

PRODUCT DATA SHEET

3 inch - 750 psi 300 ANSI

Next Generation of Steel Line Pipe

FlexSteel is a revolutionary spooled pipe solution that couples the durability of steel with the installation, performance, and cost benefits of flexible pipe products.

- Reduced CAPEX with up to 65% lower installation cost
- Corrosion-resistant properties eliminate cost of maintenance, lowering overall OPEX
- The only truly, dependable pipeline product proven through 100% reliability
- Environmentally friendly zero emission lines
- Faster commissioning and improved flow rates

Durable & Reliable by Design

With unmatched structural integrity, FlexSteel's helically wound steel core provides durability and longevity as it does not need to be de-rated over time. It will not weaken when wet and will stand up to the most grueling cyclic loading environments.

It is the only on-shore flexible pipe with API 17J certification and an environmentally friendly gas capture annuals for zero emissions. It is the clear choice when failure is not an option.

Installations Made Easy

FlexSteel is fast, easy and inexpensive to install with minimal disruption to land, which can cut installation time from weeks to days. It can be laid directly in even the most challenging terrains without the need for special bedding or handling.

Our time tested swaged fittings make for fast, reliable connections that are not sensitive to cleanliness or ambient temperature.

Applications



Oil & Gas

FlexSteel is a smart investment that yields indisputable life-cycle quality cost and performance advantages in a myriad of oil and gas applications.



CO₂

FlexSteel uses a combination of polyethylene and steel to create the ideal pipe for CO₂ transportation.



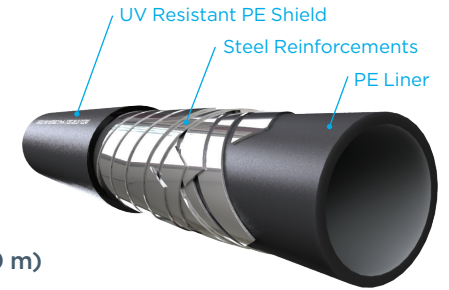
Water

Fast, easy and cost-effective installation coupled with extreme corrosion resistance make FlexSteel a natural choice for water pipelines.



Other Applications

Our solution-based approach has opened up many applications and markets where FlexSteel adds tangible, long-term value.



Pipe Specifications

Reel Length - 4,265 ft (1,300 m)

Dimensions

| | | |
|----------------------------|---------|----------|
| Pipe Inside Diameter | 69.7 mm | 2.743 in |
| Pipe Outside Diameter | 92.6 mm | 3.646 in |
| Storage Bend Radius, SBR | 0.83 m | 2.7 ft |
| Operating Bend Radius, OBR | 0.83 m | 2.7 ft |

Weights

| | | |
|------------------------------|-----------|------------|
| Weight Empty in Air | 4.7 kg/m | 3.2 lb/ft |
| Weight Water-filled in Air | 8.6 kg/m | 5.8 lb/ft |
| Weight Empty in Water | -2.2 kg/m | -1.5 lb/ft |
| Weight Water-filled in Water | 1.7 kg/m | 1.2 lb/ft |
| SG Empty in Air | 0.70 | 0.70 |
| SG Pipe Wall | 1.62 | 1.62 |

Pressures

| | | |
|-----------------------------------|-----------|-----------|
| Design Pressure | 5.17 MPa | 750 psi |
| Factory Test Pressure | 6.72 MPa | 975 psi |
| Burst Pressure | 15.69 MPa | 2,275 psi |
| Maximum External Pressure | 345 kPa | 50 psi |
| Maximum Water Depth (Fresh Water) | 35.2 m | 116 ft |

Flow Properties

| | | |
|----------------------------------|-----------|------------|
| Absolute Roughness, ϵ | 1.5E-06 m | 5.0E-06 ft |
| Relative Roughness, ϵ/D | 16E-06 | 16E-06 |
| Hazen-Williams Coefficient, C | 150 | 150 |

Thermal Properties

| | | |
|-----------------------|---------------------------|--------------------------------|
| Maximum Temperature | 60°C | 140°F |
| OHTC, U (based on ID) | 29.81 W/m ² °C | 5.25 BTU/hr-ft ² °F |

Mechanical Properties

| | | |
|------------------------------|------------------------|--------------------------|
| Bending Stiffness, EI | 1,225 N·m ² | 2,963 lb-ft ² |
| Spooling Tension | 1.8 kN | 400 lb |
| Maximum Installation Tension | 31.1 kN | 7,000 lb |