

PLANT COLUMN BASES

CASE STUDY

Denso Covercoat System





Denso Covercoat System applied to a column base before the Archco 15 topcoat is applied.



Full column base encasement system installed with Archco 15 flexible topcoat.



Completed Denso Covercoat System applied for column base protection.

Project Data

Location	Springs - SA
Completion	April 2024
Project Type	Column Base Protection
Products Used	Denso Hi-Tack Primer, Denso Profiling Mastic, Denso Hi-Tack Tape, Denso D14 Scrim, Denso Basecoat, Archco 15

Project Details

Protecting steel column bases from corrosion is crucial for maintaining any building and infrastructure's structural integrity and longevity. Corrosion at the base can weaken the steel, reducing its load-bearing capacity and potentially leading to structural failure. Since column bases are often exposed to moisture, soil, or chemicals, they are particularly vulnerable. Proper protection is needed to help prevent costly repairs, ensure safety, and prolong the life of the structure.

Deficiencies in surface preparation led to grit from grit blasting interfering with plant operations, which worsened severe corrosion problems. Despite regular reapplication of surface-tolerant epoxy to alleviate these issues, the challenges persist. This highlighted the urgent need to reevaluate surface preparation methods and investigate alternative corrosion prevention strategies to effectively address the ongoing corrosion concerns. The Denso Covercoat System for column base protection was recommended. This system comprises of Denso Hi-TackTM Primer to coat the cleaned substrate, Denso Profiling MasticTM is used to fill any voids and to build up any angles required to create a smooth profile, a layer of Denso Hi-TackTM Tape is then applied over the area followed by a layer of Denso D14 ScrimTM and Archco 15, a flexible water-based acrylic topcoat is applied to complete the protective encasement system.

The system requires only minimal surface preparation, specifically to SSPC-SP-1, 2 or 3 standards, while still offering a long life expectancy. Additionally, minimal yearly maintenance is required to ensure the integrity of the system remains intact. This combination of features underscores its efficiency and durability. Providing a cost-effective solution with reduced downtime & maintenance requirements, as well as providing 30+ years of service life.

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