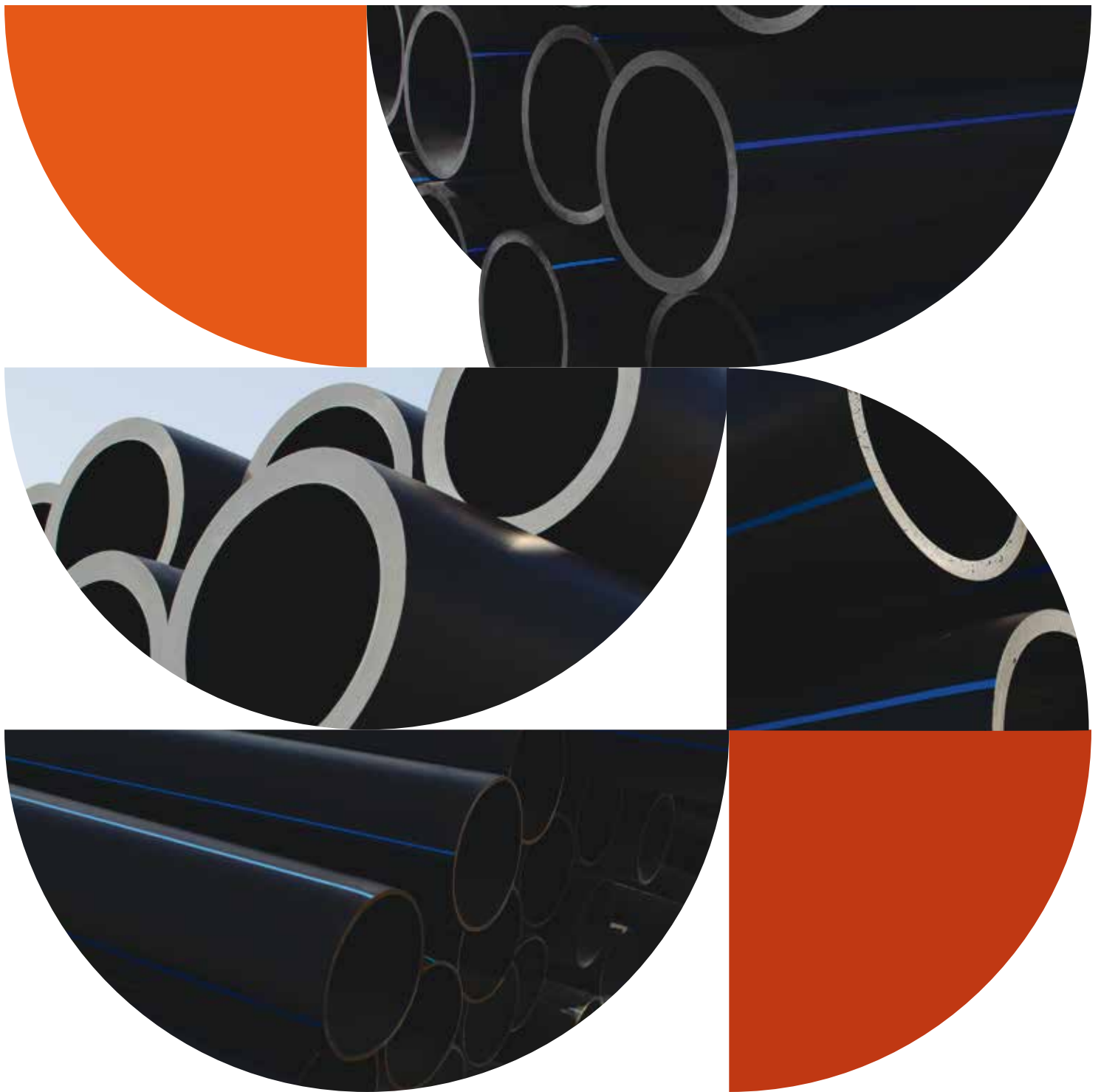




TDRFORZA

HDPE PRESSURE PIPE



TDRPIPE

TDR™ FORZA is our high performance HDPE pressure pipe product line. Using only high quality certified and listed materials with state of the art production technology. We build a strong pipe to resist the most demanding applications.



APPLICABLE STANDARDS AND CERTIFICATIONS

- ASTM F-714
- ASTM D-3035
- PPI TR4 HSB Program Listed

APPLICATIONS

- Potable Water Systems
- Mining Industry
- Storm and Sanitary Water Sewage
- Oil and Gas Industry
- Pressure Irrigation Systems
- Pipe Bursting and rehabilitation Lines

PIPE CHARACTERISTICS

- TDR PE 4710 is a high performance bimodal HDPE pipe.
- Superior strength, corrosion, abrasion and high chemical resistance.
- Smooth interior wall to resist scale build up preventing flow capacity reduction.
- Leak-free heat fused joint system.
- Installed by open cut or trenchless method.
- Color gray for TV internal inspection available.
- Color stripes according to application available.

TECHNICAL DATA - PE 4710

Physical Properties	Nominal Value*	Test Method
Resin Designation	PE 4710	ASTM F714
Cell Classification Limits	445472C	ASTM D3350
Density (g/cm ³)	>0.947~0.955	ASTM D1505
Melt Index (MI) 190°C/2.16 Kg (g/10 min)	<0.15	ASTM D1238
Flexural Modulus MPa (psi)	758-<1,103 (110,000 to 160,000)	ASTM D790

Physical Properties	Nominal Value*	Test Method
Tensile Strength @ Yield Mpa (psi)	21 - <24 (3000 - < 3500)	ASTM D638
Slow Crack / Growth Resistance / II. PENT (hours) / Molded Plaque / 80°C / 2.4 Mpa	>500	ASTM F1473
Hydrostatic Design Basis (HDS), Mpa (psi) (23°C)	6.9 (1000)	ASTM D2837
Minimum HDB at 140°F (60°C), Mpa (psi)	5.5 (800)	ASTM D D2837
Color and Ultraviolet (UV) Stabilization Code C	2 to 3 % carbon black	ASTM D4218

DIMENSIONS

Work Pressure (psi)	327	250	200	160	125	111	100	80	63
DR	7	9	11	13.5	17	19	21	26	32.5
IPS Size	Nominal OD (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)	Min Wall (in)
4	4.500"	0.643"	0.500"	0.409"	0.333"	0.265"	0.237"	0.214"	0.138"
6	6.625"	0.946"	0.736"	0.602"	0.491"	0.390"	0.349"	0.315"	0.204"
8	8.625"	1.232"	0.958"	0.784"	0.639"	0.507"	0.454"	0.411"	0.265"
10	10.750"	1.536"	1.194"	0.977"	0.796"	0.632"	0.566"	0.512"	0.331"
12	12.750"	1.821"	1.417"	1.159"	0.944"	0.750"	0.671"	0.607"	0.392"
14	14.000"	2.000"	1.556"	1.273"	1.037"	0.824"	0.737"	0.667"	0.431"
16	16.000"	2.286"	1.778"	1.455"	1.185"	0.941"	0.842"	0.762"	0.492"
18	18.000"	2.571"	2.000"	1.636"	1.333"	1.059"	0.947"	0.857"	0.554"
20	20.000"	-	2.222"	1.818"	1.481"	1.176"	1.053"	0.952"	0.615"
22	22.000"	-	2.444"	2.000"	1.630"	1.294"	1.158"	1.048"	0.677"
24	24.000"	-	2.667"	2.182"	1.778"	1.412"	1.263"	1.143"	0.738"
26	26.000"	-	2.889"	2.364"	1.926"	1.529"	-	1.238"	0.800"
28	28.000"	-	3.111"	2.545"	2.074"	1.647"	-	1.333"	0.862"
30	30.000"	-	3.333"	2.727"	2.222"	1.765"	-	1.429"	0.923"
32	32.000"	-	3.556"	2.909"	2.370"	1.882"	-	1.524"	0.985"
34	34.000"	-	3.778"	3.091"	2.519"	2.000"	-	1.619"	1.046"
36	36.000"	-	4.000"	3.273"	2.667"	2.118"	-	1.714"	1.108"
42	42.000"	-	-	3.818"	3.111"	2.471"	-	2.000"	1.292"
48	48.000"	-	-	-	-	2.824"	-	2.286"	1.477"

Pressure ratings for water@ 73.4°F (23°C)

*Nominal Values are typical results and are not guaranteed or intended to be used as a product specification or engineering values

**Pressure Ratings are dependent upon temperature, environmental, and/or chemical considerations which may require the use of additional service factors. The listed pressure ratings are based on PE 4710 materials with 1,000 psi HDS in Maximum design temperature is 140°F. Federal design requirements will take precedence for regulated piping systems.