

Case Study

SKPS® 18" Gasline External Corrosion Pipeline Reinforcement using CS Composite Wrapping and Viscotaq Coating



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1 Surface Preparation

Pipeline suffered severe external corrosion. Surface preparation was done in SA 2 ½ by blasting. Steel putty has been applied on the wall thinning and uneven surfaces prior to the Clock Spring composite application.



2 Titanium Putty Application

Filling and fairing the repair area using Titanium Putty. External corrossions were filled using Titanium putty. Used Titanium putty to create smooth shape pipe substrate before doing composite repair.



3 Clock Spring Contour Application

A repair is required that will enable the line to be operated safely. The proposed solution is the application of Clock Spring Contour application.

Apply Peel Ply layer on the entirety of pipe, starting beyond the edge of the fabric in a spiral wrap to cover all area. Allow a 3 hour curing time and remove the Peel Ply



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4 Viscotaq® Viscowrap Application

Viscotaq® Viscowrap HT is applied by removing the release liner and placing adhesive side on the pipe. Initial wrap should be a straight circumference wrap. Once initial straight circumference wrap is completed, wrap with slight tension and a minimum 1/2” overlap.

A Holiday Test is using a high voltage tester must be carried out on the Viscotaq® Viscowrap prior to the application of any Outer Wrap.



5 Viscotaq® PVC Outerwrap Application

Outer Wrap should be wrapped with tension and a minimum of 50 % overlap. First wrap and termination wrap should be a straight circumference wrap



6 Design Criteria

Design Pressure	: 8 Bar
Operating Pressure	: 6.6 Bar
Defect Type	: External corrosion
Wall Thickness	: 3.95mm
Material	: API 5L – X 60
Location	: UAE