



Acid-Shield™

Acid-Shield™ is a custom engineered composite repair system with superior chemical compatibility. Designed for repairing corroded and damaged piping, this ASME PCC-2 4.1.4.2 compliant system uses chemically resistant, bi-directional fabric in conjunction with a proprietary epoxy system to deliver repairs suitable for piping with harsh chemical services, including 98% sulfuric acid at temperatures up to 150°F (66°C).

Applications

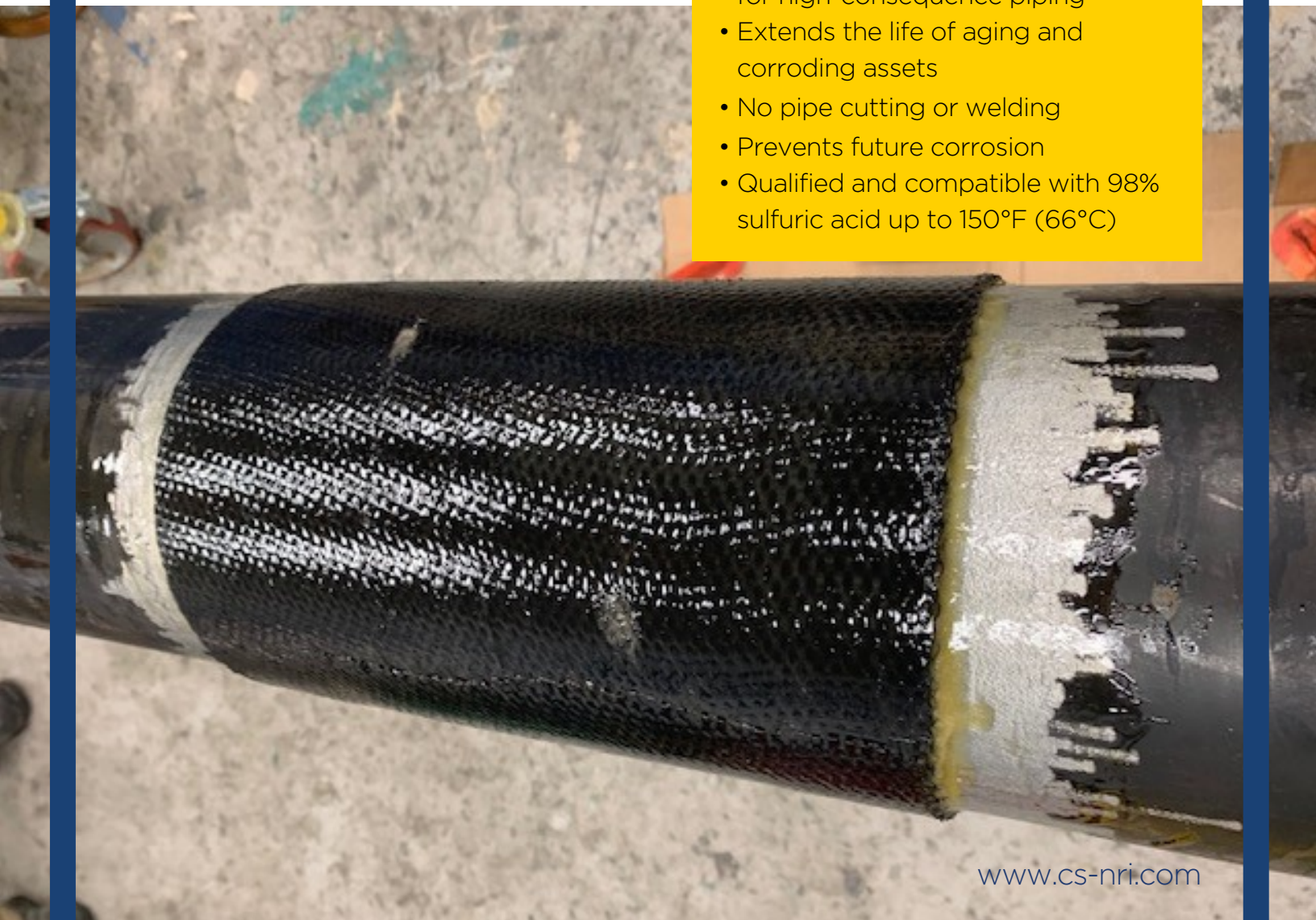
- 98% sulfuric acid lines up to 150°F (66°C)
- Chemical processing lines
- Flare lines
- Blowdown lines

Features

- Compatible with harsh chemicals like sulfuric acid, phosphoric acid, ammonium hydroxide and sodium hydroxide etc.
- Conformable for repairing elbow, tees, nozzles, welds and headers
- Design conforms to ASME PCC-2, ASME B31, ISO TS 24817, DOT, API, and CSA Z662 standards for nonmetallic reinforcing and repair

BENEFITS:

- Eliminates unplanned down time for high-consequence piping
- Extends the life of aging and corroding assets
- No pipe cutting or welding
- Prevents future corrosion
- Qualified and compatible with 98% sulfuric acid up to 150°F (66°C)



QUALIFICATION DATA

TEST	VALUE
Tensile Modulus Circumferential Direction	5.48 Msi (37.8 GPa)
Tensile Modulus Axial Direction	1.4 Msi (9.7 GPa)
Thermal Expansion Coefficient Circumferential Direction	4.2 ppm/°F (7.6 ppm/°C)
Thermal Expansion Coefficient Axial Direction	20.8 ppm/°F (37.4 ppm/°C)
Laminate Thickness	0.021 inch (0.53 mm)
Poisson's Ratio	0.21
Glass Transition Temperature	252°F (122°C)
Shear Modulus of Polymer	163 ksi (1.1 GPa)
Hardness	86 Shore D
Energy Release Rate	0.63 in.lb/in ² (111 J/m ²)
Lap Shear Strength	1,097 psi (7.56 MPa)

Warranty: CSNRI routinely implements product improvements. Please contact your local distributor or office for the most current product specifications. CSNRI warrants the quality of this product when used according to directions.

