Case Study 20" Heavy Oil Fuel Line Repair





1027/SKPS/CAS/20

20" Heavy Oil Fuel Line Repair



Surface Preparation

20" heavy fuel oil line found severe external wall loss due to coating/insulation damage. Heat tracing cable was exposed due to corrosion leading to fluctuations while operation. Pipe surface preparation achieved to SA2.5 by sand blasting.





Titanium putty Application

External corrosions were filled using Steel/Titanium putty. Also used Steel / Titanium putty & Quad fiber glass to create smooth shape between heat tracing cable and pipe substrate before doing composite repair. This is to avoid any kind of air gaps prior composite repair.





Clock Spring® contour composite repair

Applied Clock Spring® contour composite repair for 2.0 meters with a repair thickness of 16.0mm as per ISO 24817 design calculations.





Once final fabric wrap has been applied, apply peel ply finishing wrap starting on the pipe beyond the edge of the fabric in a spiral wrap to cover all wrapped area extending a minimum of 3 Inches after the other edge of the fabric.



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Viscotaq® Viscowrap Application

Applied Viscotaq® Viscowrap (viscous elastic layer) over the composite repair and overlap on the bare metal exposed on both edges of repair.



6 Viscotaq® PU composite wrap

Applied Viscotaq® PU composite wrap over viscous elastic layer as a mechanical protection layer.



Operating Pressure	:	10 bar
Operating Temperature	:	120 °C
Defect type	:	External corrosion
Size	:	20"
Material	:	Carbon Steel

Design Criteria

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