

Project Completion Report Reline of Cooling Tower Sump Food Factory - Midlands



Project Overview

Site: Food factory, Midlands.

Project Time: 4 Days

Scope of Works: Prepare and reline 1no cooling tower internal sump using a solvent free polyurethane coating.

Scope of Works

- **Arrival** – Cooling Tower Sump was drained and empty on arrival - **Complete**
- **Surface Preparation** – All surfaces of the cooling tower sump were chemically cleaned and mechanically abraded to raise a desired adhesion surface profile of 75 microns. The walls and floors were then washed down with fresh water before a blower was used to dry the surfaces - **Complete**
- **Application of Stripe Coat** – Product was applied by brush to all joints, edges, bolt heads, struts and other sharp protuberances to ensure any high-risk areas are secured and enable subsequent coating to be a seamless membrane - **Complete**
- **Application of First Coat** – Product was applied by roller to internal surfaces to a minimum 500-micron wet film thickness - **Complete**
- **Application of Second Coat** – Product was applied by roller to internal surfaces to a minimum 500-micron wet film thickness to achieve a desired 1000-micron total coating thickness on all internal surfaces - **Complete**
- **Commissioning** – Upon completion of the reline works, the cooling tower was left to cure for 8 hours, ready to be refilled, disinfected and re-commissioned by others - **Complete**

External Photo of the Tower



Condition of Sump Prior To Commencement of Works

The cooling tower sump was in poor condition prior to preparation and had heavy internal corrosion along the walls.



Relining Process

The photos below show the tank at various stages of the process, from preparation of the surface, to the final application of the 1st and 2nd coat. A dry film thickness test was carried out during the process with an average thickness of more than 1000 microns achieved on all surfaces.

