

ATP-120 Coiled Tubing

ATP-120 is a thermally processed grade of coiled tubing with a uniform microstructure throughout the tubing that yields improved bias weld performance with respect to low-cycle fatigue accumulation and localized corrosion. ATP-120 can be ordered as either TRUE-TAPER™ or TRUE-TAPER XR, straight wall, or as a string with an electric wireline or capillary tube installed.

Mechanical properties

Minimum yield strength	Minimum tensile strength	Maximum hardness
psi (MPa)	psi (MPa)	
120,000 (827)	125,000 (862)	33 HRC

Technical data

Specified

	Outside diameter, D		Wall thickness, t		Calculated inside diameter, d		Plain end mass, M _{pe}		Pipe metal cross sectional area, A		Pipe body yield load, L _y		Tensile load, L _t		Internal yield pressure, P _i		Hydro test pressure, P _T		Torsional yield strength, T _t	
	in.	mm	in.	mm	in.	mm	lb/ft	kg/m	in. ²	mm ²	lb	kg	lb	kg	psi	MPa	psi	MPa	ft-lb	N-m
1¾	44.5	0.134	3.4	1.482	37.7	2.315	3.450	0.680	439.40	81,600	37,000	85,000	38,540	17,690	121.9	14,100	97.2	2,950	3,990	
1¾	44.5	0.145	3.7	1.460	37.1	2.488	3.707	0.731	472.30	87,720	39,780	91,370	41,430	19,200	132.3	15,000	103.4	3,130	4,240	
1¾	44.5	0.156	4.0	1.438	36.6	2.658	3.961	0.781	504.60	93,720	42,500	97,620	44,270	20,700	142.7	15,000	103.4	3,300	4,470	
1¾	44.5	0.175	4.4	1.400	35.6	2.946	4.391	0.866	559.30	103,920	47,120	108,250	49,090	23,310	160.7	15,000	103.4	3,580	4,850	
1¾	44.5	0.188	4.8	1.374	34.9	3.139	4.678	0.923	595.90	110,760	50,230	115,370	52,320	25,090	172.9	15,000	103.4	3,760	5,090	
1¾	44.5	0.203	5.2	1.344	34.2	3.357	5.003	0.987	637.30	118,440	53,710	123,370	55,950	27,150	187.1	15,000	103.4	3,960	5,360	
1¾	44.5	0.224	5.7	1.302	33.1	3.654	5.444	1.074	693.40	128,880	58,440	134,250	60,880	30,030	207.0	15,000	103.4	4,210	5,700	
2	50.8	0.134	3.4	1.732	44.0	2.673	3.978	0.786	506.80	94,320	42,770	98,250	44,550	15,480	106.7	12,300	84.8	3,960	5,360	
2	50.8	0.145	3.7	1.710	43.4	2.875	4.280	0.845	545.20	101,400	45,980	105,620	47,900	16,800	115.8	13,400	92.3	4,220	5,710	
2	50.8	0.156	4.0	1.688	42.9	3.075	4.577	0.904	583.00	108,480	49,190	113,000	51,240	18,120	124.9	14,400	99.2	4,460	6,040	
2	50.8	0.175	4.4	1.650	41.9	3.414	5.081	1.003	647.30	120,360	54,580	125,370	56,850	20,400	140.6	15,000	103.4	4,860	6,580	
2	50.8	0.188	4.8	1.624	41.2	3.642	5.420	1.070	690.50	128,400	58,230	133,750	60,650	21,960	151.4	15,000	103.4	5,120	6,930	
2	50.8	0.203	5.2	1.594	40.5	3.900	5.804	1.146	739.40	137,520	62,360	143,250	64,960	23,760	163.8	15,000	103.4	5,400	7,310	
2	50.8	0.224	5.7	1.552	39.4	4.253	6.327	1.250	806.00	150,000	68,020	156,250	70,860	26,280	181.1	15,000	103.4	5,780	7,830	
2	50.8	0.236	6.0	1.528	38.8	4.450	6.623	1.308	843.70	156,960	71,180	163,500	74,140	27,720	191.1	15,000	103.4	5,970	8,080	
2	50.8	0.250	6.4	1.500	38.1	4.677	6.961	1.374	886.70	164,880	74,770	171,750	77,890	29,400	202.7	15,000	103.4	6,190	8,380	
2¾	60.3	0.134	3.4	2.107	53.5	3.210	4.776	0.943	608.40	113,160	51,320	117,870	53,450	13,030	89.8	10,400	71.7	5,770	7,810	
2¾	60.3	0.145	3.7	2.085	52.9	3.457	5.142	1.016	655.10	121,920	55,290	127,000	57,590	14,140	97.4	11,300	77.9	6,160	8,340	
2¾	60.3	0.156	4.0	2.063	52.4	3.700	5.505	1.088	701.30	130,560	59,210	136,000	61,670	15,250	105.1	12,200	84.1	6,540	8,860	
2¾	60.3	0.175	4.4	2.025	51.4	4.116	6.123	1.210	780.00	145,200	65,850	151,250	68,590	17,170	118.3	13,700	94.4	7,160	9,700	
2¾	60.3	0.188	4.8	1.999	50.7	4.395	6.539	1.292	833.00	155,040	70,310	161,500	73,240	18,490	127.4	14,700	101.3	7,560	10,240	
2¾	60.3	0.203	5.2	1.969	50.0	4.713	7.012	1.385	893.30	166,200	75,370	173,120	78,510	20,000	137.8	15,000	103.4	8,010	10,850	
2¾	60.3	0.224	5.7	1.927	48.9	5.151	7.659	1.514	975.70	181,680	82,390	189,250	85,820	22,130	152.5	15,000	103.4	8,600	11,650	
2¾	60.3	0.236	6.0	1.903	48.3	5.396	8.028	1.586	1022.60	190,320	86,310	198,250	89,900	23,340	160.9	15,000	103.4	8,920	12,080	
2¾	60.3	0.250	6.4	1.875	47.6	5.679	8.449	1.669	1076.30	200,280	90,830	208,620	94,610	24,750	170.6	15,000	103.4	9,280	12,570	
2¾	60.3	0.276	7.0	1.823	46.3	6.191	9.214	1.820	1,174.16	218,394	99,063	227,493	103,170	27,380	188.7	15,000	103.4	9,910	13,420	
2¾	60.3	0.281	7.1	1.813	46.1	6.289	9.358	1.849	1,192.58	221,820	100,618	231,063	104,790	27,890	192.2	15,000	103.4	10,020	13,570	
2¾	66.7	0.156	4.0	2.313	58.8	4.117	6.131	1.210	781.00	145,200	65,850	151,250	68,590	13,800	95.1	11,000	75.8	8,140	11,020	
2¾	66.7	0.175	4.4	2.275	57.8	4.583	6.824	1.347	869.40	161,640	73,300	168,370	76,350	15,540	107.1	12,400	85.4	8,930	12,100	
2¾	66.7	0.188	4.8	2.249	57.1	4.898	7.292	1.439	929.00	172,680	78,310	179,870	81,570	16,730	115.3	13,300	91.7	9,450	12,800	
2¾	66.7	0.203	5.2	2.219	56.4	5.256	7.826	1.545	996.90	185,400	84,080	193,120	87,580	18,100	124.7	14,400	99.2	10,030	13,590	
2¾	66.7	0.224	5.7	2.177	55.3	5.749	8.557	1.690	1,090.10	202,800	91,970	211,250	95,800	20,020	138.0	15,000	103.4	10,800	14,630	
2¾	66.7	0.236	6.0	2.153	54.7	6.027	8.974	1.771	1,143.10	212,520	96,380	221,370	100,390	21,120	145.6	15,000	103.4	11,220	15,200	
2¾	66.7	0.250	6.4	2.125	54.0	6.347	9.451	1.865	1,203.90	223,800	101,490	233,120	105,720	22,400	154.4	15,000	103.4	11,690	15,830	
2¾	66.7	0.276	7.0	2.073	52.7	6.929	10.311	2.037	1,314.00	244,405	110,862	254,589	115,450	24,770	170.7	15,000	103.4	12,520	16,960	
2¾	66.7	0.281	7.1	2.063	52.5	7.039	10.476	2.069	1,334.96	248,303	112,630	258,649	117,300	25,230	173.9	15,000	103.4	12,680	17,180	
2¾	66.7	0.300	7.6	2.025	51.5	7.454	11.093	2.191	1,413.67	262,944	119,271	273,900	124,210	26,970	185.9	15,000	103.4	13,240	17,940	

A Minimum wall thickness is 0.005 in. (0.13 mm) less than specified wall thickness.

B Pressures calculated based on t – 0.005 in. (0.13 mm).

C Maximum hydrostatic test pressure is 15,000 psi (103 MPa).

D Additional diameters and wall thicknesses may be available upon request.

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