

The image features a dark blue background with a white utility pole and crossarm. The pole has two crossarms, each with five red insulators. A red rectangular sign with a white border is mounted on the top crossarm. The word "KORTICK" is written in large, white, bold, sans-serif capital letters on the sign. Below the sign, the text "Pole Line Hardware" and "Construction Specialties" is written in a white, cursive script. The utility lines are represented by thin white lines extending from the pole.

**KORTICK**

*Pole Line Hardware  
Construction Specialties*

Thermal Diffusion  
Galvanizing  
Comparative  
1500 Hr B117 Salt  
Spray Results

# Testing Background

- Testing done at independent certified lab:  
Calcoast-ITL  
683 Thornton Street  
San Leandro, CA 94577 USA
- ASTM B117 protocol
- Start Date 9/9/2013
- Complete as of 11/11/2013

# Definitions

- “HDG”-Hot Dip Galvanizing per ASTM 153
- “TDG”-Thermal Diffusion Galvanizing per ASTM 1059
- “ERX”-two samples have corrosion resistant paint applied on top of HDG or TDG. *(ERX intended for structural components. Applied to bolts for comparative corrosion purposes only. Not for use on field bolts)*
- “SS” stainless steel. Both grades 304 and 316
- “Zinc Electroplating” per ASTM F1941

# Bolts Tested-Pictured at 500 Hrs



First row from left to right: ERX painted HDG, 316ss, 316ss, 304ss, 304ss, HDG silicate coated, HDG silicate coated, HDG, HDG, TDG

Second row from left to right: ERX painted TDG, Electroplated, Aluminum, TDG

# All @ 1500 Hrs



From left to right:

TDG (2), 316 SS (2), 304 SS (2), Silicate Coated HDG (2), HDG (2),  
Aluminum( 1), electroplated (1), ERX TDG (1), ERX HDG (1)

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# TDG @ 1500 Hrs



316 SS @ 1500 Hrs



# 304 SS @ 1500 Hrs



# HDG @ 1500 Hrs



# HDG Silicate Coated @ 1500 Hrs



# Top-Electro Plated Coated Bottom-Aluminum @ 1500 Hrs



# Top-ERX painted on HDG, Bottom ERX painted on TDG @ 1500 Hrs



# All @ 1000 Hrs



# TDG, HDG @ 1000 Hrs



# Threads close up @ 1000 Hrs



## Thread Status:

316 SS-one minor corrosion point. Usable

HDG Silicate-corroded. Unusable

HDG-Badly corroded. Unusable

TDG-No corrosion. Usable

# HDG @ 500 Hrs



**Status:**  
Heavily corroded  
Frozen Threads  
Unusable

# TDG @ 500 Hrs



## **Status:**

Zero corrosion head, body, chamfer.

Free threads with zero corrosion.

# Silicate Coated HDG @ 500 Hrs



## ***Status:***

Heavy corrosion  
head, chamber,  
body, threads.  
Frozen Threads,  
unusable.

# 304 and 316 SS @ 500 Hrs



## **304 Status:**

Minor corrosion point on head and chamfer.

No body corrosion

Fully functional threads, one minor corrosion point.



## **316 Status:**

Minor corrosion point on head and chamfer.

No body corrosion

Fully functional threads, no corrosion

# Aluminum @ 500 Hrs



**Status:**  
Heavily corroded  
unusable

# Electroplated Zinc @ 500 Hrs



**Status:**  
Heavily corroded  
unusable

# Kortick Manufacturing Hayward, California

Experience, Expertise, and Innovation in  
T&D Hardware

The logo for Kortick Manufacturing, featuring the word "KORTICK" in a bold, black, sans-serif font with a white outline, set against a red background within a black rectangular border.

**KORTICK**