### **Cathodic Protection**



### Protection and Testing for Underground Propane Storage Tanks

Note: NFPA 58 2011, section 6.6.6.1 for testing recommendations

- 1) Test cathodic protection within 180 days of installation
- 2) Verify effectiveness 12 to 18 months after initial test
- 3) Periodic follow-up testing intervals 36 months intervals

The testing must be documented with record retention of the last 2 tests

# Compact Cathodic Protection Testing Kit

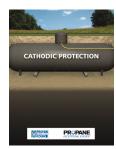
Anode Test Kit

#### Contains:

- 6A copper sulfate half cell
- Digital multi-meter w/leads (VEI)
- Copper sulfate crystals (1 lb. 3 oz.) all in a convenient hard sided carrying case.

Items also sold separately.





< PERC Cathodic Protection Training video

3715



Bergquist offers free on-site\* Cathodic Protection Training.

\* contact your Area Sales Manager to set up a class time.

### Testing for Corrosion Protection

How do you know if your tank is protected? It only takes a minute to check. As stated in the section on cathodic protection, if the voltage of steel is -0.85 volts or greater, it is protected. It takes a volt meter and a copper sulfate electrode to take the reading. If can be taken by a propane gas supplier technician with a basic understanding of cathodic protection. If the reading is greater than -.85 volts, you can assume that the tank is protected at the location where the reading was taken on the date it was taken. If the reading is below -.85 volts, the anode installed on the tank either has been consumed, or the tank is connected to the house utilities without a dielectric union or the wire has been disconnected. Occasionally, there is a problem with the testing equipment or contact to the tank. It takes practice and experience to find the answer to these problems. There are other causes for a low reading which might require a cathodic protection technician or a corrosion engineer to determine.

Hans Schmoldt recommends taking at least four reading around the tank once a year. (reprint from Anode Systems Co. - Hans Schmoldt)



17 10 | 9 10 | 5 10

Anode Bag Pallet Pricing...50 per pallet 17 lb plus free freight

### General recommendations;

Use 1-17 lb. anode bag on a 500 gallon tank and 2-17 lb. bags on a 1,000 gallon tank. 5 lb. and 9 lb. bags are used on piping and general use.

#### Advantages of our anodes bags...

- Made from pure Magnesium Ore...high quality ore provides more current per pound increasing tank protection compared to grade B recycled Magnesium with added ore.
- 13' lead wire (more flexibility during installation) compared to a 10' lead wire.
- Our anodes are packaged in individual boxes for protection during shipping.
- Ingot style bags provides increased surface for more protection versus the rounded style anode bags.





## < Anode Clamp

The anode clamp is an alternative method of attaching anode bags to underground tanks, eliminating the need for cad welding.