



Fertilizer Plant

Hoopstad, Freestate
South Africa
January 2025

Due to the high PH content of the fertilizer stored in the building, the steel structure requires continuous maintenance to combat corrosion and degradation.

SI-COAT 579

Traffic White



The client required a test to be conducted to prove the sustainability of the corrosion maintenance coating SI-COAT 579.

A portion of the pillars were prepared and coated.



3 Months After Coating

Discolouration was found at the base of the pillars after the 3 month period.

A full investigation is required to ascertain the cause.



After Investigation 6 Months Later

Discolouration was caused by corrosion dripping down the pillar and collecting at the base of the column, and in rough patches where previous corrosion had eroded the steel structure.

As can be seen above this was just surface discolouration and was easily removed with a damp cloth.

Hopper

The Hopper was an area of concern due to corrosion degradation.



SI-COAT 579

Traffic White



Most of the Hopper was blasted and painted with red oxide in preparation for the coating of SI-COAT 579.

Note:

Preparation does not require red oxide. The corroded areas can be cleaned with a flap wheel or wire brush before coating.

The client had already begun painting the red oxide, which we had not requested. We demonstrated on the areas not painted with red oxide but just sand blasted, that SI-COAT 579 could be applied directly onto the surface without a primer. The client was impressed that after 3 months there were still no signs of corrosion.



3 Months After Coating

After 3 months the Hopper showed no signs of corrosion where SI-COAT 579 was applied.

