

Corrosion Protection for a Single Bottom Storage Tank on Concrete Foundation via Chime Ring Dry and Dry Tube IDS and Dry Tube IDS

Project Specifics

Installation Dates
July 7-11, 2020

Location
Florida, USA

Environmental Conditions
Avg. Temp. 95°F; Hot and sunny with some clouds.

Asset Details
Diameter: ~150ft
Vessel Construction: Single-Bottom with Liner, 18 ports, and no anchor bolts.
Foundation Media: Concrete

Inhibitor Delivery System (IDS)
Chime Ring Dry and Dry Tube IDS with ER Probe IDS Monitoring System

Zerust Product(s) Used
Zerion® FVS Corrosion Inhibiting Powder

Zerust Installation Overview

PVC pipes were installed in ports through the ring wall at fourteen (14) different locations. Each port is connected to a trench that goes to the center of the tank foundation. Ports assemblies were connected to the installed PVC pipes that will allow for a helium test to be conducted. A union was used in the connection so the PVC pipes would remain accessible for the installation of the sleeves. An additional four (4) ports were used to install the ER probes listed above. ER probe readings were taken from each installed unit and analysis shall be provided in proceeding reports upon gathering of further data. All eighteen (18) pipes were bonded to the trench using Sikaflex polyurethane construction adhesive.

Chime Ring IDS PVC pipes were installed around the tank circumference at the chime/tank floor plate interface and each was bonded to the concrete with Sikaflex polyurethane construction adhesive. Chime Ring IDS PVC ports were installed at each Dry Tube IDS port

Additional

Remaining works to be done include installation of Zerion FVS-S15 corrosion inhibitor sleeves into the Chime Ring IDS PVC pipes, as well as corrosion inhibitor sleeves into the Dry Tube IDS pipes.

