



[PRODUCT LINE]

- **Bell x Spigot Piping**
- **Tee Fittings**
- **45° and 90° Elbows**
- **Adapters and Bushings**
- **Reducers**
- **Sleeve Couplings**
- **Flanges**

Lightweight, easy to handle and install, Centron® Fiberglass Epoxy GRE Bell x Spigot Line Pipe is ideal for oil field or other flow line installations. The piping system is installed using Ameron adhesive systems which provide a fast cure and a locking mechanism where the connections are held together securely while the adhesive is curing. Assembly of Centron Bell x Spigot piping systems requires no special tools or preparation except for tapering the field cut joints with a taper tool which is fully described in the installation manual. A full line of fittings and adapters is available. Centron Bell x Spigot Pipe is filament wound on polished steel mandrels for exceptional flow characteristics.

FEATURES

- > The chemical resistance of Centron Tubular Products is determined by the Epoxy Resin System. Centron offers two standard resin systems. The Centron anhydride/epoxy system delivers trouble free service in the vast majority of oilfield fluids to 180°F (82°C). The Centron aromatic amine/epoxy system provides service over a wide pH range up to temperatures of 210°F (99°C). Both systems may be hot oiled to 225°F (106°C) for periods of time up to 24 hours at pressures not to exceed 50% of the ambient temperature static pressure rating. Contact Centron's Customer Service Department for any application questions.

ADVANTAGES

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 - Lower installation costs
 - Excellent corrosion resistance and long service life
 - Superior flow characteristics for pumping economy
 - Fast cure adhesive
 - Low paraffin and scale build-up

Centron line pipe meets or exceeds API specifications 15LR. Centron International Inc. manufactures a complete line of fiberglass surface pipe, line pipe, tubing, casing and associated fittings. See your Centron distributor or call Centron International Inc. for all your fiberglass tubular product needs.



Q1, 15LR, 15HR
ISO 9001

Physical Specifications

Nominal Size Inches (mm)	Series/ Rating	Nominal Outside Dia. Inches (mm)	Nominal Inside Dia. Inches (mm)	Nominal Wall TK Inches (mm)	Nominal Box O.D. Inches (mm)	Weight Lbs. / Ft. (Kg/M)	Minimum Bend Radius Feet (M)	Offset per joint Inches (M)	Support Spacing Feet (M)
2 (50)	CBS 500	2.35 (59.7)	2.23 (56.6)	.060 (1.52)	3.12 (79.0)	.37 (.55)	88 (27)	60 (1.5)	12 (3.6)
3 (75)	CBS 500	3.49 (88.6)	3.35 (85.1)	.070 (1.78)	3.70 (94.0)	.65 (.96)	135 (41)	39 (1.0)	14 (4.2)
4 (100)	CBS 500	4.49 (114.0)	4.33 (110.0)	.080 (2.00)	4.70 (120.0)	1.00 (1.50)	178 (54)	29 (0.8)	16 (4.8)

JOINT LENGTH=30.0 FT. (9.14 M)

MAKE-UP LENGTH= 29.67 FT. (9.04 M)

Performance Properties¹

RATED INTERNAL OPERATING PRESSURE				TYPICAL ULTIMATE VALUES	
Nominal Size Inches (mm)	Series	Static ² PSI (MPa)	Cyclic PSI (MPa)	Short Term ³ Weep Pressure PSI (MPa)	Ext. Collapse Pressure PSI (MPa)
2 (50)	CBS 500	500 (3.45)	300 (2.07)	2400 (16)	130 (0.9)
3 (75)	CBS 500	500 (3.45)	300 (2.07)	2000 (14)	60 (0.4)
4 (100)	CBS 500	500 (3.45)	300 (2.07)	1600 (11)	40 (0.3)

1. In all applications chemical compatibility and physical capability of the pipe for the operating conditions must be determined.

2. Quasi-steady

3. Unrestrained across the joint strength

General Technical Data

Mill Test Pressure:	Operating Pressure x 1.25
Axial Modulus of Elasticity:	1.85 x 10 ⁶ PSI (1.27 x 10 ⁴ MPa)
Hoop Modulus of Elasticity:	3.00 x 10 ⁶ PSI (2.05 x 10 ⁴ MPa)
Density:	0.07 lbs/in ³ (Sp. Gr.= 1.95)
Coefficient of Thermal Expansion:	1.0 x 10 ⁻⁵ in/in/°F (1.8 x 10 ⁻⁵ m/m/°C)
Hazen-Williams Flow Factor:	150
Poissons Ratio (Hoop Tensile):	.60
Poissons Ratio (Axial Tensile):	.45