Fertilizer Tank Relining

Ar-Tech Coating Ltd.

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Background

• Four tanks (approx. 2000bbl each) are used for storing fertilizer products. Seasonal storage, tanks are unheated.

• Tank #422 was uncoated and showed floor pitting. This tank was to be put back in service. The coating solution was to line it entirely with Devchem 253 (except roof) and then overcoat the floor and 1 meter up with Devmat 111.

• Tank #’s 405, 414 and 417 were all coated with Bar-Rust 236. Two of the three had the floor overcoated with Devmat 111. Tank #405 was recommended for relining as numerous holidays were found. The two tanks with the Devmat 111 overcoat on the floor just needed to be repaired in spots despite being the older tanks of the three (1998 vs 2002). It is likely that tank cleaning or traffic may have contributed to the condition of the tanks and that the addition of Devmat 111 in two of the tanks reduced the impact.
Application

Ar-Tech supplied a two man safety / rescue team for this project due to confined space entry and Customer safety guidelines.
The site was secured and prepped for cool weather. Tanks were hoarded to ensure that sufficient heat could be maintained round the clock during coating. For the curing process temperatures were increased further. Tanks were mil tested and inspected for holidays.
The project took approximately 2 weeks to complete.
Anticipated coating life is >20 years.

Tank #422

Tank prior to cleaning. Solids build up on the floor.

Tank cleaned and ready for blast. Some pitting on the tank floor and bottom ring.

Ar-Tech Coating white metal blast and coated with Devchem 253 on walls and floor, then a Devmat 111 overcoat on the floor and 1 ft up the wall. The Devmat 111 adds additional abrasion resistance from the build up of solids and foot traffic.