

# DEEPWATER

## TANKGARD™ INTERNAL CATHODIC PROTECTION SYSTEM FOR TANKS

**TankGard is the only system of its kind, providing reliable CP for up to 10 years.**

Deepwater pioneered the TankGard impressed-current cathodic protection system for internal tank corrosion. Since the mid-1980s, TankGard systems have been addressing the inherent corrosion issues of harsh-environment upstream-process tanks and vessels, making internal corrosion prevention for tanks much easier to implement and monitor.

The TankGard systems were pioneered in the San Joaquin Valley oil fields of California where produced water is hot and sour and there is a high tendency for scaling and sludging. Deepwater installed several prototype systems in which all combinations of anodes and reference electrodes were evaluated. The result was a reliable, low-cost system that has proved to last the entire 10-year design life.

### FlangeMate™ anodes

At the heart of the system is the innovative FlangeMate anode-mount; this system isolates the impressed-current anode from the vessel within the mount and eliminates spark hazards from insulated flange or Victaulic mounts. The Polatrak® HP-1Z™ and RT-1Z™ reference electrodes coupled with an IR-free, potentially-controlled power unit complete the system.

There is also a floor-mounted anode which helps distribute cathodic protection current more effectively.

### Fit-for-purpose reference electrodes

The Polatrak HP-1Z is a permanent reference electrode designed to allow positive monitoring and control of cathodic protection potentials. This instrument is rated to 3,000 PSI, making it suitable for almost any vessel. The electrode may be wired to a monitoring station or simply read directly at the vessel using a multi-meter.

The self-bleed zinc electrode material used to manufacture the HP-1Z and RT-1Z provides a rugged +/- 20 mV electrode for just about any environment, and the 3,000 PSI pressure rating is suitable for almost any pressure vessel. It can be inserted through any fitting providing a 1/2" or 3/4" NPT access.

More info at [www.stoprust.com](http://www.stoprust.com)



### TANKGARD

TankGard system on a Chemelec-type vessel. A tech is checking the electrodes.



### ANODES

FlangeMate anodes and floor-mount anodes provide the CP.



### HP-1Z PERMANENT REFERENCE ELECTRODES

Provide CP potential readings with a multimeter or via a monitoring panel.