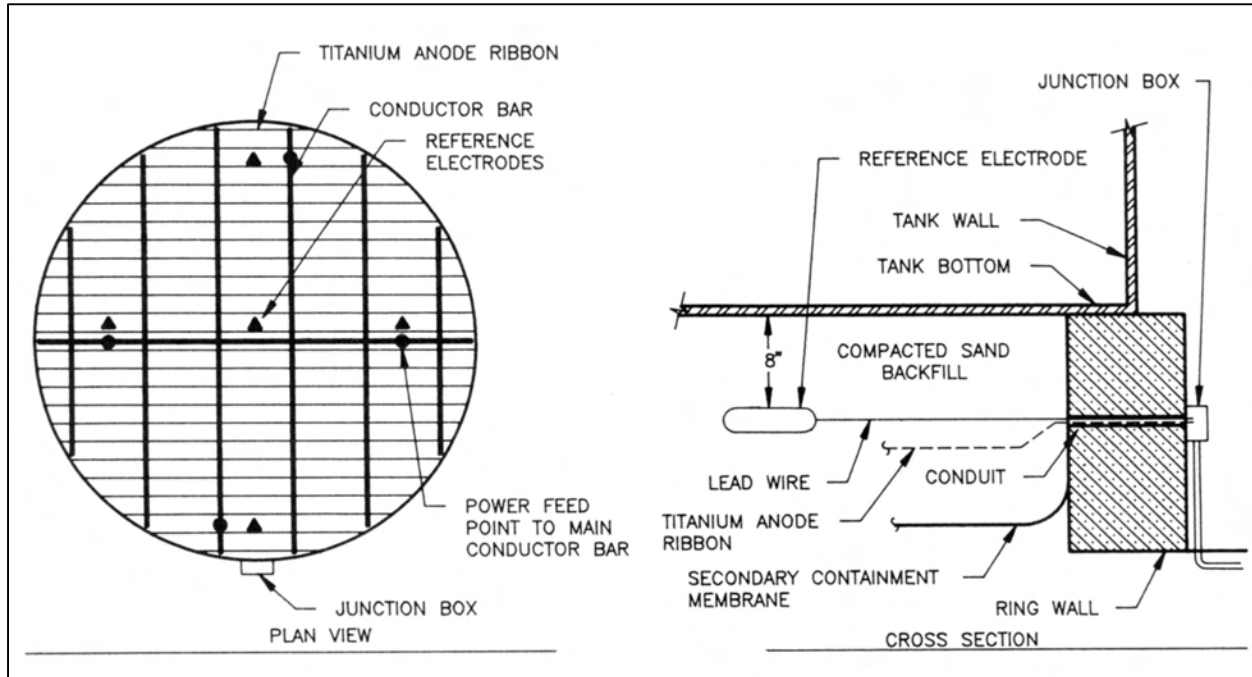
No field splices are necessary with The Grid system. The connection between the lead wire and the main power distributor bar is made at the factory. It is encased in an epoxy tube, and is totally water tight. Reference cells used in the system include Corrpro's Permacell 802, a copper/copper sulfate cell. Junction boxes and rectifiers provided with the system are offered with either cast aluminum cases, for areas requiring explosion-proof protection, or in fiberglass cases, which are NEMA Type 4X rated.



#### Corrpro Companies Europe Limited

Adam Street, Bowesfield Lane, Stockton on Tees, TS18 3HQ  
Telephone: (01642) 614106 (8 lines) Telex: 587388  
Fax: (01642) 614100 E-mail: ccel@corrpro.co.uk

## The Grid™ Impressed Current System



### Typical Applications

The Grid system is designed for protection of aboveground storage tank bottoms. It may be used on new tank installations with secondary containment liners, or existing tanks retrofitted with a double bottom. The system can be installed by Corpro's trained technicians or any certified tank installer.

### Ordering Procedure

Corpro's tank bottom system is custom made to satisfy design specifications. To learn how the system can be used to effectively protect your structure, contact your local Corpro representative.



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