

# Corrosion Protection of Acid Storage Tanks

Application by ProCoat Specialities Pvt. Ltd.

## ThistleBond

A Division of E. Wood Ltd., U.K.



In the power plants, chemical industries etc, the corrosive acids like HCL, H<sub>2</sub>SO<sub>4</sub>, phosphoric acid etc which are stored in the tanks often face severe corrosion problem. Tank internal surface is required to be protected in a full proof method in order to prevent corrosion and erosion effect of acids. Moreover, during handling of acid, spillage is very common. Due to these damage to external surface and adjoining concrete & metal installations takes place.

ProCoat Specialities offers an effective and long term solution to acid tank internal & external corrosion protection with ThistleBond advanced range of ultimate corrosion protection product 'Hycote 175'.

### Product : Hycote 175

'Hycote 175' is a high performance solvent free, special phenolic polymer resin and a polyamine curing agent system which produces a highly cross linked polymer matrix. This unique system prevents permeation and subsequent attack on coating by highly aggressive chemicals, allowing the system to be used where ever chemical resistance or high corrosion protection is required. The example is internal & external surface of acid tanks. This coating is specifically designed for use in complete immersion conditions also.

'Hycote 175' coating system offers excellent resistance to the most corrosive chemicals even in immersed conditions

- Acetic Acid up to 20%
- Hydrochloric Acid up to 35%
- Phosphoric Acid up to 75%
- Sulphuric Acid up to 98%
- Nitric Acid up to 30%
- Sodium Hydroxide All conc.
- And many other corrosive liquids

### PHYSICAL PROPERTIES

Water Vapour Permeability	4.69 x 10 <sup>-6</sup> perm.cm
Salt fog Resistance	Excellent, unaffected after 10000 hours exposure
Humidity Resistance	unaffected exposure 5000 hours
Temperature Resistance	177 °C
Recommended Thickness	300 - 600 microns based on the life expectancy requirements



## Application Method

'Hycote 175' can be applied to prepared surfaces by good quality brush, medium pile rollers. For larger areas, 'Hycote 175' can be applied by airless spray equipment.

## Spray Equipment

Ensure relative humidity is not more than 85% and substrate temperature is not less than 5°C.

## Surface Preparation

Ideally grit / sand blasted to SA2.5 with chloride / neutralization.

## Corroded Concrete Bund Areas

Damaged concrete areas can be rectified and can be protected with ThistleBond 'Concrete Patch Repair' system followed by a coat of 'Hycote 175' for protecting concrete from chemical spillage.



## Distributor catering to your needs



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