



Atlas™

Atlas™ is the most tested carbon fiber composite solution for the permanent repair and rehabilitation of pipelines and piping structures. Atlas™ is highly engineered to permanently restore the original strength of pipelines suffering from both common and complex pipeline anomalies while maintaining strict compliance with corresponding regulations, codes and standards.

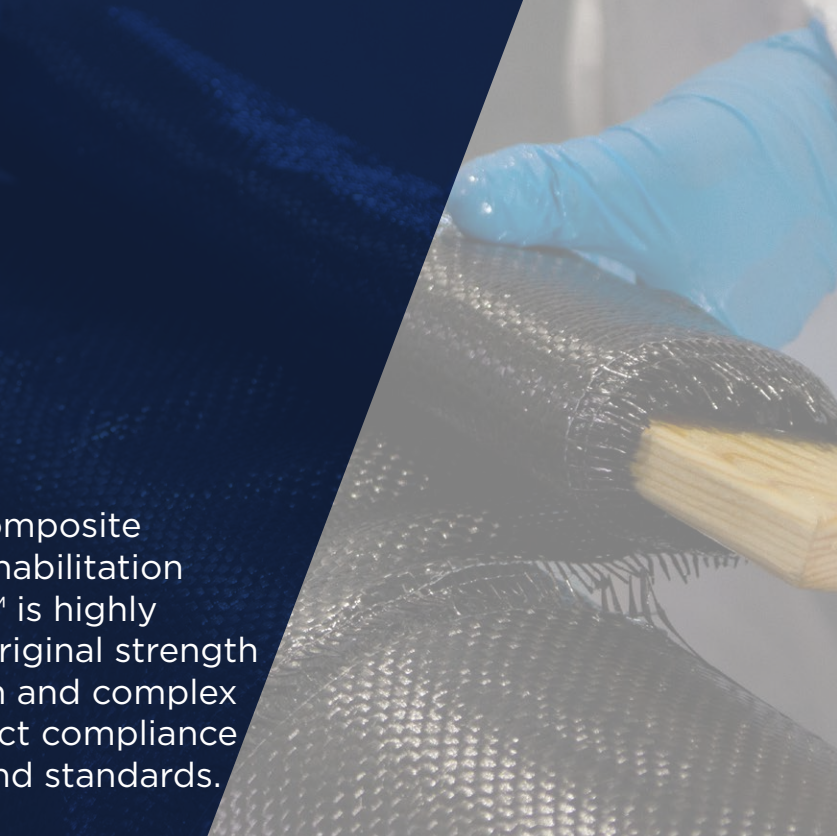
APPLICATIONS

The Atlas™ system is most used for permanently restoring serviceability to pipelines suffering from the following defects:

- External corrosion and pitting
- Dents, gouges, and scratches
- Weld defects and other manufacturing flaws
- Wrinkle Bends/Deformations
- Cracks (conditional cases)

COMPLIANT WITH: (standards/certifications)

- US CFR 192 and CFR 195
- API 579/ASME FFS-1
- CSA Z662
- ASME B31 standards
- ISO 24817
- ASME PCC-2 Article 401
- PDAM
- SAEP-345
(9Com approved)



BENEFITS:

- Permanent repair with minimal disruption to pipeline operation during installation and top coating
- No hot works, increased safety compared to welding
- Flexible repair system can be installed on complex deformations and geometries and in areas of low clearance
- Installed and inspected with cost-effective field labor
- Reduce time and cost in the ditch, repairing more anomalies in less time
- Can be installed over non-injurious hard spots and laminations without safety risk, reducing the total repair length, cost and time required compared to steel sleeves

TECHNICAL DATA

PROPERTY	CIRCUMFERENTIAL DIRECTION	AXIAL DIRECTION
Tensile Strength	166.7 ksi (1.15 GPa)	19.9 ksi (137.2 MPa)
Tensile Modulus	9.81 Msi (67.6 GPa)	2.95 Msi (20.4 GPa)
Ply Thickness	0.017" (0.43mm)	
Glass Transition Temperature	216°F (102°C)	
Hardness	85	
Max Recommended Application Temperature	140°F (60°C)	
Shelf Life	24 months	

CURING SCHEDULE

TEMPERATURE		SET TIME	CURE TIME
(C)	(F)	(HRS)	(HRS)
10	50	18	24
16	60	15	20
24	75	4	6
32	90	3.5	5
49	120	1.5	2

REPAIR SYSTEM COMPONENTS

- Filler: EPN-101, EPN-242
- Primer: PPR-220, PPR-290
- Resin: SFE-206
- Fabric: FCB-240, FEB-530

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.