

High Performance Coating for Concrete and Steel- Nirma Plant, Bhavnagar

Scope of Work :

Design specification and application of high performance coating system on concrete and Steel with a design life ranging from 05 years to 10 years.

Challenges :

Nirma Industry is one of the most reputed company in india and manufacturers range of finished products (including salt) and intermediate products. The plant is exposed to highly corrosive chemical environment due to handling and processing of various aggressive chemicals which is further aggravated by closeness to sea. The degree of corrosion has been very high for all kind of substrates – Steel or Concrete.

Requirement :

Client was looking for a solution to contain corrosion using high performance coating system in order to prevent costly repair and replacement of concrete and steel structures. The expected service life was for 10 years.

Solution :

BROMINE ACID & SODA ASH plant were given the priority. Armaflake EHB was proposed for RCC structures at selected plants with a DFT of around 500 microns . It was suggested to apply ARMAPRIME before application of Armaflake EHB in order to form optimum bond with RCC substrate.

Coating system was applied by authorized contractor with complete compliance to ITP and Application procedure.

Out Come :

Armaflake EHB has been demonstrating excellent results and found in sound condition during site surveys. Based on excellent performance, The product was extended to Steel structure and has been applied for couple of projects with a design life of 10 years.

Another product Armaflake ST has been proposed and widely used at Nirma Plant for both steel and concrete structures with a design life of 05 years.

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.

