

Advanced Composite Technology for Piping Repair



- Corrosion Repair**
- Structural Reinforcement**
- Secondary Leak Containment**
- Abrasion Protection**
- Carbon Fiber Fabrics Available**





Field Applied High-Strength Composite Reinforcement for Pipeline and Piping Repair

Engineered to Perform

PowerSleeve® is an engineered composite system that consists of fiberglass fabric and high performance epoxy resulting in a powerful piping reinforcement product.

Our industry leading kit format provides all the necessary tools for a professional installation. During production the fabric is cut to length and the epoxy components are factory pre-measured and sealed. This eliminates the need for measuring and weighing in the field, which can be cumbersome and inaccurate.

PowerSleeve® is available with your choice of multiple different epoxy systems for almost any application. Whether it is a cold climate, high-heat, or harsh chemical, there is a system to suit your need.

PowerSleeve® has been used worldwide to repair damaged and corroded piping. Whether it's the deserts of Egypt or the cold mist of the North Sea, PowerSleeve® has been there to provide a composite solution to the oil, gas, refining, and power generation industries.

Installation without Frustration

Simply lay out the fabric on a prepared table or other flat surface, combine the resin components, mix, and wet-out the fabric. The composite is ready for installation, with just the right amount of resin/fiber fraction to provide a field constructed, high-strength repair.

This kit format has helped technicians install PowerSleeve® effectively for over 12 years. We were the first to introduce this concept, and it continues to be a valuable tool to provide high-strength composite reinforcement in the field.



The quantity of materials provided with each kit is engineered to provide you with plenty of reinforcing power - but not a pile of waste!

- Versatile
- High Strength
- Convenient
- Corrosion Resistant
- Excellent Cost-to-Strength Ratio
- Conformable



Conforms to ASME PCC-2 Article 4.1
Nonmetallic Composite Repair Systems for
Piping and Pipework: High Risk Applications

Installer Qualification Training available at
your location or our facility.





Use on Straight Pipe, Elbows, Tees, and Large Diameter Tanks & Vessels

Standard Matrix (or X-100 version for underwater installations)

A two-component, ambient temperature matrix is suitable for use with all our PowerSleeve® fabrics. This ambient temperature cure matrix wets out easily and is relatively fast setting, approximately 30 minutes @77° F and is used where a maximum service temperature of 265° F is desired. No VOC's, 100% solids. Both the Standard Matrix and X-100 version products ship DOT non-hazardous.

439 Matrix

A two-component, medium temperature matrix is suitable for use with all of our PowerSleeve® fabrics. This ambient temperature cure matrix wets out and has very good chemical resistance. It is relatively fast setting, approximately 90 minutes @77° F and is used where a maximum service temperature of 325° F is desired. This matrix system should be post cured in order to achieve the best chemical resistance. This product ships DOT hazardous (corrosive).

439-S Matrix

A two-component, medium temperature matrix is a derivative of our 439 System designed for higher application temperatures. To achieve its ultimate properties, it requires heat in excess of 200° F during the curing process. It is relatively fast setting, approximately 90 minutes @150° F and is used where a maximum service temperature of 325° F is desired. This matrix system should be post cured in order to achieve the best chemical resistance. This product ships DOT hazardous (corrosive).

70079 Matrix

Type 70079 Matrix is a premium quality, two-component, novolac-epoxy hybrid system with excellent exposure resistance to most military and civilian fuels and a vast array of chemicals. It is suitable for use with all of our fabric systems. This product is used as a composite matrix where its fuel and chemical performances are required. It is very resistant to moisture and humidity effects. It will cure in high humidity conditions. This product contains no solvents, is 100% solids, and contains zero VOC's. This product ships as non-hazardous.

X-TEMP-2

A two-component, heat resistant matrix for use with all of our PowerSleeve® composite reinforcement fabrics. This system allows for higher application temperatures. This matrix system is suitable for use in service temperatures up to 450° F. Dry to touch cure time is 6 hours @150° F. This matrix system should be post cured in order to achieve the best chemical resistance. This product ships DOT hazardous (corrosive).

Reinforcement Fabrics

W-11

This fabric is a hybrid alloy employing aerospace grade E-glass and DuPont's Kevlar® yarns, arranged in a multi-axis layout that maximizes the ultimate composite strengths. It is constructed using a unique non-crimped method that reduces stress on the individual fibers and increases strength over generic woven fabrics by as much as 30%. This fabric allows for much better resin wet-out and its multi-axis format provides strength in the 90°, +45°, and -45° axis. Width is 12" nominal (wider widths available.)

G-03

This tape fabric is used for quick and easy installation on smaller diameters. It may be spiraled axially along piping and elbows or wrapped circumferentially around the pipe. Widths are available from 2" through 6".

C-2 Carbon Fiber

This carbon fabric is designed to provide maximum strength and high modulus repairs to larger diameter piping systems.

TEE Kits

Custom engineered kits are available for the repair of tees on varying sizes.

These fabrics are custom woven and designed to our specifications.

Refer to individual technical data sheets for detailed information on performance characteristics.

An ISO 9001:2008 Certified Manufacturer



- DOT QUALIFIED
- CAN BE APPLIED AT FULL PRESSURE
- FACTORY PRE-MEASURED FOR FAST INSTALLATION
- VALIDATED TO ASME PCC-2 STANDARD AND ISO 24817 TECHNICAL SPECIFICATION
- ISO 9001:2008 CERTIFIED MANUFACTURER
- DET NORSKE VERITAS (DNV) CERTIFICATION

Industries Served

- Refining
- Power Generation
- Chemical Plants
- Mining
- Industrial
- Pulp and Paper
- Liquid and Gas Transportation
- Production Facilities
- Water and Wastewater Treatment

AVAILABLE PRT PRODUCT SUPPORT SERVICES

- Project assessment
- Engineering consultation
- Repair design, calculation and documentation
- Project supervision, domestic and international
- Full range of ASME PCC-2 and ISO 24817 compliant composite materials
- Supporting installation supplies

TECHNICAL SUPPORT ASSISTANCE CONTACT:

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