CASE STUDY

WALKER TECHNICAL

Oil Export Line Repair

Overview
Various valves and branches from a crude oil export line were suffering internal corrosion and wall thinning, resulting in the pipe having as little as 2mm of a wall thickness.

Scope
Replacement of the pipe section was not practical therefore maintenance was to take form of an engineered fit-for-purpose composite repair. This repair method would enable more time for operations to source fabrication of a replacement line section with the relevant valves and branches.

Challenges
Operating temperature of the line was 120°C: 30°C higher than the maximum temperature the standard Technowrap 2K™ system can be applied to. Walker Technical developed the resin used as part of the Technowrap 2K™ standard product to allow application to pipe lines operating up to a maximum of 220°C.

Our Approach
Through adaptation of the standard resin used within the Technowrap 2K™ system, a high temperature (H.T.) repair was installed successfully providing the line with an extended design life of 2 years until fabrication of the new line replacement would be complete, allowing change out the existing pipe work.