



Submerged in concentrated salt water for 5,000 hours.

## Corrosion Is Expensive, Protect Your Investment! A Common Sense Approach To Corrosion Control Save Downtime And High Repair Cost

### Understanding Corrosion:

Corrosion is the result of electrochemical activity ... galvanic action. Scientific studies have proven that metals having a higher electrical potential will corrode and degrade in a typical corrosion cell, while protecting other metals having a slower electrical potential. Of all metals, Zinc has the highest electrical potential.

The most common type of corrosion cell is a simple Battery. The outer case is made of a zinc alloy having a negative charge ... the anode. The center post is a carbon rod having a positive charge ... the cathode. Separating the two is a filler ... the electrolyte. In operation, the positive current charge rushes from the zinc anode to the cathode, causing eventual pitting of the zinc case. As the electrochemical activity stabilizes, the battery loses strength. The aggressive nature of the electrolyte determines the current output and the life of the battery.

The same phenomenon occurs in submerged water and gas mains. The pipes and fittings are buried in an electrolyte ... the moist soil. The unprotected lines and fittings ... the cathode ... have a positive charge and the current generated is discharged directly into the soil in the electrochemical process of corrosion. Corrosion failures of water and gas mains are directly related to the failure of either the bolt/nut combination, or the flanges secured by the combination. By adding a sacrificial metal. .. zinc caps ... the natural current flow is altered, flowing from the anode ... (the zinc caps) ... to the cathode ... (the pipe and fittings), through the electrolyte ... (the moist soil) ... and preventing corrosion.

## Applications

- Zinc anode caps should be used on buried or submerged pipeline fittings, valves, flanges, bolts, couplings and hydrants.

### Sizes

- 2.5 oz. Hex  
Thread Size: 1/2", 3/8", 5/8", 3/4"
- 2.5 oz. Tapered  
Thread Size: 5/16", 3/8", 1/2", 7/16"
- 6 oz. Hexagon  
Thread Size: 1/2", 5/8", 3/4", 7/8", 1", 1 1/8"
- 14 oz. Hexagon  
Thread Size: 1 1/8", 1 1/4", 1 1/2", 1 3/4"



**Pollardwater**