

Application Report

FLOOR & FOUNDATION COATING



At

TATA POWER LTD

JAMSHEDPUR

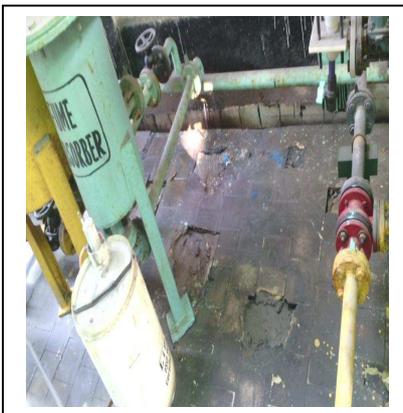
Introduction:-

Metal working fluids Contaminants and additives such as lubricating oils (infrequent) machined plastics, and cleaning or degreasing products used in machine maintenance are some of most critical Factors in Floor & Foundation corrosion.

Concrete can be very porous, so oils, acid and chemicals can penetrate the pores and attack the integrity of the slab. The surface of concrete can also be worn down by physical impact and abrasion. Water can sometimes penetrate concrete, freeze and expand inside it when the temperature drops, and ultimately weaken the concrete from within. In addition, if the concrete has reinforcing steel bar (rebar) to impart additional strength and other properties, the rebar can corrode contributing to the deterioration of the concrete.

PROBLEM:-

The floor of TATA POWER LTD is exposed to sever acid leakage media. The acid spillage damages the foundation & floor coating as concrete is highly susceptible to such environment. In spite of foundation being designed with any superior grade of concrete, pore formation is inherent property of concrete. This porosity in concrete is making it vulnerable for corrosion.



Floor Damage by ACID/OIL Spillage

PRODUCT RECOMMENDATION:-

- 1) DIFFSCREED
- 2) DIFFTUFF

DIFFSCREED: - DIFFCRETE is high solid heavy duty solvent free polymeric resin mortar screed has been specially developed for providing high strength to floor. DIFFCRETE is two-component system, providing heavy duty flooring and has high mechanical strength, anti-skidding, non dusting and chemical resistance properties.

DIFFTUFF: - DIFF-TUFF is a high-solids, high-build, epoxy protective coating for tough industrial environments & Floors. Especially formulated with its blend of penetrates and surface tension-control agents for concrete surface to solve, corrosion due to oily surface, chemical spillage with minimal surface preparation. The result is a tough, durable coating with excellent resistance to weather, moisture, and chemical fumes.

APPLICATION PROCEDURE:-

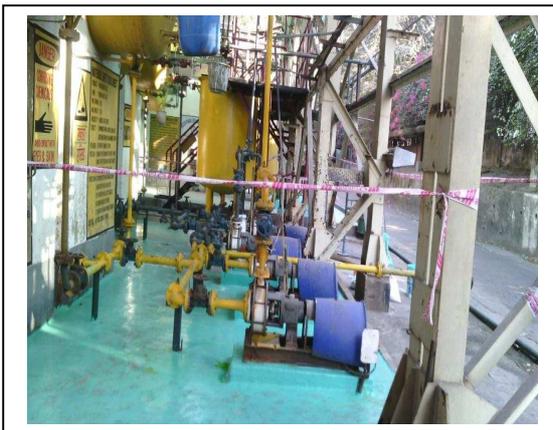
Surface Preparation:-

Initially cleaning will be done by chipping out all the deposition of oil & dust from the surface. After manual cleaning, surface will be clean by buffing tool, to remove all the loose particles. Foundation is chemically cleaned by our specially developed cleaning agent. Final surface is prepared by grinding with the help of surface grinder.



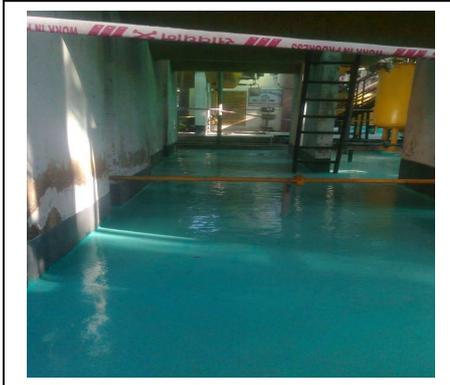
Surface Preparation done by wire brush & surface grinder

COATING:-



Application of DIFFSCREED

To give oil resistance DIFFTUFF is applied as top coat.



Application of DIFFTUFF



Benefits of Foundation Coating:-

- ❖ ***Seamless, Smooth & Non-porous Surface Finish***
- ❖ ***Protect Foundation & Floor from Oil/Acid Penetration***
- ❖ ***Excellent Wear/Abrasion Resistant Properties***
- ❖ ***Easy to Install & Maintain***
- ❖ ***Easy to Clean***

ACKNOWLEDGEMENT

AREA ENGINEER:

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APPLICATION TEAM:

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