Reinforcement of an Ammonia Tank using Belzona SW2.

Industry:	*Chemical & Petrochemical*	Customer Location:	*St Nazaire, France*
Application:	*TCC-Tanks and Chemical Containment Areas*	Application Date:	*November 2023*
Substrate:	*Carbon steel*		
Products:	*Belzona 1121 (Super XL-Metal), Belzona SuperWrap II, Belzona 5831LT*		

Problem

The roof of an Ammonia (NH3) tank showed signed of weakening due to prolonged corrosion. In order to restore structural integrity, we'll be reinforcing localised parts of the roof from the exterior of the tank using Belzona SuperWrap II. This repair will allow to restore the tanks compliance without the need for welding new plates, risking making the structure heavier.

Roof prior to the application.

Application of the first layer.

Utilisation of a roller between each layer to remove bubbles and consolidate.

Reinforcement application completed prior to the application of Belzona 5831 LT.

Application Situation

Ammonia (NH3) storage tank within a Chemical Manufacturers facility.

Application Method

To restore the damages areas, we first needed to pit-fill to the exact profile of the original roof using Belzona 1121. Then, to reinforce the areas in need of repair we conducted SuperWrap II patch repairs. Finally, to provide anti-corrosion assurance we applied corrosion barrier coating, Belzona 5831LT.

This applications followed a modified version of Belzona System Leaflets, with an adaption due to the fact we can't use Belzona 9382 (Release/Consolidation Film). We therefore had to use rollers to compress (removing air bubbles) and consolidate between each layer (applied 4x layers at 90°).

Belzona Facts

This repair will allow to restore the tanks compliance without the need for welding new plates, risking making the structure heavier.