

Product Case History



Reline of Blended Clay Storage Tank S1-1 - UPM Kymmene Inc.

PRODUCT(S) USED:

Exterior Coating 1: Plasite Plasguard 7122 HAR

AREA COATED:

The UPM Kymmene Inc. (formerly Repap) pulp and paper operation routinely performs inspection procedures on their process tanks as a part of their maintenance program. In the course of such inspections, it was determined that Tank S1-1, a steel blended clay storage tank had showed some pitting in the floor that needed repair.

This tank is equipped with an impeller to keep the product fluid, and although the tank had been originally lined in 1989, the perpetual agitation led to a thinning of the lining material. Corrosion had penetrated the liner in pit form causing deterioration in those areas of the tank floor. It was further determined that, although the lining materials had performed beautifully and were still intact on the vertical surfaces, it would be economically prudent to reline the entire structure.

LOCATION:

MIRAMICHI, NB

DATE OF APPLICATION:

MARCH - JUNE 2001

MARKET:

PULP & PAPER

SUBSTRATE:

STEEL BLENDED CLAY

SURFACE PREP:

CLEAN & DRY

EXPOSURE:

CHEMICAL

SURFACE PREP:

NACE 1 / SSPC - SP5



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Others repaired the affected floor area and a local Carboline/Plasite approved applicator was contracted to reapply the lining materials inside the tank.

COATING SELECTION EXPLANATION:

The tank had been originally lined with Plasite Plasguard 7122 HAR (High Abrasion Resistance), a highly cross-linked phenolic with an alkaline curing agent. This material is formulated to provide resistance to a wide range of chemicals. In reviewing the operation of this tank, it was decided that Plasguard 7122 was still the most viable choice of materials for this application. Recognizing the effect of the impeller agitation, Plasite Plasguard 7122 HAR was again selected.

The repaired floor and walls were abrasive blasted to NACE 1/SSPC-SP5 standard for white metal clean with a 3.0 mil anchor profile. Plasguard 7122 HAR was spray applied in two coats at 5.0 to 7.0 mils per coat for a total of 10.0 to 14.0 mils and allowed to cure. Once cured, the tank was returned to service.

Given that the initial liner has performed satisfactorily for over 12 years, it is expected that the new liner will give equal if not superior service and life to this tank.