

Armaflake Offshore and Others- Tata Chemicals

Scope of Work:

Design specification and application of high performance suitable coating system for various units at Tata Chemicals at Mithapur

Challenges :

Tata chemical is exposed to very high degree of corrosion due to handling and processing of salts, Acids and various corrosive chemicals compounded with high proximity to sea. The plant easily falls into the category of C5- I as per ISO 12944.

Multiple companies have carried out product trials at Tata Chemical plant but with limited success. The coating system should have a combination of excellent chemical and physical properties to withstand against aggressive chemicals, salts and other anomalies for desired period. Armacoat has designed multiple coating system after through corrosion surveys and evaluation of persisting corrosion drivers. Armaflake offshore (glass flake based epoxy system) was suggested for highly corrosive location where blasting could be possible.

Solution :

Armacoat has designed multiple coating system after through corrosion surveys and evaluation of persisting corrosion drivers. Armaflake offshore (glass flake based epoxy system) was suggested for highly corrosive location where blasting could be possible. For other locations, Armamastic and Armaflake EHB was suggested to manage corrosion. Trials for Armaflake Offshore were carried on blasted plates and for Armaflake EHB and Armamastic on highly corroded and pitted fixed structures.

Specification :

Location	Surface preparation	Coating System	DFT (Microns)
Highly corrosive – Salt unit/conveyor belt etc	Abrasive Blasting	Armaflake Offshore	600
Highly Corrosive- HCL unit/ other locations	Power tool	Armaflake Offshore OR Armaflake EHB	400 400

Out Come :

Armaflake offshore sample plate was exposed to different area/location prone to severe corrosion and were evaluated for almost 05 years . The excellent property of Armaflake offshore ensured perfect coating condition even after 05 years of exposure against aggressive chemicals.

Armamastic / Armaflake offshore have also shown excellent tolerance towards prevailing chemicals and were found in excellent condition even after years.

Highly successful trials led to approval of Armacoat products at Tata Chemicals and supplies were made against purchase orders