Pipe Conveyor Gallery- Tata Steel

Scope of Work:

Design specification and application of high performance suitable coating system for pipe conveyor gallery at Tata Steel Unit Jamshedpur .

Challenges :

The pipe conveyor structures were highly corroded and pitted due to limited performance of existing coating system . The conveyor gallery was surrounded of number of cooling towers, ammonia plant , battery unit and was exposed to coke dust . the combinations of these factors had direct impact on corrosion rate and degradation of existing coatings systems.

Requirement :

TSL was looking for a coatings system which can be applied on highly pitted and corroded structures but without carrying our abrasive blasting due to certain site limitations. Also, minimum expected service life was for five years.

Solution :

The prevailing challenges and client expectation led to selection of Armaflake EHB with a DFT of 350-400 microns. The product has strong capability to bond with steel substrate even if marginally prepared and provide excellent resistance against saline environment and aggressive chemical environment.

The product was applied on power tool cleaned surface by a trained coating crew. Low pressure water jetting was also used prior to power tooling.

Specification :

Location	Surface preparation	Coating System	DFT (Microns)
CT winch area of Jetty	Manual and Power Tool(ST-2)	Arma Flake EHB Arma Flake EHB Acrylic polyurethane Total	150-175 150-175 50 350-400

Out Come :

Armaflake EHB has demonstrated excellent results and is completely intact after 04 years. Coating evaluation was carried out as per ASM D 610 and was found in order. Based on current performance, the system may survive for couple of years and may or may not require very minor touch-ups.

Other Suggested Areas :

Jetty Piles, jetty pipelines, splash zone and other area at offshore structures, concrete structures exposed to high corrosion, Chemical plants, refineries and petrochemicals, Tank lining.