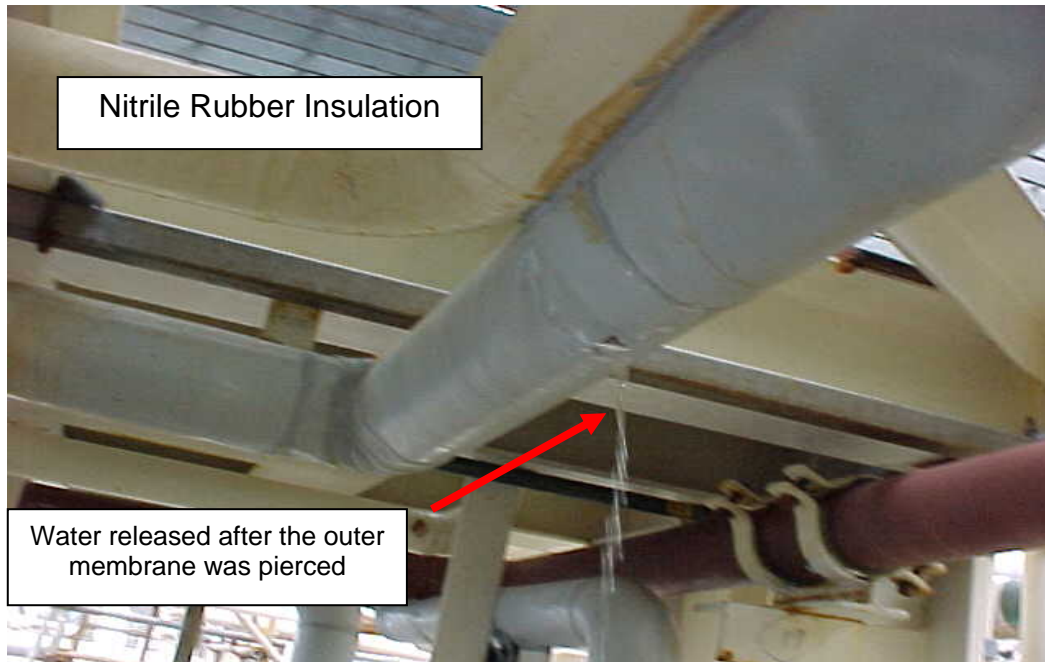


Thermacote Trials On A GP3 – October 2003



Problem.

- Nitrile Rubber Insulation was fully saturated with water and creating a significant CUI problem.
- Replacement of lining required temperature to be dropped from $>80^{\circ}\text{C}$ to $<40^{\circ}\text{C}$.
- The operating conditions of the process prevented repair and replacement of the Nitrile Rubber without process shut down

Solution.

A system of RL 500 PF and Thermacote RA 1000T was specified because

- **RL 500 PF is a moisture and surface tolerant primer that requires little surface preparation.**
- Thermacote RA 1000T can be applied at temperatures upto 150°C and would need a process shut during application.

Application

- Water blast to remove corrosion products.
- Apply 1 coat Epochem RL500PF (2 pack Zn-MIO epoxy) to wet substrate
- Allow to part cure.
- Apply Thermacote insulation in 10 – 15mm thick patches.
- Temperature fall from $80 - 85^{\circ}\text{C}$ to $35 - 40^{\circ}\text{C}$ in <5 minutes.
- Glue nitrile rubber to Thermacote.

Future Work

- 1st stage separator A
- 2nd stage separator B
- Coalescor vessel

Work undertaken under supervision of Malcolm Davies – Petrofac Production Services.

STAGE 1.

- Nitrile rubber stripped away to expose corroded surface.



STAGE 2.

- Hot surface prepared with UHP water jetting and primed with Chemco Epochem™ RL500PF (primer / finish)



STAGE 3.

- Trial application made of Chemco Thermacote™ solvent free epoxy thermal insulation.
- Application made to hot surface at approximately 10-15mm thickness in a single application.



STAGE 4.

- Trial application reduced temperature to <math><40^{\circ}\text{C}</math> in <math><5</math> minutes.
- Trial proceeded to application of Chemco Thermacote™ in pre-designated areas prior to re-application of the nitrile rubber.
- Extremely Easy to mould and stick to flanges and awkward shapes.
- Created good seals to areas always prone to seepage and water ingress



Completed Job

Outer Membrane Re-applied

