

Wrap & Seal PIPE BURST TAPE Case Study

Water Main Pipe Leaking Expansion Joint Repair

A water company in the UK repair a leaking aluminium expansion joint fitted to a 225mm steel water supply pipe running over a major road suspension bridge



The expansion joint was leaking through a split between the two bent bellows on the right hand side



The steel pipe ran beneath the suspension bridge road deck in a severely cramped space, making access for repair difficult



Wrap & Seal was applied between the bellows, covering the split in the expansion joint



The completed repair left a solid rubber band over the leak, containing pipe content

Defect

The 335-metre suspension bridge provided an important link between two counties. It carried an A road over a river with the water main fixed directly beneath the road deck in a very constrained space.

The aluminium expansion joint was fitted to reduce stress on the pipe caused by movement of the bridge. A split appeared in the expansion joint between two bellows, through which water was leaking.

Comparing the position of the fitting with a recent inspection revealed it had moved and contracted significantly. A flexible repair was needed to seal the joint and allow for future movement of the fitting.

Solution

The water company recently approved all its engineers to carry a **SylWrap Pipe Repair Contractor Case**, meaning the team making the repair had a suitable range of products to hand.

On the day of the repair, the expansion joint had contracted to the point of failure. But even with the reduced space between the bellows, the engineers were able to apply **Wrap & Seal Pipe Burst Tape**.

Three PB-50x4m tapes were used. The tapes amalgamated together to form a solid rubber band over the leak, filling the gap between the two bellows.

Result

Feeding back after the repair, the engineers said: "The Contractor Case was extremely useful in this scenario, and within the cramped work area."

"Having a variety of products within the repair pack provided plenty of options to us once the problem had been fully evaluated."