

ZERION TR-70, TR-110, & TR-170

CORROSION PROTECTION OF

**TRUNNIONS, PIPE SUPPORTS,
AND DEAD-LEGS**

**CORROSION
PROTECTION**

Zerion TR provides corrosion protection for trunnions on offshore platforms which are susceptible to interior corrosion, primarily caused by the ingress of seawater leaving residual salt inside the trunnion over time. Zerion TR also provides corrosion protection to dead-legs in piping or tubing systems where there is no process flow creating an environment more conducive to corrosion. Zerion TR offers corrosion protection to carbon steel, stainless steel, and super duplex stainless steel.

Recommended Product Applications

Recommended applications for Zerion TR corrosion inhibitors include, but are not limited to the following:

- Trunnions
- Permanent or Physical Dead-Legs
- Temporary Dead-Legs (Mothballed or Temporarily Out-of-Service)
- Pipe Supports

Application Guidelines

Trunnion Preparation

1. Each trunnion will need two holes:
 - a. Vent hole
 - b. Drain hole
2. Inspect each trunnion and locate the existing vent hole
 - a. Typical size for the vent hole is 12-13mm (1/2")
3. Determine a location for the drain hole
 - a. Drill the drain hole at the lowest point of the trunnion
 - b. Thread the drain hole
 - c. Typical size for the drain hole is 12-13mm
4. Flush the trunnion interior with compressed air

Inhibitor Installation

1. Install plug into the drain hole
2. Determine the volume of inhibitor needed for the trunnion
 - a. The target volume of inhibitor is 25%
3. Fill the measuring beaker to the required volume
4. Insert the end of the tubing of the funnel/tubing assembly into the vent hole
5. Pour the inhibitor powder into the funnel
6. Install plug into the vent hole

For trunnions requiring 1 liter of inhibitor or greater, the use of the auger feeder is recommended.

Product Description

Zerion TR corrosion inhibitors have demonstrated the ability to mitigate corrosion within trunnions as the result of intermittent seawater ingress for carbon and stainless steel substrates.

Zerion TR is a versatile new corrosion inhibitor formulation specifically designed to protect ferrous metals in aggressive corrosion environments against the accumulation of water, moisture, and/or water ingress.

Zerion TR solution will provide Vapor Corrosion Inhibitors (VCIs) to protect the interiors of “air space” voids and exposed metal surfaces on welded joints, in crevices, at coating holidays, etc., and Soluble Corrosion Inhibitors (SCIs) that will mitigate corrosion from moisture accumulation or the ingress of water.



Physical Properties

Product Name	Asset Operating Temperature
<i>Zerion TR-70</i>	Ambient to 70°C
<i>Zerion TR-110</i>	70°C to 110°C
<i>Zerion TR-170</i>	110°C to 170°C

Maximum operating temperature of the asset dictates which Zerion TR formulation to use.

Availability

Availability

Available in 2kg pail.

Storage

Shelf life: 2 years

Store tightly closed in the original container in a dry, well-ventilated area at room temperature.

Part No. TR-70 460-F-00019PL
TR-110 460-F-00020PL
TR-170 460-F-00021PL