

THYSSENKRUPP WAUPACA PLANT 5

After the exterior coatings started to deteriorate on ductwork and furnace stacks at the ThyssenKrupp Waupaca Plant 5 steel mill in Tell City, Indiana, officials there forged ahead with a refurbishment project that specified the use of a high-durability coating system from Tnemec. "The ductwork network on top of the steel mill and two of the plant's four stacks were never properly prepared prior to being coated," Tnemec coating consultant Mike Barnhill explained. "The existing coatings were applied over mill scale and started falling off the first year that the plant was in operation and within two years it was very unsightly."

Specifications called for the approximately 600 linear feet of exterior ductwork, measuring six-to-eight-feet in diameter, and two 100-foot-tall stacks to be prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning to remove all visible dust, mill scale, rust, paint, and other foreign matter. A prime coat of Series 164 Epoxoline, a polyamine epoxy, was applied, followed by a topcoat of Series 73 Endura-Shield, an acrylic polyurethane, to protect the steel from abrasion, wet conditions, corrosive fumes, chemical contact, and exterior weathering. "The project engineers wanted a thick-film, two-coat system," Barnhill recalled. "Both coatings were brush- and roller-applied due to the location of an employee parking lot adjacent to the plant."

Two of the plant's stacks, which had been properly prepared and primed during fabrication, were high-pressure washed and given a field tie-coat of Series 27 F.C. Typoxy, a polyamide epoxy, followed by a finish coat of Series 73.

"The plant manager was pleased with the coating system, the contractor's application, and the follow-up support that Tnemec offered," Barnhill added. "After five years, the coating system still looked fantastic and that job has led to many others at this plant – all of them involving the use of Tnemec coatings."

ThyssenKrupp Waupaca Plant 5 produces gray and ductile iron castings used to manufacture disc brakes, brake drums, and other components used in the light and heavy truck, construction, passenger car, and agricultural markets.

FEATURED PRODUCTS

- Series 27 F.C. Typoxy
- Series 73 Endura-Shield
- Series 164 Epoxoline



PROJECT INFORMATION

Project Location

Tell City, Indiana

Project Completion Date

February 2005

Owner

ThyssenKrupp Waupaca
Tell City, Indiana

Engineer

Michael Barnhill
Boonville, Indiana

Field Applicator

Sam Estes Painting
Maceo, Kentucky

The exterior ductwork at the ThyssenKrupp Waupaca Plant 5 in Tell City, IN was topcoated with Series 73 Endura-Shield to protect the steel from abrasion, wet conditions, and chemical contact.

