FLEXPIPE®

FLEXCORD

HIGH-PRESSURE LINEPIPE





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FLEXCORD IS THE SOLUTION

Flexcord™ delivers the same corrosion resistant, quick and cost-effective installation benefits as Flexpipe. With the ability to handle high pressures and severe pressure cycles and pulsations generated by piston pumps such as triplex and diaphragm pumps, Flexcord can be counted on to elevate your production efficiency, and maintain reliability for the duration of operation.

Capabilities up to
2000m
of spoolable pipe installed per day

35%
INSTALLATION cost reduction

50%
QUICKER TIME to first oil



52%

of pipeline failures are due to corrosion

*CAPP 2017

DESIGNED TO BE RELIABLE

The design of Flexcord uses the same three-layer principles as our Flexpipe product line, however the interior reinforcement layer of Flexcord is constructed of helically wound galvanized steel cords. This allows the pipe to experience both severe cyclic pressure or pulsations without worry of degradation of the reinforcement layer. Flexcord has been specifically designed for high reliability in demanding applications, and extensive testing as validated there is no need to overdesign or de-rate Flexcord even under severe pressure cycling.

Steel cord design allows for enhanced venting of gasses that permeate through the liner allowing for rapid decompression.

Patented design with HDPE liner and jacket reinforced with high strength galvanized steel cords.

INDUSTRY LEADING DURABILITY

Built to exceed the industry requirements of CSA, API and ASTM standards, Flexpipe's Flexcord is a preferred choice for water handling and enhanced oil recovery (water and CO_2 injection) applications.

The materials used in Flexpipe Spoolable Products have been widely used in the oil and gas industry for many years:

- The high-strength steel cords utilized in Flexcord are constructed from a series of stranded wires that provide optimum strength and flexibility.
- Inner and outer high-density polyethylene layers provide excellent corrosion and abrasion resistance.
- Each real of pipe is manufactured in a single continuous production run that combines liner, reinforcement and jacket into the finished product.

PROJECT SNAPSHOT

Flexcord was used by an energy producer in SE Alberta for water injection lines.

- Pump type: duplex piston pump, operating at 70 pressure cycles per second.
- The client intended to put a 1400 m (4500 ft) fiberglass line back into service for water injection, but after the fiberglass pressure test failed the decision was made to replace the line using FlexCord.

The client chose Flexcord to mitigate cyclic issues and corrosion concerns. Flexcord offered a robust solution increasing the reliability of the pipeline system.



“I have only good things to say about Flexcord. It is the most efficient, durable, and easy pipeline material to work with on the market. It can achieve the higher designed pressures in a variety of different environments while eliminating the potential of corrosion and failure due to fewer underground connections.”

- CANADIAN OIL & GAS COMPANY

FLEXCORD PRODUCT

spoolable composite
3”- 4” diameters

Flexpipe’s unrivaled track record is a testament of the reliability and durability of its products.

INSTALLATION

- Trenching
- Boring
- Liner Pulls
- Surface Lines
- Plowing
- Chain Ditching

UPSTREAM APPLICATIONS

- Water Disposal
- Enhanced Oil Recovery
- Water Injection
- Gathering Systems
- Surface Lines
- Flow Lines

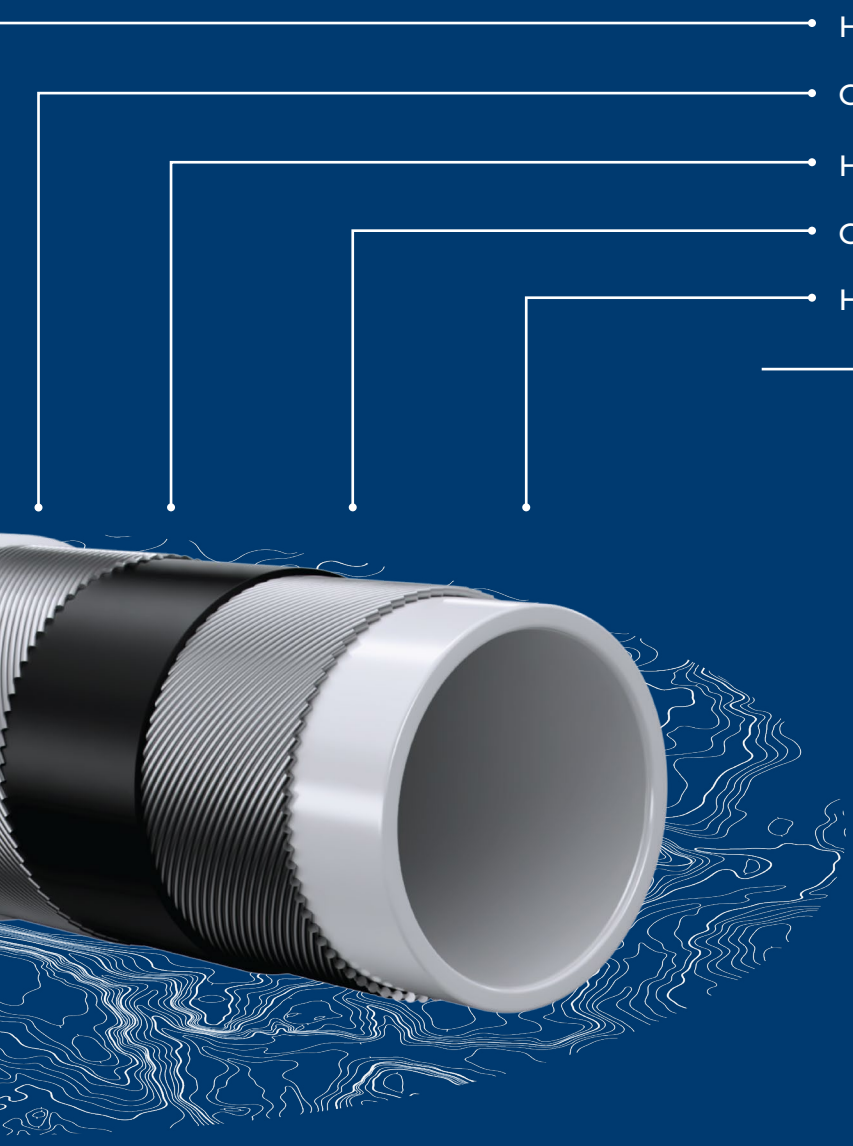


LENGTH PER REEL:
525-615 meters (1,722-2,018ft)

2,250 psi [ANSI 900]:
MAXIMUM OPERATING PRESSURE

CAPABILITIES

- Up to 100% CO_2 in gas or dense-phase
- Severe cyclic pressure conditions
- Capable of withstanding 3000 ppm of H_2S
- High concentrations of methanol and glycols
- Up to 50% aromatic concentrations
- Excellent chemical resistance
- Widely used for water transportation, injection and disposal



"We have enjoyed using Flexpipe's many products for our many needs in oil, gas and water applications"

- LARGE U.S. OIL & GAS COMPANY

Review our technical manual for more details at www.flexpipesystems.com

QUALIFICATIONS

Standards applied to Flexpipe products are predominantly performance-based. This means that they emphasize the demonstration of a product's capabilities through extensive and repeated testing.

STANDARDS AND REGULATIONS

The American Petroleum Institute (API) applies to RTP and spoolable thermosetting composite pipe. The Flexcord product line has been designed following the requirements of API 15S third edition.

The Canadian Standards Association (CSA) provides standards to which manufacturers should comply. Flexpipe spoolable products fall under clause 13.1 of this standard, and are fully compliant. Flexpipe products are qualified with regulatory bodies in the United States, Australia and Latin America. Contact our sales teams to learn more.

SAFETY, TESTING AND RELIABILITY

Flexpipe is committed to ensuring that all products are rugged, reliable and safe. Flexpipe strongly believes that its products should perform as well under field conditions, as they do in the laboratory.





THE FLEXCORD ADVANTAGE

- Lower life cycle costs
- Corrosion and abrasion resistant
- Quick and easy installation
- Reliability and traceability
- Engineering and field support
- Lower environmental impact

PROJECT SNAPSHOT

Flexcord Linepipe was chosen as the corrosion resistant pipeline solution in NW North Dakota for an energy producer's oil gathering system:

- Pump type: FMC MO615 triplex pump operating with a mean pressure of 1000 psi.
- Because Flexcord Linepipe is a flexible lightweight composite pipeline system the client was able to greatly reduce the total installation cost compared to the use of lined steel in the same application.

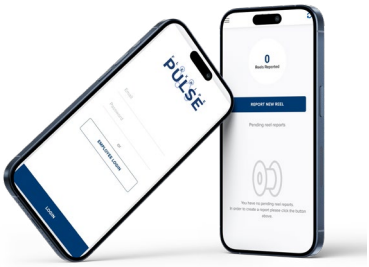
Flexpipe Systems' reliable pipeline system is capable of handling severe pressure pulsations and does not require over-specifying pressure rating or diameter.

DIGITAL ENABLEMENT

To create an entire sustainable composite technology system, Flexpipe has developed a tailored digital solution to bring seamless communication and collaboration between the end-users, contractors, and Flexpipe as the supplier, whether in the field or in the office.

- Customer Portal
- Reel Inventory Management
- Field Installation Traceability

FLEXPIPE PULSE



JOINING SYSTEMS

Flexpipe joining systems are reliable and easily repeatable, making them a top choice amongst composite customers.



Weldneck Fitting
Used to connect a steel line to a composite line



Flanged End Fitting
Allows you to tie into other materials easily



Pipe to Pipe Coupler
Connect two segments of pipe

- Proprietary fittings can be installed in 20-30 minutes
- All fittings are available in Electroless Nickel Coating or Duplex Stainless Steel
- Fittings are tested according to NACE MR0175, CSA Z662 and API 15S standards

"We have enjoyed using Composite System's many products for our oil, gas, and water applications"

- LARGE U.S. OIL & GAS COMPANY

WORKING FOR YOU

We are a global materials science company specializing in products, services and solutions for the water, energy, infrastructure and transportation markets. We continually pursue sustainable solutions that protect the environment, conserve resources and extend asset life.

flexpipesystems.com

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