



ABOUT MODERN POLYMER PIPE AND EXTRUSIONS

Modern Polymer Pipe and Extrusions was founded in 2014, initially only capable of producing 2" - 6" diameter HDPE pipe. After almost a decade of experience, we have expanded our catalog to produce up to 24" diameter HDPE pipe. Along with developing a larger catalog, we have also been able to focus on improving the quality of our pipe. We are certified by the NSF that our pipe meets AWWA C901 and AWWA C906 requirements to transport potable water safely.

Modern Polymer Pipe and Extrusions is part of The Modern Group, a strong family of industrial equipment companies serving a broad range of industries including oil and gas, agriculture, power generation, storage, and transportation.

HDPE (HIGH DENSITY POLYETHYLENE)

HDPE is a strong, light-weight thermoplastic used to manufacture pipe for liquid and gas transfer. We use PE4710, an improved, high-performance resin that offers stronger physical properties allowing the pipe to handle high internal pressures. Due to its unique performance properties, HDPE has a broad range of applications and a 100-year service life. At Modern Polymer Pipe and Extrusions, we can help your company meet your HDPE needs.



HYDRAULIC PERFORMANCE 4" IPS PIPE

VISIT OUR WEBSITE TO VIEW AND DOWNLOAD PERFORMANCE DATA ON ALL PIPE OFFERINGS.

Avg OD,	DR	7	9	11	13.5	17	21
in	Pressure Rating	335 psi	250 psi	200 psi	160 psi	125 psi	100 psi
4.5	Min wall, in	0.643	0.500	0.409	0.333	0.265	0.214
	Avg ID, in	3.137	3.440	3.633	3.793	3.939	4.046
	Weight, lb/ft	3.401	2.750	2.304	1.915	1.547	1.268

STANDARDS FEATURES

Pipe Manufacturing Standards

- ASTM D3035
- ASTM F714
- **ASTM F2619**
- NSF/ ANSI 14
- FM 1613

Pipe Resin Standards

ASTM D3350

Water Works Standards

- AWWA C901
- AWWA C906
- NSF/ ANSI 61
- CC3 Oxidative Resistance Classification

Available in sizes from 2" - 24" **IPS with DR 7 - 21**

- 2" 6", 500/1000/2000 ft coils
- 2" 24", 20/40/50 ft sticks



Temperature Deratings								
Temperature	Multiplier, F _T							
40	1.22							
50	1.15							
60	1.08							
70	1.02							
73	1.00							
80	0.96							
90	0.90							
100	0.84							
110	0.78							
120	0.73							
130	0.68							

APPLICATIONS WE'VE GOT DECADES OF EXPERIENCE Energy

- EPC
- Municipal
- Water/ Sewer
- Waterworks
- Mining
- Landfill
- Farm and Agriculture
- Golf and Irrigation

THE TOTAL PIPING SOLUTION.





Polyethylene pipe is connected through heat fusion, a technique that partially melts the pipe to then be joined to another section or fitting. The ends of the pipes to be joined are trimmed flush then placed against a heater plate. Once the ends begin to melt, the heater plate is removed, and the ends are brought together. Once cooled, the new formed joint is stronger than the pipe itself and creates a leak-free connection that is self-restrained. HDPE can be installed in several ways including above ground, direct burial, slip lining, pipe-bursting, and directional-drilling as well as be used in open-cut trenchless applications.



WHY CHOOSE HDPE?

- Economical
- Zero Leak Rate
- Hydraulically Smooth
- Long Design Life
- Easy to Install
- Corrosion Resistant
- Abrasion Resistant
- Freeze Resistant
- Impact Resistant

- Surge Resistant
- Inert
- Lightweight
- Flexible/ Coil-able
- 100-year service life
- Listed and Approved
- CC3 Oxidative Resistance Classification

HDPE PIPE CHART



Pipe Size Aug OD OR 6 7 9 11 13.5 17 21		PE4710 Pressure Class*					250 psi		200 psi	160 psi		125 psi		100 psi	
2" IPS	Pipe Si	ize Avg OD	DR	6		7		9		11		13.5		17	21
Weight, lb/ft 1.072			Min Wall, in	0.396		0.339		0.264		0.216		0.176		0.140	0.113
3" IPS 3.5	2" IP:	S 2.375	Avg ID, in	1.536		1.656		1.816		1.917	Ш	2.002	Ш	2.079	2.135
3" IPS			Weight, lb/ft	1.072	ш	0.947		0.766		0.642	Ш	0.533	Ш	0.431	0.353
Weight, lb/ft	/		Min Wall, in	0.583		0.500		0.389		0.318		0.259		0.206	0.167
4" IPS	3" IP:	S 3.5	Avg ID, in	2.263		2.440		2.676	Ш	2.825	Ш	2.950	Ш	3.064	3.147
4" IPS	6		Weight, lb/ft	2.329		2.057		1.663		1.394	Ш	1.158	Ш	0.936	0.767
Weight, ib/ft 3.849 3.401 2.750 2.304 1.915 1.547 1.268			Min Wall, in	0.750		0.643		0.500		0.409		0.333		0.265	0.214
6" IPS	4" IP:	S 4.5	Avg ID, in	2.910		3.137		3.440		3.633		3.793		3.939	4.046
6" IPS 6.625			Weight, lb/ft	3.849		3.401		2.750		2.304		1.915		1.547	1.268
Weight, lb/ft 8.343 7.371 5.960 4.995 4.150 3.354 2.749			Min Wall, in	1.104		0.946		0.736		0.602		0.491		0.390	0.315
8" IPS	6" IP:	S 6.625	Avg ID, in	4.284		4.619		5.064		5.348		5.585		5.799	5.956
8" IPS			Weight, lb/ft	8.343		7.371		5.960		4.995		4.150		3.354	2.749
Weight, lb/ft 14.141 12.493 10.102 8.466 7.034 5.684 4.660 0.512 1.019 1.018 1.019 1.018 1.019 1.018 1			Min Wall, in	1.438		1.232		0.958		0.784		0.639		0.507	0.411
10" IPS 10.75	8" IP:	S 8.625	Avg ID, in	5.578		6.013		6.593		6.963		7.271		7.549	7.754
10" IPS			Weight, lb/ft	14.141		12.493		10.102		8.466		7.034		5.684	4.660
Neight, lb/ft 21.968 19.407 15.693 13.151 10.927 8.830 7.239			Min Wall, in	1.792		1.536		1.194		0.977		0.796		0.632	0.512
12" IPS 12.75 Avg ID, in 8.245 8.889 9.747 10.293 10.748 11.160 11.463 14.47 1.176 1.179 1	10" IF	PS 10.75	Avg ID, in	6.952		7.494		8.218		8.678		9.062		9.409	9.665
12" IPS			Weight, lb/ft	21.968		19.407		15.693		13.151		10.927		8.830	7.239
Weight, lb/ft 30.903 27.300 22.075 18.500 15.372 12.421 10.183			Min Wall, in	2.125		1.821		1.417		1.159		0.944		0.750	0.607
14" IPS	12" IF	PS 12.75	Avg ID, in	8.245		8.889		9.747		10.293		10.748		11.160	11.463
14" IPS 14 Avg ID, in 9.053 9.760 10.702 11.302 11.801 12.254 12.587 Weight, lb/ft 37.259 32.915 26.616 22.305 18.534 14.976 12.277 16" IPS Min Wall, in 2.667 2.286 1.778 1.455 1.185 0.941 0.762 1.778 1.455 1.487 14.005 14.385 Weight, lb/ft 48.665 42.991 34.764 29.133 24.207 19.560 16.035 18" IPS 18 Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143			Weight, lb/ft	30.903		27.300		22.075		18.500		15.372		12.421	10.183
Meight, lb/ft 37.259 32.915 26.616 22.305 18.534 14.976 12.277			Min Wall, in	2.333		2.000		1.556		1.273		1.037		0.824	0.667
Min Wall, in 2.667 2.286 1.778 1.455 1.185 0.941 0.762	14" IF	PS 14	Avg ID, in	9.053		9.760		10.702		11.302		11.801		12.254	12.587
16" IPS Avg ID, in Weight, lb/ft 10.347 11.154 12.231 12.916 13.487 14.005 14.385 18" IPS Min Wall, in 3.000 2.571 2.000 1.636 1.333 1.059 0.857 18" IPS Avg ID, in 1.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in 2.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 3.429 2.667 2.182 1.778 1.412 1.143			Weight, lb/ft	37.259		32.915		26.616		22.305		18.534		14.976	12.277
Weight, lb/ft 48.665 42.991 34.764 29.133 24.207 19.560 16.035 18" IPS 18 Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 2.182 1.778 1.412 1.143			Min Wall, in	2.667		2.286		1.778		1.455		1.185		0.941	0.762
Min Wall, in 3.000 18" IPS Min Wall, in 3.000 2.571 2.000 1.636 1.333 1.059 0.857 Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, Ib/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 Avg ID, in 3.333 2.857 2.222 1.818 1.481 1.176 0.952 Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, Ib/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143	16" IF	PS 16	Avg ID, in	10.347		11.154		12.231		12.916		13.487		14.005	14.385
18" IPS Avg ID, in Weight, lb/ft 11.640 12.549 13.760 14.531 15.173 15.755 16.183 20" IPS Min Wall, in Weight, lb/ft 3.333 2.857 2.222 1.818 1.481 1.176 0.952 Avg ID, in Weight, lb/ft 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143				48.665		42.991		34.764		29.133		24.207		19.560	16.035
Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in 12.933 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143			Min Wall, in	3.000						1.636				1.059	0.857
20" IPS Min Wall, in 3.333 Avg ID, in 12.933 Weight, lb/ft 2.857 T6.038 Avg ID, in 12.933 T6.174 T6.038 T6.038 T6.174 T6.038 T6.038 T6.174 T6.038 T6	18" IF	PS 18		11.640		12.549								15.755	
20" IPS Avg ID, in Wall, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, Ib/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143				61.591		54.411		43.998		36.872		30.637		24.756	20.295
Weight, lb/ft 76.038 Min Wall, in 67.174 3.429 54.318 2.667 2.182 37.824 30.563 25.055 1.412 1.43			Min Wall, in	3.333		2.857				1.818				1.176	0.952
Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143	20" IF	PS 20		12.933		13.943		15.289		16.145		16.859		17.506	17.981
			U , ,	76.038						45.521				30.563	
24" IPS 24 Avg ID in 16 731 18 347 19 375 20 231 21 007 21 577															
	24" IF	PS 24	Avg ID, in			16.731		18.347		19.375		20.231		21.007	21.577
Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079			Weight, lb/ft			96.730		78.218		65.550		54.466		44.011	36.079
Legend Potable Water Use Sewage Water Use Reclaimed Water Use		Legend	l	Potable Water U	Jse	Sew	age	Water Use		Reclaimed W	ate	r Use			
*Pressure Ratings based on water at 73°F.	*F	Pressure Ratings based on v	water at 73°F.												

HDPE STICK TRUCK LOAD CHART &

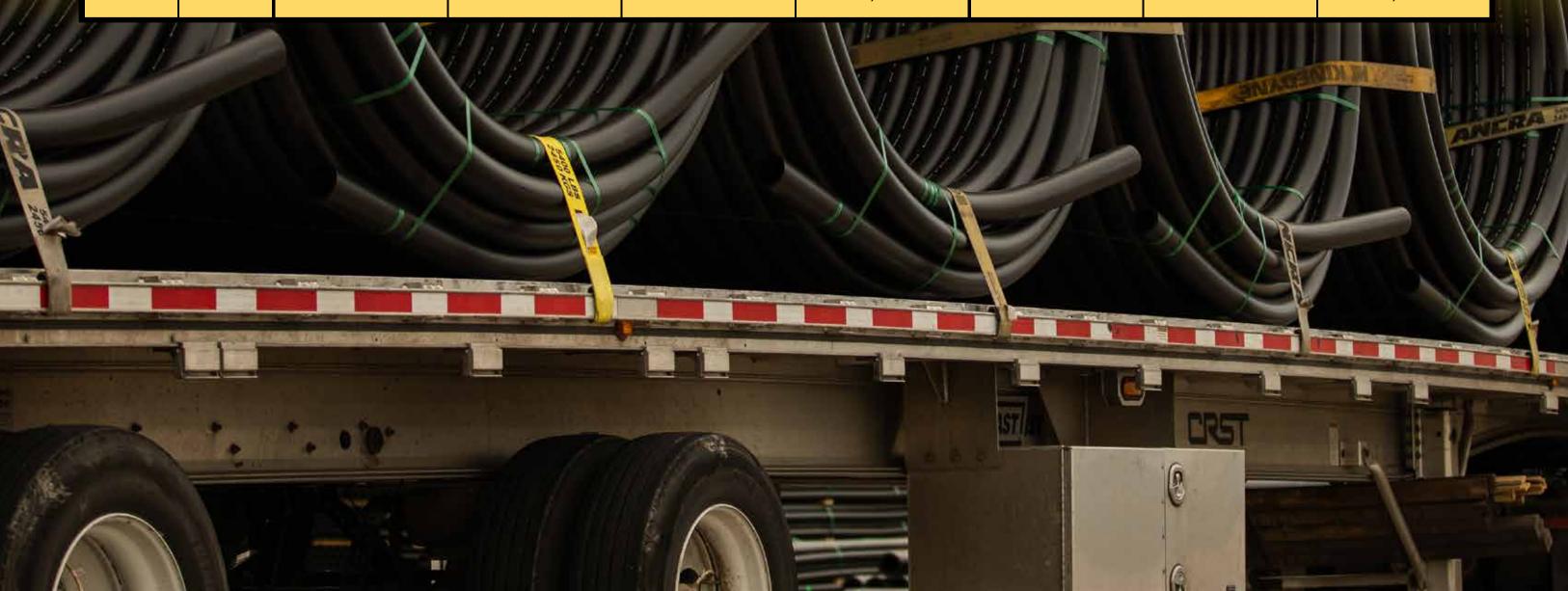


Pipe Size Dick Bundles Pixels Truck Truck Pixels Truck Pixels Truck Pixels Truck Truck Pixels Truck Pixels Truck Truck Pixels Truck Truck Pixels Pixels Truck Truck Pixels Truck Pixels Truck Pixels Truck Truck Pixels Truck Pixels Truck Truck Pixels				Chieke mon		50 ft Sticks		40 ft Sticks			20 ft Sticks				
2" PS 7 50 20 1,000 20 60,000 24 1,200 48,000 48 2,400 48,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 22,000 28 1,400 28,000 28,000 28 1,400	Pipe Size		DR	Sticks per Bundle	dle Bundles per Sticks Footage per Bundles per Sticks		Sticks	Footage per	Bundles per	Sticks	Footage per				
2	L			Dullale	Truck	per Truck	Truck	Truck	per Truck	Truck	Truck	per Truck	Truck		
9-21		2" IPS		50		-		24	1,200	48,000	48	2,400	48,000		
3" PS							·								
1							·	11	550	22,000	22	1,100	22,000		
13.5-21		3" IPS		50				1./	700	28 000	20	1 400	28 000		
14 266 13,300 18 342 13,680 36 684 13,680 11 13,521 21 399 19,950 22 418 16,720 44 836 16,720 47 13,521 10 130 6,500 12 156 6,240 24 312 6,240 24 11 12 12 156 7,800 14 182 7,280 28 364 7,280 11 12 13 14 182 9,100 14 182 7,280 28 364 7,280 11 12 12 10 10 90 4,500 12 108 4,320 24 216 4,320 11 12 108 2,160 13 108 2,160								14	700	20,000	28	1,400	28,000		
4" IPS	ı						·	18	342	13 680	36	684	13 680		
11								10	0.12	10,000	- 50	001	10,000		
13.5 - 21		4" IPS		19				22	418	16,720	44	836	16,720		
1	ı		13.5 - 21		22	418									
11-21	ı		7		10	130	6,500	12	156	6,240	24	312	6,240		
8" IPS 9		6" IPS		13				14	187	7 280	28	364	7 280		
8" IPS 9			11 - 21												
11-21								10	90	3,600	20	180	3,600		
10" PS 9 5/4 6 54 2,700 8 72 2,880 16 144 2,880		8" IPS		9				12	108	4,320	24	216	4,320		
10" IPS 9				5/4				C	Ε.4	2.460	12	100	2.460		
11-21		10" IDS						6	54	2,160	12	108	2,160		
12" PS 9		10 11 3					-	8	72	2,880	16	144	2,880		
12" PS								5	40	1 600	10	80	1 600		
12" IPS 9	•														
13.5-21	1	12" IPS		4	5	40	2,000	+4 sticks		2,080		108	2,160		
13.5 - 21	1		11			48	2,400	7	56	2 240	14	112	2 240		
14" IPS 9															
11-21 6 42 2,100 6 42 1,680 12 84 1,680 1				4/2	4/2					35	1,400	10	70	1,400	
The color of the		14" IPS		4/3				6	42	1,680	12	84	1,680		
16" IPS								0	2.4	000	1.0	40	000		
16" IPS															
11		16" IPS		3				11	33	1,320	22	00	1,320		
13.5 - 21 12 36 1,800 18" IPS 7 3/2 4 17 850 4 20 800 8 40 800 20" IPS 9 3/2 14 700 3 15 600 6 30 600 24" IPS 11 2 8 400 3 12 480 6 24 480 24" IPS 11 2 3 400 3 12 480 6 24 480 24" IPS 1 480 6 24 480 24" IPS 1 480 6 24 480 8 3 12 480 6 24		200	11			32	1,600	12	36	1,440	24	72	1,440		
18" IPS 3/2 1/2 1/4 1/7 850 4 20 800 8 40 800	ı		13.5 - 21			36	1,800			·					
18" IPS			7			17	850	4	20	800	8	40	800		
9		18" IPS		3/2											
11-21 5 25 1,250							-	5	25	1,000	10	50	1,000		
20" IPS 9 3/2 3 17 850 4 20 800 8 40 800 11-21 4 20 1,000 4 20 800 8 40 800 24" IPS 7 3 12 600 3 12 480 6 24 480 24" IPS 11 2 3 14 700 4 16 640 8 32 640								2	15	600	e	20	600		
11-21		20" IPS		3/2				3							
24" IPS 2 2 8 400 3 12 480 6 24 480 3 12 600 3 12 600 6 24 480 11 2 480 6 24 480		20 113		3/2				4	20	800	8	40	800		
24" IPS 11 2 3 12 600 3 12 480 6 24 480 6 24 480 6 640 8 32 640															
24" IPS 11 2 3 14 700 4 16 640 8 32 640								3	12	480	6	24	480		
		24" IPS	11	2		14	700	4	16	640	8	32	640		
			13.5-21		4	16	800								

HDPE COIL TRUCK LOAD CHART



H	Pipe Size	DR		48 - 50	' Truck	53' Truck					
1	Pipe Size	DK	Coil Size	Dimensions	Coils per Truck	Footage per Truck	Coil Size	Coils per Truck	Footage per Truck		
	2" IPS	7 - 13.5	2000'	H-80" W-44"	16	32,000	500'	56	28,000		
	2 173	7 - 13.3	500'	H-80" W-13.5"	49	24,500	300		28,000		
1 de	3" IPS	7 - 13.5	1000'	H-96" W-45"	13	13,000	500'	26	13,000		
	3 113	7 - 13.3	500'	H-96" W-23"	24	12,000	300		13,000		
20	4" IPS	7 - 13.5	800'	H-102" W-45"	12	9,600	500'	18	9,000		
	4 113	7 - 13.5	500'	H-102" W-29"	18	9,000	300	10	9,000		
1	6" IPS	7 - 13.5	500'	H-120" W-48"	6	3,000	500'	8	4,000		





3005B PASADENA FREEWAY
PASADENA, TEXAS 77503
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MODERNPOLYMERPIPE.COM

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