BELZONA 1984 ON SWEATING NOZZLE

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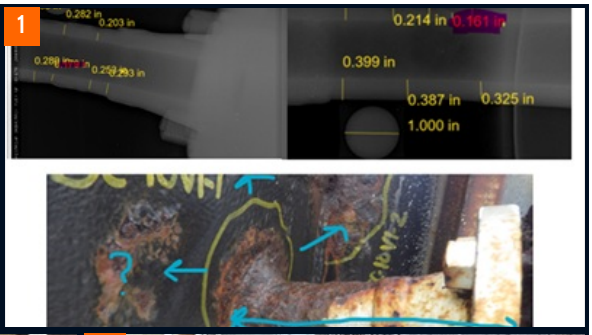

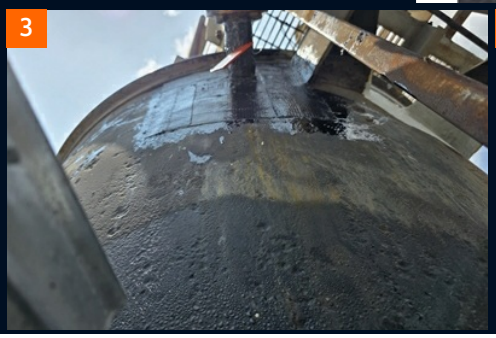

PROBLEM
CUI led to excessive corrosion. The vessel operates at sub ambient temperatures which leads to sweating substrate.

APPLICATION SITUATION
During a turnaround, severe corrosion was discovered at 2 nozzles. The vessel was not emptied completely of the propylene gas which made the substrate temperature colder than the dew point and create a sweating substrate. The client needed an ASME composite that could be applied to wet surfaces.

APPLICATION METHOD
This application could not involve any hot work, so sparkless grinders were used to prepare the substate to SP 11 surface cleanliness levels. Belzona 1161 was used to rebuild the pitting and create a chamfered transition at the nozzle/vessel interface. Belzona SuperWrap II was then installed. The repair wrapped the entire nozzle and flared onto the vessel extending 4 inches beyond the pitting in each direction. Belzona 1984 was allowed to cure and then inspected. Once deemed acceptable the repair was abraded and Belzona 5831 was used to topcoat the composite.

BELZONA FACTS
This nozzle was about 80 feet up from ground level. The scaffolding needed to be removed to finish the turnaround work. This solution allowed the client to complete their turnaround on time.

INDUSTRY
Oil & Gas

LOCATION
Orange Texas

APPLICATION DATE
June 2025

PRODUCTS
Belzona 1161 (Super UW-Metal)
Belzona 1984
Belzona SuperWrap II
Belzona 5831 (ST-Barrier)

SUBSTRATE
Carbon steel

PHOTOS
1. Picture of defective area.
2. Power tool prep to SSPC-SP 11 using sparkless grinders.
3. SuperWrap II using 1984 installed onto nozzle. Belzona 1161 was used as the rebuild underneath.
4. Belzona 5831 used to topcoat system.