

Potable Water Pipeline Internal Coating

Case study 2012

Focus product: Interline® 925

Location: India

Project owner: Gujarat Water Infrastructure Ltd (GWIL)

Pipe suppliers: Welspun & Essar Steel

Applicator/fabricator: SPML, IVRCL, Larson & Toubro, Pratibha Industries

ISO12944 environment: Im-1 (Immersed)

Project size: 440 km of piping

Background

Essar Steel Pipes Division operates one of India's first coatings plants capable of producing pipes up to 100" (2.54m) in diameter. In early 2012, Essar Steel won orders to supply steel pipes for a project promoted by Gujarat Water Infrastructure Limited (GWIL). Internally, they were to be coated with a solvent-free liquid epoxy approved for use in contact with potable water by an international certifying agency. Externally they were to be protected by 3LPE wrapping. The project is a part of the ambitious Bulk Water Transmission System Project and is being implemented by the Gujarat government. It involves 8 packages aimed at supplying water to the 7 districts of the State of Gujarat, requiring approximately 440 km of piping with a potential for nearly 1.4 million litres of paint.

Out of this Essar Steel is scheduled to supply approx 100 km of pipes. Fast-tracked as part of the high profile Sardar Sarovar Narmada Canal-based drinking water supply project this meant there was tremendous pressure on the pipe fabricators for timely deliveries of coated pipes. Hence, the coatings provider's manufacturing and supply chain efficiency was of the utmost importance in this project.

The solution

AkzoNobels 15 million litre capacity Bangalore plant along with its global procurement capabilities were ideally placed to meet the challenge of maintaining product quality and timely supplies to an unprecedented scale. Our NACE qualified technical service personnel were instrumental in ensuring smooth progress during application of the coating at the customer yard. Our ability to provide customized SKUs, ranging from 1.5 litre packs to 800 litre packs, was an added benefit to the customer in enabling higher productivity and lower application costs.

GWIL and their consultants decided on the use of newer technologies for the lining of the pipelines. Our solvent-free epoxy coating **Interline 925** met and exceeded all of their specified criteria and potable water approval requirements.

The GWIL is a landmark project in terms of technology adoption, as it is the first major project which has specified potable water approved, solvent-free epoxy for the internal surfaces of all mild steel transmission pipelines. **Interline 925** not only enhances the life of the pipelines, but it also provides significant power savings to the owner by reducing friction in the pipe by providing a smooth surface for the flow of water.



“The challenge at the start of the project was to select a supplier who has good commitment on delivery and the overall capability to service such a large project in a defined timeframe. From the point of view of quality and product performance, we felt the commitment to quality and on-time delivery was the key element and we had confidence that AkzoNobel was the right choice for this project.” Jai Purohit, Plant Head, Essar Steel

