

FIBERGLASS PIPING SYSTEMS



TS&M Supply is the distributor for Centron, Star, Bondstrand & Smith RT and GT fiberglass corrosion resistant products, including linepipe, downhole tubing, and low pressure facility piping products. Our many fiberglass piping options offer a number of benefits over traditional materials, like steel. Benefits of using fiberglass are ease of installation, reduced installation costs, elimination of failures due to corrosion, low maintenance and life cycle costs. With over 35 years of experience selling Fiberglass products, TS&M's technical expertise, product selection and commitment to service and safety ensures we will meet your fiberglass requirements. TS&M field supervisors have solid industry experience and are qualified by the manufacturer to provide training certifications and supervision on the product and installation procedures; available 24 hours a day.

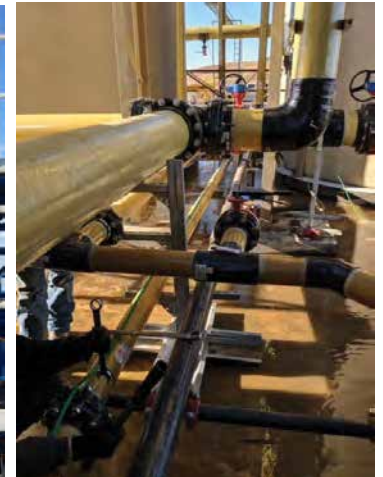


APPLICATIONS

- Flow / Emulsion lines
- Injection / Disposal lines
- Group lines
- Gas gathering & transport lines
- Low pressure battery & facility piping
- Acid / Polymer facilities
- Water processing
- De-watering lines
- Liners for linepipe & tubing
- Injection / Disposal tubing
- Production tubing
- Cement stingers
- Coal bed methane
- Casing
- CO₂, H₂S

FEATURES

- Corrosion resistant to commonly found corrosion elements in oil and gas applications (internal and external)
- Environmentally friendly option
- Can tie into any product: steel, spoolable, and fiberglass systems
- Supervision & technical services available
- Downhole tubing operating pressures of up to 4000 PSI in sizes ranging from 1.9"-9 5/8"
- Prevents paraffin and scale build-up
- Flow characteristics 1½ times better than steel
- At ¼ the weight of steel, handling and installation costs are reduced substantially
- Fast, reliable, make-up; industry standard and premium end connectors available
- Can be assembled in any weather
- Tubing and casing with deep hole capabilities of more than 10,000 ft (3048 m)
- Temperature range up to 212°F
- Facility piping operating pressures of up to 450 PSI in sizes 2"-16"



For more information on fiberglass products and services or for a customized solution, please contact your local TS&M representative or email tsm.fiberglass@dnw.com.

Big Spring, TX - 432-264-7888; **Odessa, TX** - 432-391-5255; **Williston, ND** - 701-572-9301

Sales Office (Denver, CO) - 406-890-0207 www.tsmfiberglass.com

FIBERGLASS PIPING SYSTEMS

FIBERGLASS LINEPIPE – STAR™ SS (SP/SPH), SSS, SS-HP, ACT AND PGT 8rd

- Large diameter linepipe products are manufactured in sizes ranging from 2" – 12"
- Pressure capabilities up to 3000psi, depending on size and temperatures up to 212°F
- Typically used to transport highly corrosive produced water and CO₂ gas
- Used in lower to medium pressure oil and gas flow lines where corrosive flow is encountered
- The epoxy resin systems are anhydride and aromatic curing agents with each providing slightly different chemical and temperature resistance
- Manufactured to a minimum design life of 20 years at rated temperature and pressure according to the ASTM D2992 Procedure B and industry standards, such as API 15HR

FIBERGLASS TUBING/CASING – CENTRON DH/DHC, STAR ACT

- NOV Fiberglass Systems is the leading downhole GRE producer in the industry due to its unique proprietary fiberglass layering sequence, which provides superior tensile performance
- Tubing is offered in 1 ½" – 9 5/8" with pressure ranges up to 3250 psi
- Available in 4 RD and 8 RD-EUE thread
- Used in a variety of highly corrosive applications such as:
 - Saltwater and CO₂ injection/disposal wells - for corrosion control
 - Observation wells - for monitoring formations where steel can interfere with equipment
 - Producing wells - where steel products corrode easily



FIBERGLASS FACILITY PIPING – BONDSTRAND & SMITH RT AND GT

- Available in diameters of 2" to 16" and in pressure classes of 450 psig (Larger sizes available upon request)
- Pipe sections are assembled using the Taper/ Taper adhesive joint
- Provides significant savings due to its light weight and easy installation features
- Little to no heavy handling equipment is required
- Superior corrosion resistance to oilfield fluids
- Large diameters in pipe and fittings for handling high volume flow rates
- Long service life, light weight, corrosion resistance, and improved flow characteristics

- An excellent option in the oilfield for water handling, vapor recovery, production gathering, and inner battery lines where corrosion of steel pipe is an issue.

FIBERSPAR SPOOLABLE LINEPIPE

- Fiberspar is a patented spoolable LinePipe system available in up to 6" NPS and rated up to 3500 psi and 203°F
- Fiberspar is compliant with all applicable design standards and specifications worldwide (API 15S, CSA Z662, AS 2885, Shell DEP, etc.)
- Embedded in an epoxy resin matrix, premium E-glass fibers are protected from both mechanical and chemical degradation during handling, installation and operation of Fiberspar LinePipe
- Thermoplastic liner is chemically bonded to structural glass/resin layer improving liner collapse resistance
- Thermoplastic liner offers superior internal corrosion resistance eliminating need for costly in-line inspections (ILI) as well as corrosion inhibition chemical programs
- Robustly engineered continuous, longer reel Fiberspar LinePipe systems significantly reduce overall installed and operating costs, especially in remote locations
- Fiberspar compression slip connectors are fast to install and are re-usable