

# **FLEXFLOW™ LINEPIPE**

Manufactured and tested to the highest standards, **FlexFlow Linepipe**(FFLP) is the only fully bonded, epoxy-free, flexible composite pipe solution for the 6 and 8 inch onshore linepipe market.

## **CORROSION RESISTANCE**

FFLP is suitable for highly corrosive applications. With a patent pending reinforced thermoplastic design and reliable electrofusion joints, FFLP eliminates the need for a metallic fitting connection every 200-400 meters (656-1,312 feet) unlike other 6 and 8 inch spoolable composite linepipes available on the market

### VERSATILITY

6 inch FFLP provides comparable flow rates versus 10 inch SDR 7 HDPE and 8 inch FFLP provides higher flow rates versus 12 inch SDR 7 HDPE for produced water applications due to higher allowable pressure drop with FFLP. FFLP does not require de-rating for any hydrocarbons present, and significantly more footage can be transported than HDPE per truck load due to lower internal diameter of FFLP meeting flow requirements.

#### RELIABILITY AND DURABILITY

FFLP offers significantly superior impact resistance, durability and flexibility over stick fiberglass. FFLP maintains a burst pressure greater than 5 times maximum operating pressure after the impact from a 20 pound (9.1 kilograms) object dropped from a height of 3 meters (10 feet) at -25°C (-13°F). This eliminates the need for gentle handling and sand padding, saving on installation costs. It is also suitable for cyclic applications and can handle 10 full 0 to MAOP pressure cycles per day with a safety factor of 10.

## **ROBUST CONNECTION SYSTEM**

FFLP comes with one end of the pipe already fused to the FlexFuse<sup>™</sup> coupling, reducing the installation time in the field. Total cycle time is approximately 8 minutes per connection. The FlexFuse connection is extremely reliable and eliminates leakage issues. COMPOSITE PRODUCTION SYSTEMS Shawcor.com 60°C (140°F) maximum continuous operating temperature

750 psi (ANSI 300) MAXIMUM OPERATING PRESSURE

## **APPLICATIONS:**

Oil, gas, water,  $H_2S$  (up to 50,000 ppm) and  $CO_2$  (up to 100%)

# ID SIZES:

5.8 and 7.6 inch

# LENGTH PER STICK:

11.9 meters (39.2 feet), 12.2 meters (40 feet) with coupling

#### INSTALLATION:

Trenching, plowing, chain ditching, surface lines, horizontal directional drilling (HDD), liner pulls (remediation)



# INSTALLATION COST SAVINGS

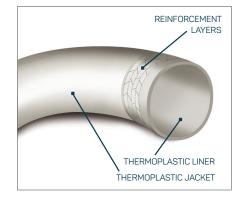
Unlike steel linepipe that requires special bend sections, FFLP has a minimum operating bend radius of 3-4 meters (10-13 feet) that allows for quick installation around bends. Being a stick product eliminates the need for reel management and additional heavy equipment onsite. FFLP reduces the transportation cost by half or more compared to other spoolable composite linepipe by packing between 950 and 1,200 meters (3,100 and 3,900 feet) per truck load.

# True 6" and 8" products with IDs of 5.8" and 7.6" for increased flow rates.

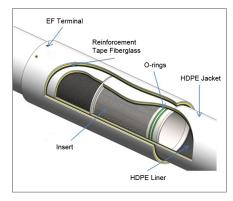
		FF301	
MAXIMUM OPERATING PRESSURE @ 60°C OR 140°F		5,171 KPA / 750 PSI	
Nominal Size		6"	8"
Pipe Length	Metric (m)	11.94	11.94
	Imperial (ft)	39.17	39.17
Pipe Outside Diameter	Metric (mm)	175	226
	Imperial (inches)	6.9	8.9
Pipe Inside Diameter	Metric (mm)	147	192
	Imperial (inches)	5.8	7.6
Pipe Weight	Metric (kg/m)	8.3	14
	Imperial (lbs/ft)	5.6	9.4
Coupling Length	Metric (mm)	510	620
	Imperial (inches)	20.1	24.4
Coupling Outside Diameter	Metric (mm)	201	262
	Imperial (inches)	7.9	10.3
Coupling Weight	Metric (kg)	5.5	11.4
	Imperial (lbs)	12.1	25.1
Insert Length	Metric (mm)	510	620
	Imperial (inches)	20.1	24.4
Insert Inside Diameter	Metric (mm)	135	175
	Imperial (inches)	5.3	6.9
Insert Weight	Mertic (kg)	3.2	4.4
	Imperial (lbs)	7.1	9.7
Minimum Bend Radius	Metric (m)	3.0	4.0
	Imperial (ft)	9.8	13.1
Pipe, Coupling, Insert and End	Metric (kg)	109.1	184.6
Caps Combined Weight	Imperial (lbs)	240.5	407
Pallet Shipping Weight	Metric (kg)	2,820	3,780
	Imperial (lbs)	6,210	8,320

Lengths and weights are approximate as they may vary depending on the manufacturing run. FFLP sticks are also available in lengths to fit standard shipping containers.

Shawcor Ltd. is a global energy services company specializing in products and services for the pipeline and pipe services segment of the oil and gas industry and related products for petrochemical and industrial markets. The Company operates through a network of fixed and mobile manufacturing and service facilities located around the world and is valued for its integrity, technology, and proven capability to execute the most complex projects in our industry.



# FlexFuse<sup>™</sup> Connection



### Insert



Product data is subject to change without notice. Shawcor's products are patented by US Patents 6,889,716, 6,902,205, 7,946,629 B2 and 8,042,252 B2 by Canada Patents 2,513,506, 2,513,468 and 2,562,823 and by European Patent 1592908. Additional patents are pending. Shawcor FFLP complies with API RP 15S, CSA Z662-15 and ASTM D2992. ©Shawcor Ltd., 2016

# SHAWCOR