CSNRI®

Atlas™ HT

Atlas™ HT is the most tested, high temperature, carbon fiber composite solution for the permanent repair and rehabilitation of pipelines and piping structures operating at high temperatures up to 450°F (232°C). Atlas™ HT is engineered to 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™ HT system is most used for pipelines and piping systems that have suffered from corrosion or third-party damages. Possible defects that can be repaired include:

- External corrosion and pitting
- Dents, gouges, and scratches
- Weld and other manufacturing flaws
- Wrinkle Bends
- Crack Reinforcement (conditional cases)
- High Temperature Pipelines

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

BENEFITS:

- Permanent repair with minimal disruption to pipeline operation during installation and top coating
- 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

Atlas™ HT

TECHNICAL DATA

PROPERTY	CIRCUMFERENTIAL DIRECTION	AXIAL DIRECTION
Tensile Strength	111.2 ksi (766.7 MPa)	15.2 ksi (104.5 MPa)
Tensile Modulus	8.81 Msi (60.7 GPa)	2.49 Msi (17.2 GPa)
Ply Thickness	0.017" (0.43mm)	
Glass Transition Temperature	484°F (251°C)	
Hardness	84	
Max Recommended Application Temperature	250°F (121°C)	
Shelf Life	12 months	

Requires heated cure schedule (will not cure in ambient conditions). Each temperature step should be followed with heating ramp rates not to exceed 2°F (1°C) per minute.

CURE SCHEDULE

TEMPERATURE		OPTION 1 (RECOMMENDED)	OPTION 2	OPTION 3 (MINIMUM)
(C)	(F)	(HRS)	(HRS)	(HRS)
60	140	5	-	-
70	160	-	4	3
90	195	1	-	1
120	250	-	1	-
150	300	1	-	4
175	350	-	1	-
205	400	3	1	-

REPAIR SYSTEM COMPONENTS

- Filler: EPN-453
- Primer: PPR-460
- Resin: SFE-450
- 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.

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ISO 9001 Certified