

Location:

Key West, FL, United States

Date of Completion:

December 2014

Market:

Power - Conventional

Job Size:

20,000 Square Feet

Owner:

Florida Municipal Power Agency

Engineer:

Florida Municipal Power Agency

Contractor:

Champion Painting
Fort Lauderdale, FL

Keys Energy Services Fuel Storage Tanks

Area Coated: Tank Exterior

Substrate: Ferrous Metal (Carbon Steel)

Exposure: Exterior Weathering - severe industrial - seacoast and chemical environment

Surface Prep: SSPC-SP 12 (WJ-3) (Water Jet Thorough Cleaning)

- Carbomastic 90
- Carboguard 501
- Carboguard 890
- Carbothane 133 LH

Project Description:

Florida Municipal Power Agency had to make modifications and repairs to two Fuel Oil Storage Tanks located at their Stock Island, FL facility. Based on the condition of the existing coating it was determined the tanks were a solid candidate for an overcoat system with spot blasting of rusted areas and areas where repairs were made. Due to the fact the tanks were in service at the time of painting, the contractor chose to use wet abrasive blast equipment to perform surface preparation on the tank in order to minimize spark potential of the blast media.

During the course of surface preparation some spots on the roof of the tank were uncovered exposing small penetrations through the roof of the tank. Carboguard 501 was used in conjunction with fiberglass mesh to repair these areas prior to application of the intermediate and finish coats.

Coating Selection Explanation:

Carbomastic 90 was selected for use as spot primer on bare metal areas for ability to bond tenaciously to rust bloomed steel.

Carboguard 501 was used as a filler coat with fiberglass mesh to repair small holes in the roof of the tank.

Carboguard 890 was used as the intermediate coat to provide additional barrier protection to the steel substrate.

Carbothane 133LH was chosen to provide long-term color protection with a low sheen finish.

