

Location:

FORT LAUDERDALE, FL, United States

Date of Application:

April 2014

Market:

Pipelines & Terminals

Substrate:

Ferrous Metal (Carbon Steel)

Surface Prep:

SSPC-SP 2 (Hand Tool Clean)

Exposure:

Exterior Weathering - severe industrial
- seacoast and chemical environment

Job Size:

10,000 Square Feet

Owner:

Vecenergy

Engineer:

Vecenergy

Applicator:

Champion Painting

Vecenergy Berth 13 Coating Project

Area Coated: Exterior Piping

- First Coat (Spot Primer): Carbomastic 15
- Second Coat: Carboguard 893
- Third Coat: Carbothane 134 HG

Area Coated: Exterior Canopy Structure

- First Coat (Spot Primer): Carbomastic 15
- Second Coat: Carbocrylic 3359 DTM

Project Description:

The piping and canopy structure for Berth 13 unloading dock at Vecenergy's Port Everglades Florida Terminal was in rough shape and needed a protective coating over-coating system applied for corrosion protection and also aesthetics.

Project Challenge:

Even with a canopy covering the majority of the piping, fluctuations in the tidal pattern can occur and cause lower sections of the structure to be partially immersed for intermittent time periods.

Surface preparation was also limited to a minimum of hand tool cleaning as the structure had to be fully operational throughout the application process.

Coating Selection Explanation:

Carbomastic 15 was chosen as a spot primer for its surface tolerant properties and superior wetting out of the surface. The added benefit of aluminum flake for a tertiary mean of barrier protection also make it the perfect choice for application to marginally prepared substrates for long-term protection.

Coating Selection Explanation (Cont'd):

Carboguard 893 was chosen as the intermediate coat due to its excellent chemical and barrier protection properties and also helped provide initial hiding properties at a more economical cost.

Carbothane 134HG was chosen for its outstanding color and gloss retention properties to provide a long-term, aesthetically pleasing finish coat.

Additional Information:

Due to ratchets banging the tops of pipes where valves are opened and closed, the coating in these areas are suffering early failure from impact. We are testing the use of Semstone 805 reinforced with Fabric 100 on the topsides of the pipe to provide a fabric reinforced, flexible epoxy to the topside of the pipes where damage is occurring.

Based on the results of this testing, this system can become a standard means in the facility to provide an economical solution to their corrosion concerns on the top of the pipes in this area.

