carboline®
Coatings - Linings - Fireproofing
THE PROTECTIVE COATINGS PROFESSIONALS™

Product Case History

Raw Water & Service Water Tanks

Location:
Morgan City, LA, United States

Date of Completion:
April 2015

Market:
Power - Conventional

Job Size:
20,000 Square Feet

Owner:
Louisiana Energy & Power Authority

Engineer:
Robins & Morton
(Power & Industrial Division)

Fabricator:
Erected Steel Products of Alabama

Painting Contractor:
Champion Painting
Fort Lauderdale, FL

Area Coated: Tank Lining

Substrate: Ferrous Metal (Carbon Steel)
Exposure: Water Immersion - Raw Water & Service Water
Surface Prep: SSPC-SP 10 (Near White Blast)

- Carboguard 891 HS

Area Coated: Tank Exterior Components

Substrate: Ferrous Metal (Carbon Steel)
Exposure: Water Immersion - salt water or wastewater
Surface Prep: SSPC-SP 10 (Near White Blast)

- Carbozinc 11 (Shop Primer)
- Carbozinc 859 (Field Touch-Up for Welds and Damaged Areas)
- Carboguard 893
- Carbothane 134 HG

Project Description:

Robins & Morton was selected as the EPC contractor to design and construct a grassroots combined cycle plant for L.E.P.A. in Morgan City, LA.

Erected Steel Products of Alabama (ESP) was contracted by Robins & Morton to fabricate and erect two steel ground storage tanks for Raw Water storage and Service Water storage for the site. Champion Painting contracted with ESP to perform field preparation and coating of the interior lining and exterior portions of the tanks.

The exterior of the tank was shop blasted in acordance with SSPC-SP6 Commercial Blast Cleaning and primed with Carbozinc 11 at 3.0-5.0 mils DFT. Field finish painting was completed on the stripe coat, intermediate and finish coats.

The interior of the tank was field blasted to SSPC-SP10 Near White Metal Blast Cleaning standards and lined with 2 coats of Carboguard 891 HS applied at 5.0-7.0 mils DFT/coat (10.0-14.0 mls DFT total) with a stripe coat on the welds and sharp edges.

Coating Selection Explanation:

The exterior coating system was selected for ease of application for the shop primer (Carbozinc 11) and in the field for the welds and touch-ups (Carbozinc 859), intermediate coat (Carboguard 893) and finish coat (Carbothane 134 HG). Meets requirement for AWWA Outside Coating System #6.

Carboguard 891 HS was chosen as the interior coating system for the ease of application, along with the high solids content (85% SBV), low VOC content and approved per NSF Standard 61 as required in the specification. Meets requirement for AWWA Inside Coating System #1.