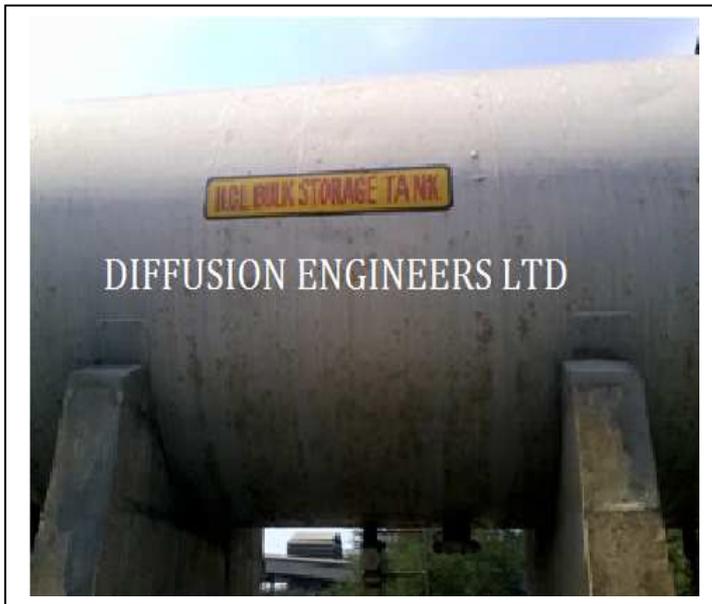


APPLICATION REPORT
EXTERNAL COATING
OF
HCl STORAGE TANK



AT
MAHA CEMENT LTD
HYDERABAD

Introduction:-

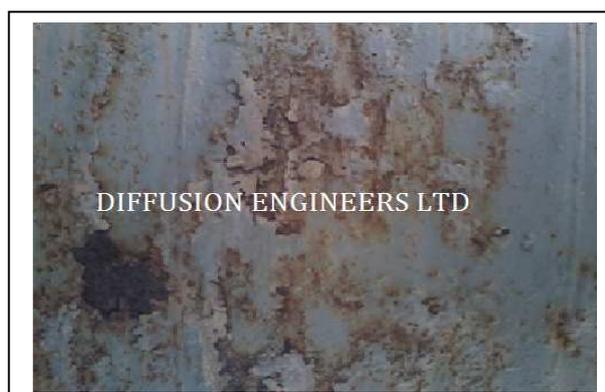
Hydrochloric Acid (HCL) also known as Muriatic Acid is a corrosive, stable mineral acid that is clear to slightly yellowish in color. Its versatility lends itself well to many industrial uses including hydraulic fracturing, pulp and paper, steel-making, PVC manufacturing, and chemical processing. Similarly, it's also used in the production of high-fructose corn syrups. HCL, while being versatile and widely used is also highly corrosive which makes maintaining supply and hauling a challenge. . Hydrochloric acid reacts with a chromate, permanganate, or persulfate to generate chlorine; and reacts with a metal peroxide to form its chloride and chlorine. Hydrochloric acid gas has a strong pungent odor, and is highly corrosive.

Problem:-

Structural corrosion in industrial environment is mainly due to the sulfur oxides and nitrogen oxides produced by the burning of automotive fuels and fossil fuels in industries. The atmosphere is associated with concentrations of chlorides, phosphates, hydrogen sulphate, ammonia and its salts which are important factors for influencing the corrosion.

The cost of structure corrosion to the total economy must be measured in crores per year. Because carbon steels represent the largest single class of alloys in use, both in terms of tonnage and total cost, it is easy to understand that the corrosion of carbon steels is a problem of enormous practical importance. This is the reason for the existence of entire industries devoted to providing coating for irons and steel.

External Corrosion Of HCl TANK:-



PRODUCT RECOMMEND:-

DIFFGLASS PRIME:-

DIFF-GLASS PRIME is a Two-pack polyamine cured epoxy priming surface tolerant compound incorporating a rust inhibitor and passivator.

DIFFGUARD-GF:-

DiffGuard-GF is Improved version of DiffGuard coating being filled with highly corrosion resistant Glassflake, where high resistance to acid in aggressive chemical environments and abrasion resistance is desired. Diffguard GF is Multifunctional modified epoxy amine cured system.

DIFFTOP:-

DIFF-TOP is a aliphatic polyurethane based top coat system for external application with various color combination.

APPLICATION PROCEDURE:

A.SURFACE PREPARATION

1. Before application of any kind of coating surface preparation is must to activate the base metal so that coating will have better bonding.
2. The surface preparation is done by griding.

B.PRODUCT APPLICATION:-

- 1) After surface preparation priming was done by **DIFFGLASS PRIME**....
- 2) To give corrosion resistance **DIFFGUARD-GF** was applied.
- 3) Top coat of **DIFFTOP** was applied over DIFFGUARD-GF to give U-V resistance to coating system.

FINAL VIEW OF COATING:-



AREA ENGINEER:- Sudhir Phani (Sales Engineer)

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