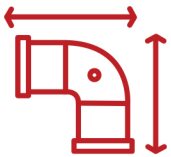


# We are Composite Solutions.

## Pipe-Type Cable Repairs



### Fully Customized Solutions

Each of our products is custom-designed for your exact needs. Our engineers will develop an installation process tailored to your project's individual specs, address all QC requirements, contractor training, and OEM oversight.



### 50-Year Life Extension. Maintenance Free.

Our fully structural composite carbon fiber reinforcement system will provide a 50-year life extension regardless of the condition of your high-pressure, fluid-filled (HPFF) or high-pressure, gas-filled (HPGF) pipes.



### Compliant with ASME PCC-2 (2015) and ISO 24817

Designed around the rigorous requirements of ASME PCC-2 (2015) Non-Metallic Composite Repair Systems: High- Risk Applications, our solution can handle 1,000 psi internal pressure even with a through-wall failure.



### Eliminates System Downtime

Repairs are done with transmission lines online, utilizing an adhesion zone concept which reduces surface prep by up to 90%. Our process maximizes efficiency and minimizes construction time.



# Maximum efficiency. No downtime.

We provide the highest quality composite reinforcement solutions for corrosion and structural degradation of the steel pipes housing your high-voltage transmission cables, preventing dielectric fluid leaks, and eliminating external corrosion.

## TYPES

### HPFF Pipes

Fully structural composites that rebuild entire pipe sections tested to 1,000 psi with through-wall failures.

### HPGF Pipes

Composite repairs are lightweight and low profile, minimizing added weight and clearance requirements.

### Manholes

Prevents corrosion in immersion conditions. Fits complex shapes like vents and splice joints.

## Installation Spotlight



**Before:** A New York-based utility found systemic corrosion in their underground HPFF transmission system. The corrosion rate was significantly accelerated in certain areas due to stray current. Though externally welded sleeves were applied during previous repairs, new dielectric fluid leaks began to occur after only 3-5 years.



**During:** After excavating and identifying adhesion zones, our carbon fiber composite reinforcement system was applied to both the feeder and return lines while still online. The adhesion zone concept eliminated 90% of the surface preparation while encapsulating 100% of the pipes with a structurally independent composite.



**After:** The system will provide a 50-year, maintenance-free service life verified to withstand more than 1,000 psi of internal pressure, even with a through-wall failure in the host pipe. The high thermal conductivity of the carbon fiber composite allows the system to stay well within the operating margin of safety for heat transfer.