

COMPOSITE PIPING SYSTEMS



TS&M Supply is the exclusive Canadian Oilfield distributor of Star™ Super Seal, Fiberspar LinePipe™ and Bondstrand® fiberglass corrosion resistant products, including line pipe, downhole tubing/casing, spoolable line pipe and low pressure facility piping. In house machining, fabrication and testing capabilities allows TS&M to provide integrated solutions and efficient completion of material supply. TS&M'S technical expertise, products and commitment to service and safety ensures we will meet your fiberglass requirements. TS&M field supervisors have solid industry experience and are CSA qualified to provide training and supervision on the product and installation procedures; available 24 hours a day.



APPLICATIONS IN CANADA

- 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)
- CSA compliant
- Environmentally friendly option
- Can tie into any product: steel, spoolable, and fiberglass systems
- Supervision & technical services available
- Linepipe with operating pressures up to 3000 PSI in sizes 2"-12"
- 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 with pressure up to 2500 PSI
- STAR™ SS (SP/SPH), SSS and SS-HP available
- Temperature range up to 100oC (212oF)
- 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.

COMPOSITE PIPING SYSTEMS

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

- Large diameter linepipe products are manufactured in sizes ranging from 2" – 12"
- Pressure capabilities up to 3000psi, depending on size and temperatures up to 100 °C
- 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
- Fiberglass reinforcement provides the structural strength
- 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 1/2" – 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:
 - o Saltwater and CO₂ injection/disposal wells - for corrosion control
 - o Observation wells - for monitoring



formations where steel can interfere with equipment

- o Producing wells - where steel products corrode easily

FIBERGLASS FACILITY PIPING – BONDSTRAND

- Available in diameters of 2" to 16" and in pressure classes of 450 psig
- 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 95°C
- Fiberspar is compliant with all applicable design standards and specifications worldwide (API 15S, CSA Z662, AS 2885, Shell DEP, etc.) and is API monogrammed
- 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