

SYLWRAP Case Study



Cracked PCCP Stub Live Leak Repair

After several failed repair attempts, a 250mm cracked PCCP stub with no isolation valve in Saudi Arabia is finally sealed in a complex live leak repair



Water escaping from numerous cracks in the stub at 4 bar pressure, causing flooding

Defect

The PCCP stub was connected to a main header operating under 4 bar. Wear and tear had caused numerous cracks, through which significant amounts of water was escaping to cause flooding.

With no isolation valve, preventing flow to the stub was impossible. Shutting off the main pipe for either repair or replacement was impractical and there was insufficient room to fit a pipe repair clamp.

Several attempts had been made to repair the stub, none of which were effective.

Solution

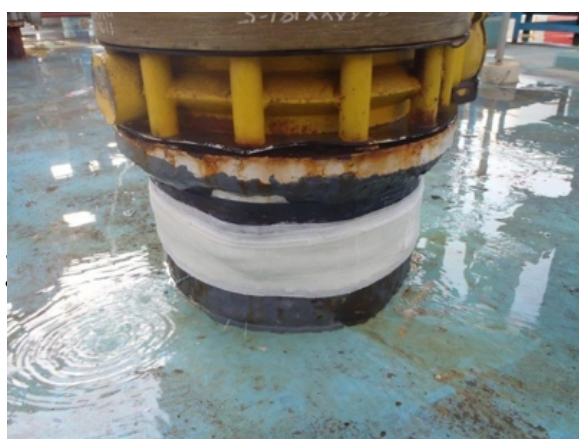
As this was a live leak, **Wrap & Seal Pipe Burst Tape** was used to seal the cracks. Numerous Tapes were applied down a 200mm section of the stub. These fused to each other to create a repair with pressure resistance to the required 4bar.

SylWrap HD Pipe Repair Bandage was then used to reinforce the Wrap & Seal. Once this section of the stub had been sealed, it was decided to also reinforce the below-ground section to protect against future ruptures in the ageing pipe which would be difficult to identify leaking under the floor.

Once the floor was excavated around the stub, a further 200mm section of previously underground pipe was wrapped with SylWrap HD, encompassing the entire stub with a protective sleeve.

Result

The stub was successfully sealed and reinforced, leaving the engineering company delighted that they had finally found a working live leak repair method for such a complex application.



Stub sealed using Wrap & Seal and reinforced with the first layer of SylWrap HD



The floor was excavated to access an underground section of the stub with the whole pipe encompassed in a protective sleeve of SylWrap HD

