

Clock Spring Company, L.P., of Houston Texas, manufactures composite repair and reinforcement systems for pipelines. The award winning system operates by transferring the hoop stress from the defect, through a high compressive strength filler, to the composite sleeve (Clock Spring®) wrapped around, and bonded to, the pipe. The composite is e-glass and polyester resin and is unique in that all the e-glass fibers are continuous strands aligned in the hoop direction providing extremely high tensile strength. The resin in the composite protects the glass strands and provides the shape memory that aids in installation.

Clock Spring® eliminates the need for welding or cutting the pipeline, increasing safety and eliminating environmental risk and release of greenhouse gases. Repairs can be made while the pipeline is fully operational eliminating costly down time. Clock Spring® requires no special handling, lifting or installation equipment and can be installed quickly and easily by two technicians.

Clock Spring® technology has been independently verified and approved for use in over 75 countries. Over 250,000 permanent repairs have been made with the Clock Spring® system since its introduction in the 1980's.

The Clock Spring® technology has now been applied to other pipeline related problems.

Clock Spring® HT

This High Temperature version of the original Clock Spring® uses vinyl ester resins and modified filler and adhesive to allow operation up to 180° F (82°C).

Clock Spring® Snap Wrap

Clock Spring® SW is an economical repair alternative for pipelines larger than 3/4" (19 mm), operating at less than 500 psi (3.45 MPa). Clock Spring® SW is comprised of a composite split-sleeve and the Clock Spring® filler and adhesive. The individual layers are bonded together and to the pipe surface to fully restore serviceability with all of the safety and economic advantages of the standard Clock Spring®.

Clock Spring® Pipe Support

Clock Spring® PS uses Clock Spring® composite, filler and adhesive to protect pipes at support or hanger locations. The system uses two wraps of the composite to repair crevice corrosion, restore serviceability and prevent additional corrosion or abrasion.

Clock Spring® Leak Stop

Clock Spring® LS is a repair technique for leaking pipelines. The system provides multiple sealing paths. First, the defect is dressed and cleaned. A plug is used to seal the leak and polymeric putty used to provide a second leak barrier. An elastomeric barrier forms the third seal. Split-sleeve composite Clock Spring® technology is used to compress the sealing barriers and fully reinforce the leak area.

Clock Spring® is simply the smartest pipeline repair decision you can make.