BAOSTEEL UNDERGROUND SECONDARY CONTAINMENT

Shanghai Baosteel Group, China's largest manufacturer of steel, and one of the largest in the world, built underground passageways that run through its manufacturing facility's waste treatment and chemical feed areas. The facility designers created the area in such a way that if a pipe or vessel developed a leak or unexpectedly burst, the chemicals would be contained in an area that would allow them to be safely and effectively removed without allowing dangerous chemicals to seep into the earth and groundwater.

To ensure that the chemicals did not penetrate into the concrete and destroy the surrounding areas, Series 282 Tneme-Glaze, a chemical and solvent-resistant epoxy, was recommended by Tnemec's distributor, and chosen by the owner as the topcoat for the potential temporary storage of the liquids.

All concrete surfaces were prepared in accordance with SSPC-SP13/NACE No. 6 Surface Preparation of Concrete by abrasive blasting before coating. After surface preparation, the floors of the trenches received a prime coat of Series 201 Epoxoprime, a clear polyamine epoxy, which was followed by and intermediate coat of series 237 Power-Tread, a multi-purpose polyamine epoxy. This impact and abrasion resistant floor coating was them coated with Series 282.

The walls and trough area of the trenches received the same surface preparation as the floors, followed by Series 218 MortarClad, an epoxy modified cementitious resurfacer. After resurfacing, the walls and trough received an intermediate coat of Series 61 Tneme-Liner, a cycloaliphatic amine epoxy. They then also received a finish coat of Series 282.

PROJECT INFORMATION

Project Location
Shanghai, China

Project Completion Date
November 2011

Owner
Shanghai BaoSteel Stainless Steel Division

Fabricator / Applicator
Henan Puying Anti-Corrison Company

The underground trenches at the Baosteel manufacturing facilty received a finish coat of Series 282 Tneme-Glaze to protect the concrete from leaks and overflows of harsh chemicals.

FEATURED PRODUCTS

Series 61 Tneme-Liner
Series 218 MortarClad
Series 282 Tneme-Glaze
Series 201 Epoxoprime
Series 237 Power-Tread

TNEMEC