## **Tneme-News**



## VULCAN STATUE FORGES PRIDE IN CITY'S STEEL INDUSTRY

Reported to be the largest cast iron statue in the world, the Statue of Vulcan in Birmingham, Alabama, stands tall as a symbol of the city's connection to steel manufacturing and mining. Standing as the centerpiece of the Vulcan Park and Museum on Red Mountain, the 56-foot tall statue is anchored to a 126-foot high sandstone pedestal with an observation deck overlooking the city. Although more than a century old, the statue appears as it did when it was designed by Italian-born sculptor Giuseppe Moretti and cast at the Birmingham Steel and Iron Company, according to the Vulcan Park and Museum.

In Roman mythology, Vulcan was the god of the forge, which made him a perfect ambassador for the City of Birmingham at the 1904 World's Fair in St. Louis, Missouri, where the statue ended up winning the Grand Prize in the "Mine and Metallurgy" exhibit. There was little fanfare on Vulcan's return home, however, as the disassembled statue was left on the ground of the Birmingham Mineral Railroad for more than 18 months.

After being relocated to the Alabama State Fairgrounds in 1906, the statue was reassembled with its right hand attached backward and the left hand turned in the wrong direction. To add insult to injury, Vulcan Park and Museum reported that, "Merchants began to use him for advertising, and over the years he held various objects, such as a giant ice cream cone, a pickle sign, and a Coke bottle. Later he wore a giant pair of Liberty overalls." The indignity continued until 1939 when the statue was moved to his permanent home on Red Mountain, where it was installed on the limestone pedestal, surrounded by a 10-acre park.

As part of a traffic safety campaign in 1946, the statue was equipped with a torch that flashed from green to red whenever a road fatality was reported. In 1976, the statue was listed in the National Register for Historic Places and named as a Historic Site of Jefferson County.



By 1999, cracks had developed in the statue and a major renovation was initiated to restore the statue and park to its original condition. Following the restoration for which \$15 million was raised, the project received the prestigious The National Trust for Historic Preservation Honor Award. The statue was praised by the Washington-based National Trust as "one of the most memorable works of civic art in the United States."

Continued on back.



visit www.tnemec.com/enews



As part of an ongoing maintenance program, the statue was recoated in 2010, which resulted in the project's coating contractor, Vulcan Painter, Inc., and Tnemec receiving the George Campbell Award from the Society for Protective Coatings (SSPC). The award, which was presented at the SSPC 2011 annual meeting in Las Vegas, Nevada, is for outstanding achievement in the completion of a difficult or complex industrial project. Headquartered in Bessemer, Alabama, Vulcan is 17th largest painting contractor in the nation, according to Engineering News Record.

"Accessibility was a major challenge," Tnemec coating consultant Robert Crumbaugh explained. "Rigging it, surface preparation and coating the statue was very, very difficult. Every time I visited the site, it was windy, but the project was completed without a hitch, which is to the credit of the coating contractor."

Vulcan Painting used bosun's chairs and ropes to access the statue and spider baskets to access the pedestal. A 400-ton crane and a 285-foot boom were needed to reach the statue's high points, including Vulcan's raised arm that holds a spear. Painters worked from a metal basket that was suspended from the boom. Crews blast-cleaned areas of the statue that were peeling down to bare metal and spot primed them with Series 1 Omnithane, a single component, moisture-cured urethane primer containing micaceous iron oxide and zinc.

Since work on the project started in late March, cooler weather was a consideration, so Series 161 Tneme-Fascure, a corrosion-resistant polyamide epoxy that cures in low temperatures, was specified as the intermediate coat. The finish coat was Series 73 Endura-Shield, an aliphatic acrylic polyurethane, which is highly resistant to abrasion, wet conditions and exterior weathering. "The coatings were applied by brushes and rollers to avoid overspray," Crumbaugh noted.

The statue's pedestal was also cleaned with a lowpressure sprayer, scrubbed and rinsed, then sealed with two coats of waterproof sealant using a sprayer.

Today, the statue is managed by the Vulcan Park Foundation, which is housed in the Vulcan Center where the public can learn about the history of the statue and Birmingham from interactive exhibits.

Originally included in the March 2011 E-News.

