



## PIPE REINFORCEMENT & REPAIR SYSTEM

COMMERCIALY AVAILABLE  
SINCE 1993

The Clock Spring pipeline repair and reinforcement system utilizes a composite sleeve to permanently repair various pipeline defects. **The patented architecture is the most tested, investigated, verified, and documented ever developed.**

### Clock Spring® benefits:

- Quick, Simple, Easy Installation
- Minimize All Field Errors
- Maximize Operational Efficiency
- Save Significant Money
- Enhance Short-Term and Long-Term Safety

With **documented history for over 20-years** of providing effective integrity improvements, only Clock Spring® can give you **complete, accurate and verifiable** engineering data, information & documentation.

- Created by a 10-Year, \$15 Million Study by the Pipeline Industry
- 50-year min. life deemed a Permanent Repair by Regulators
- Used in all environments, in 75 Countries



### AVAILABLE MARINE ADHESIVE ALLOWS FOR UNDERWATER REPAIR APPLICATION

Clock Spring® repairs have been successfully conducted underwater in a variety of applications.



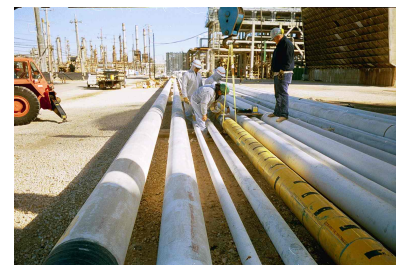
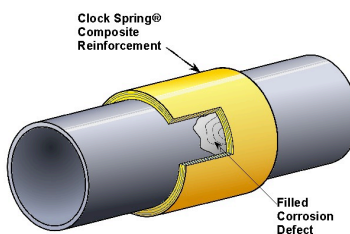
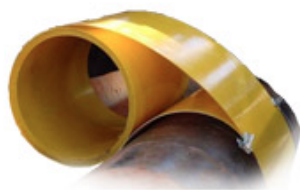
### CERTIFIED INSTALLERS

Clock Spring® repair sleeves are installed quickly and efficiently by certified installers. Re-certified each year, Clock Spring® Certified Installers receive updated installation tips & techniques.



### SIMPLE MARKING BAND SYSTEM MAKES REPAIRS VISIBLE TO IN-LINE INSPECTIONS

Composite repairs using Clock Spring® are permanent. Using our simple marking band system prevents daylighting previously repaired corrosion by showing up on ILI reports.



## CLOCK SPRING® PIPELINE REINFORCEMENT SLEEVE REPAIR SYSTEM

SLEEVE SPECIFICATIONS			
USE	Clock Spring® is a pipeline reinforcement system and repair sleeve for high-pressure transmission pipelines.		
STANDARD CONFIGURATION	Single, pre-cured sleeve featuring a continuous coil of pre-tensioned e-glass fiberglass for reinforcement.		
NOMINAL THICKNESS	Each layer Complete, Eight-layer system	.065" .500"	1.6 mm 13 mm
APPLICATION TEMPERATURE		-40° to 160° F	-40° to 70° C
SERVICE TEMPERATURE	Contact Clock Spring Company, L.P. for severe temperature application & service.	-60° to 250° F	-51° to 121° C
MATERIAL	Fiberglass and Polyester / Vinyl Ester Resin		
WIDTH		11.500" ± .500"	292mm ± .13mm
ADHESIVE SPECIFICATIONS			
LAP SHEAR STRENGTH		>1200 PSI	
SHELF LIFE	12 Months from Date of Manufacture		
FILLER SPECIFICATIONS			
COMPRESSIVE STRENGTH		>8000 PSI	
SHELF LIFE	12 Months from Date of Manufacture		
ACTIVATOR SPECIFICATIONS			
SHELF LIFE	12 Months from Date of Manufacture [Refrigeration at 38°F-52°F / 3°C -11°C Will Extend Material Shelf Life an Additional Three (3) Months]		

**Find Field Reports, Testing Validations and More at [www.ClockSpring.com](http://www.ClockSpring.com)**



Americas  
Africa, Asia, Australia, Europe

USA 281.590.8491

UK +44 1480 414703

[sales@clockspring.com](mailto:sales@clockspring.com)

[sales@clockspringuk.com](mailto:sales@clockspringuk.com)