

GT 90

# Coiled Tubing Technical Data

## MECHANICAL PROPERTIES

**Specified Min Yield Strength (SMYS)** 90,000 psi

**Specified Min Tensile Strength (SMTS)** 97,000 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			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	Gallons2	Barrels3
1.250	0.109	1.032	1.33	35,160	37,900	14,980	13,480	859	925	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	37,190	40,090	15,980	14,380	901	971	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	39,760	42,850	16,990	15,000	941	1,015	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	42,280	45,570	18,290	15,000	991	1,068	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	45,300	48,830	19,870	15,000	1,048	1,130	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	48,250	52,010	21,460	15,000	1,102	1,188	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	53,190	57,330	24,190	15,000	1,186	1,278	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	56,940	61,370	25,920	15,000	1,234	1,330	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	60,330	65,030	27,940	15,000	1,285	1,385	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	42,870	46,200	12,480	11,230	1,290	1,390	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	45,390	48,920	13,320	11,990	1,357	1,463	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	48,600	52,380	14,160	12,740	1,423	1,533	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	51,750	55,780	15,240	13,720	1,503	1,620	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	55,550	59,870	16,560	14,900	1,597	1,721	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	59,280	63,890	17,880	15,000	1,686	1,817	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	65,560	70,660	20,160	15,000	1,829	1,971	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	70,370	75,850	21,600	15,000	1,912	2,061	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	74,750	80,570	23,280	15,000	2,003	2,158	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	80,820	87,100	25,680	15,000	2,121	2,286	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	50,570	54,510	10,700	9,630	1,810	1,950	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	53,590	57,760	11,420	10,280	1,908	2,057	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	57,430	61,900	12,140	10,930	2,004	2,160	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	61,230	65,990	13,060	11,750	2,123	2,288	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	65,800	70,920	14,190	12,770	2,263	2,439	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	70,310	75,780	15,330	13,800	2,397	2,583	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	77,930	83,990	17,280	15,000	2,614	2,818	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	83,810	90,320	18,510	15,000	2,743	2,956	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	89,170	96,110	19,950	15,000	2,885	3,109	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	96,650	104,170	22,010	15,000	3,073	3,312	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	101,030	108,880	23,250	15,000	3,177	3,425	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	106,030	114,280	24,690	15,000	3,293	3,549	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	Gallons2	Barrels3
2.000	0.109	1.782	2.21	58,280	62,810	9,360	8,420	2,418	2,606	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	61,790	66,600	9,990	8,990	2,553	2,752	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	66,270	71,420	10,620	9,560	2,685	2,894	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	70,700	76,200	11,430	10,290	2,851	3,073	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	76,050	81,970	12,420	11,180	3,046	3,283	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	81,340	87,660	13,410	12,070	3,234	3,486	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	90,300	97,320	15,120	13,610	3,542	3,818	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	97,240	104,800	16,200	14,580	3,726	4,016	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	103,590	111,650	17,460	15,000	3,931	4,237	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	112,480	121,230	19,260	15,000	4,206	4,533	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	117,710	126,860	20,340	15,000	4,360	4,700	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	123,700	133,320	21,600	15,000	4,532	4,885	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	134,540	145,000	23,940	15,000	4,827	5,203	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	79,520	85,710	8,940	8,050	3,896	4,199	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	84,910	91,510	9,630	8,670	4,145	4,467	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	91,430	98,540	10,460	9,410	4,441	4,786	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	97,880	105,490	11,290	10,160	4,728	5,095	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	108,860	117,320	12,730	11,460	5,202	5,606	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	117,380	126,510	13,640	12,280	5,488	5,915	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	125,220	134,960	14,700	13,230	5,809	6,261	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	136,230	146,830	16,220	14,600	6,245	6,731	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	142,730	153,830	17,130	15,000	6,494	6,999	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	150,210	161,890	18,190	15,000	6,773	7,300	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	163,800	176,540	20,160	15,000	7,259	7,824	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	94,380	101,720	8,710	7,840	5,142	5,542	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	101,670	109,580	9,460	8,510	5,517	5,946	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	108,900	117,370	10,220	9,200	5,881	6,339	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	121,230	130,660	11,520	10,370	6,487	6,991	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	130,810	140,990	12,340	11,110	6,854	7,387	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	139,640	150,500	13,300	11,970	7,267	7,833	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	152,070	163,890	14,670	13,200	7,832	8,441	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	159,410	171,810	15,500	13,950	8,157	8,791	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	167,880	180,940	16,460	14,810	8,522	9,184	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	183,310	197,570	18,240	15,000	9,163	9,875	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	111,920	120,630	8,640	7,780	6,711	7,233	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	119,930	129,260	9,330	8,400	7,162	7,719	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	133,600	143,990	10,520	9,470	7,914	8,530	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	144,240	155,460	11,270	10,140	8,372	9,023	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	154,060	166,050	12,150	10,940	8,890	9,582	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	167,900	180,960	13,400	12,060	9,601	10,348	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	176,090	189,790	14,150	12,740	10,011	10,789	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	185,550	199,980	15,030	13,530	10,474	11,288	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	202,820	218,590	16,650	14,990	11,292	12,170	337.24	8.03	220.17	5.24