

GT 80

Coiled Tubing Technical Data

MECHANICAL PROPERTIES

Specified Min Yield Strength (SMYS) 80,000 psi

Specified Min Tensile Strength (SMTS) 88,000 psi

Max Hardness 22 HRC

Min. Elongation, % (2" Gage Length) Per API: $\text{Min}\% = 625000 * \text{Area}^{0.2} / \text{SMTS}^{0.9}$

Specified Dimensions				Axial Load Capacity		Pressure Capacity		Torsional Strength		External Displacement per 1000 ft		Internal Capacity per 1000 ft	
Outside Diameter D (in)	Wall Thickness t (in)	Inside Diameter d (in)	Nominal Weight w (lb/ft)	Yield Load Ly (lb) t _{nom}	Tensile Load Lt (lb) t _{nom}	Yield Pressure Y _p (psi)	Hydrotest Pressure 90% Y _p (psi)	Yield (ft/lb) t _{min}	Ultimate (ft/lb) t _{min}	Gallons	Barrels	Gallons ²	Barrels ³
1.250	0.109	1.032	1.33	31,260	34,380	13,310	11,980	763	840	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	33,060	36,370	14,210	12,790	801	881	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	35,340	38,880	15,100	13,590	837	921	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	37,580	41,340	16,260	14,630	881	969	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	40,270	44,300	17,660	15,000	932	1,025	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	42,890	47,180	19,070	15,000	979	1,077	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	47,280	52,010	21,500	15,000	1,054	1,159	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	50,620	55,680	23,040	15,000	1,097	1,206	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	53,630	58,990	24,830	15,000	1,142	1,256	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	38,110	41,920	11,090	9,980	1,147	1,261	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	40,350	44,380	11,840	10,660	1,207	1,327	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	43,200	47,520	12,590	11,330	1,264	1,391	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	46,000	50,600	13,550	12,200	1,336	1,470	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	49,380	54,320	14,720	13,250	1,420	1,562	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	52,690	57,960	15,890	14,300	1,499	1,649	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	58,280	64,100	17,920	15,000	1,626	1,788	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	62,560	68,810	19,200	15,000	1,700	1,870	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	66,450	73,090	20,690	15,000	1,780	1,958	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	71,840	79,020	22,830	15,000	1,885	2,074	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	44,950	49,450	9,510	8,560	1,609	1,770	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	47,640	52,400	10,150	9,140	1,696	1,866	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	51,050	56,160	10,790	9,710	1,781	1,959	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	54,420	59,870	11,610	10,450	1,887	2,076	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	58,490	64,340	12,620	11,360	2,012	2,213	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	62,500	68,750	13,620	12,260	2,131	2,344	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	69,270	76,200	15,360	13,820	2,324	2,556	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	74,490	81,940	16,460	14,810	2,438	2,682	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	79,260	87,190	17,740	15,000	2,564	2,821	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	85,910	94,500	19,570	15,000	2,731	3,004	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	89,800	98,780	20,660	15,000	2,824	3,107	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	94,250	103,670	21,940	15,000	2,927	3,219	124.95	2.97	63.75	1.52

Specified Dimensions			Nominal Weight w (lb/ft)	Axial Load Capacity		Pressure Capacity		Torsional Strength		External Displacement per 1000 ft		Internal Capacity per 1000 ft	
Outside Diameter D (in)	Wall Thickness t (in)	Inside Diameter d (in)		Yield Load Ly (lb) t _{nom}	Tensile Load Lt (lb) t _{nom}	Yield Pressure Y _p (psi)	Hydrotest Pressure 90% Y _p (psi)	Yield (ft/lb) t _{min}	Ultimate (ft/lb) t _{min}	Gallons	Barrels	Gallons ²	Barrels ³
2.000	0.109	1.782	2.21	51,800	56,980	8,320	7,490	2,149	2,364	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	54,930	60,420	8,880	7,990	2,270	2,496	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	58,910	64,800	9,440	8,500	2,387	2,626	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	62,840	69,130	10,160	9,140	2,534	2,788	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	67,600	74,360	11,040	9,940	2,708	2,979	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	72,300	79,530	11,920	10,730	2,875	3,162	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	80,270	88,290	13,440	12,100	3,149	3,464	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	86,430	95,070	14,400	12,960	3,312	3,644	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	92,080	101,290	15,520	13,970	3,494	3,844	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	99,980	109,980	17,120	15,000	3,738	4,112	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	104,630	115,090	18,080	15,000	3,876	4,264	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	109,960	120,950	19,200	15,000	4,029	4,432	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	119,590	131,550	21,280	15,000	4,291	4,720	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	70,690	77,750	7,950	7,160	3,463	3,809	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	75,470	83,020	8,560	7,700	3,684	4,053	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	81,270	89,390	9,300	8,370	3,947	4,342	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	87,000	95,700	10,040	9,040	4,202	4,623	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	96,760	106,440	11,320	10,190	4,624	5,086	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	104,340	114,770	12,130	10,920	4,878	5,366	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	111,310	122,440	13,070	11,760	5,164	5,680	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	121,100	133,210	14,420	12,980	5,551	6,107	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	126,870	139,560	15,230	13,710	5,773	6,350	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	133,520	146,870	16,170	14,550	6,021	6,623	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	145,600	160,160	17,920	15,000	6,453	7,098	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	83,890	92,280	7,740	6,970	4,571	5,028	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	90,380	99,420	8,410	7,570	4,904	5,395	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	96,800	106,480	9,080	8,170	5,228	5,751	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	107,760	118,530	10,240	9,220	5,766	6,343	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	116,280	127,900	10,970	9,870	6,092	6,701	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	124,130	136,540	11,820	10,640	6,460	7,106	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	135,170	148,690	13,040	11,740	6,962	7,658	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	141,700	155,870	13,780	12,400	7,250	7,975	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	149,230	164,150	14,630	13,170	7,575	8,332	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	162,940	179,240	16,210	14,590	8,145	8,959	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	99,490	109,440	7,680	6,910	5,965	6,562	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	106,600	117,260	8,290	7,460	6,366	7,003	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	118,750	130,630	9,350	8,420	7,035	7,738	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	128,210	141,040	10,020	9,020	7,442	8,186	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	136,940	150,640	10,800	9,720	7,903	8,693	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	149,240	164,170	11,910	10,720	8,534	9,388	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	156,530	172,180	12,580	11,320	8,898	9,788	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	164,930	181,430	13,360	12,020	9,310	10,241	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	180,280	198,310	14,800	13,320	10,037	11,041	337.24	8.03	220.17	5.24