

DURACOIL 95

Coiled Tubing Technical Data

MECHANICAL PROPERTIES

Specified Min Yield Strength (SMYS) 95,000 psi

Specified Min Tensile Strength (SMTS) 105,000 psi

Max Hardness 26 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	37,120	41,030	15,810	14,230	906	1,002	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	39,260	43,390	16,870	15,000	951	1,051	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	41,970	46,390	17,940	15,000	994	1,098	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	44,630	49,330	19,300	15,000	1,046	1,156	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	47,820	52,850	20,980	15,000	1,107	1,223	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	50,940	56,300	22,650	15,000	1,163	1,285	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	56,150	62,060	25,540	15,000	1,252	1,383	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	60,110	66,440	27,360	15,000	1,302	1,439	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	63,680	70,390	29,490	15,000	1,356	1,499	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	45,250	50,010	13,170	11,850	1,362	1,505	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	47,910	52,960	14,060	12,650	1,433	1,584	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	51,300	56,700	14,950	13,460	1,502	1,660	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	54,630	60,380	16,090	14,480	1,587	1,754	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	58,640	64,810	17,480	15,000	1,686	1,863	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	62,570	69,160	18,870	15,000	1,780	1,967	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	69,200	76,490	21,280	15,000	1,930	2,134	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	74,280	82,100	22,800	15,000	2,018	2,231	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	78,910	87,210	24,570	15,000	2,114	2,337	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	85,300	94,280	27,110	15,000	2,239	2,474	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	53,380	59,000	11,290	10,160	1,910	2,111	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	56,570	62,520	12,050	10,850	2,014	2,226	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	60,620	67,000	12,810	11,530	2,115	2,338	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	64,630	71,430	13,790	12,410	2,241	2,477	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	69,460	76,770	14,980	13,480	2,389	2,640	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	74,210	82,030	16,180	14,560	2,530	2,797	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	82,260	90,920	18,240	15,000	2,760	3,050	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	88,460	97,770	19,540	15,000	2,895	3,200	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	94,130	104,040	21,060	15,000	3,045	3,365	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	102,020	112,760	23,230	15,000	3,243	3,585	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	106,640	117,860	24,540	15,000	3,354	3,707	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	111,920	123,700	26,060	15,000	3,476	3,841	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	
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2.000	0.109	1.782	2.21	61,520	67,990	9,880	8,890	2,552	2,821	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	65,220	72,090	10,550	9,500	2,695	2,979	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	69,950	77,310	11,210	10,090	2,835	3,133	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	74,630	82,480	12,070	10,860	3,009	3,326	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	80,280	88,730	13,110	11,800	3,216	3,554	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	85,850	94,890	14,160	12,740	3,414	3,773	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	95,320	105,350	15,960	14,360	3,739	4,133	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	102,640	113,440	17,100	15,000	3,933	4,347	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	109,350	120,860	18,430	15,000	4,149	4,586	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	118,730	131,230	20,330	15,000	4,439	4,906	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	124,250	137,330	21,470	15,000	4,603	5,087	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	130,570	144,320	22,800	15,000	4,784	5,288	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	142,010	156,960	25,270	15,000	5,095	5,632	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	83,940	92,780	9,440	8,500	4,112	4,545	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	89,620	99,060	10,160	9,140	4,375	4,836	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	96,500	106,660	11,040	9,940	4,688	5,181	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	103,310	114,190	11,920	10,730	4,990	5,516	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	114,900	127,000	13,440	12,100	5,491	6,069	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	123,900	136,940	14,400	12,960	5,793	6,403	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	132,180	146,090	15,520	13,970	6,132	6,778	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	143,800	158,940	17,120	15,000	6,592	7,286	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	150,660	166,520	18,080	15,000	6,855	7,577	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	158,550	175,240	19,200	15,000	7,150	7,902	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	172,900	191,100	21,280	15,000	7,663	8,469	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	99,620	110,110	9,190	8,270	5,428	6,000	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	107,320	118,620	9,990	8,990	5,824	6,437	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	114,950	127,050	10,780	9,700	6,208	6,862	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	127,960	141,430	12,160	10,940	6,847	7,568	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	138,080	152,610	13,030	11,730	7,235	7,996	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	147,400	162,920	14,040	12,640	7,671	8,479	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	160,510	177,410	15,490	13,940	8,267	9,138	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	168,270	185,980	16,360	14,720	8,610	9,516	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	177,210	195,860	17,370	15,000	8,995	9,942	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	193,490	213,860	19,250	15,000	9,672	10,690	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	118,140	130,580	9,120	8,210	7,084	7,829	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	126,590	139,920	9,850	8,870	7,560	8,355	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	141,020	155,860	11,100	9,990	8,354	9,233	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	152,260	168,280	11,900	10,710	8,837	9,768	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	162,620	179,740	12,820	11,540	9,384	10,372	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	177,230	195,880	14,140	12,730	10,134	11,201	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	185,880	205,440	14,940	13,450	10,567	11,679	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	195,860	216,480	15,860	14,270	11,056	12,219	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	214,090	236,620	17,580	15,000	11,919	13,174	337.24	8.03	220.17	5.24