

DURACOIL 130

Coiled Tubing Technical Data

MECHANICAL PROPERTIES

Specified Min Yield Strength (SMYS) 130,000 psi

Specified Min Tensile Strength (SMTS) 138,000 psi

Max Hardness 38 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	Gallons ²	Barrels ³
1.250	0.109	1.032	1.33	50,790	53,920	21,630	15,000	1,240	1,317	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	53,720	57,030	23,090	15,000	1,301	1,381	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	57,430	60,970	24,540	15,000	1,360	1,444	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	61,070	64,830	26,420	15,000	1,432	1,520	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	65,440	69,460	28,700	15,000	1,514	1,608	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	69,700	73,990	30,990	15,000	1,592	1,689	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	76,830	81,560	34,940	15,000	1,713	1,818	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	82,250	87,320	37,440	15,000	1,782	1,892	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	87,150	92,510	40,350	15,000	1,856	1,970	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	61,920	65,730	18,030	15,000	1,863	1,978	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	65,570	69,600	19,240	15,000	1,961	2,081	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	70,200	74,510	20,450	15,000	2,055	2,181	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	74,760	79,360	22,010	15,000	2,171	2,305	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	80,240	85,180	23,920	15,000	2,307	2,449	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	85,630	90,900	25,830	15,000	2,436	2,586	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	94,700	100,530	29,120	15,000	2,642	2,804	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	101,650	107,910	31,200	15,000	2,762	2,932	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	107,980	114,620	33,630	15,000	2,893	3,071	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	116,730	123,920	37,090	15,000	3,063	3,252	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	73,050	77,550	15,450	13,910	2,614	2,775	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	77,410	82,180	16,490	14,840	2,756	2,926	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	82,960	88,060	17,530	15,000	2,894	3,073	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	88,440	93,880	18,870	15,000	3,067	3,255	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	95,050	100,900	20,500	15,000	3,269	3,470	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	101,560	107,810	22,140	15,000	3,462	3,675	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	112,570	119,490	24,960	15,000	3,776	4,009	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	121,050	128,500	26,740	15,000	3,962	4,206	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	128,810	136,730	28,820	15,000	4,167	4,423	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	139,600	148,190	31,790	15,000	4,438	4,711	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	145,930	154,910	33,580	15,000	4,590	4,872	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	153,150	162,580	35,660	15,000	4,756	5,049	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	84,180	89,360	13,520	12,170	3,492	3,707	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	89,260	94,750	14,430	12,990	3,688	3,915	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	95,720	101,610	15,340	13,810	3,879	4,118	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	102,120	108,400	16,510	14,860	4,118	4,371	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	109,850	116,610	17,940	15,000	4,400	4,671	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	117,480	124,710	19,370	15,000	4,672	4,959	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	130,440	138,460	21,840	15,000	5,117	5,432	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	140,450	149,090	23,400	15,000	5,383	5,714	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	149,630	158,840	25,220	15,000	5,678	6,028	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	162,470	172,470	27,820	15,000	6,075	6,448	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	170,020	180,480	29,380	15,000	6,298	6,686	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	178,680	189,670	31,200	15,000	6,547	6,950	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	194,330	206,290	34,580	15,000	6,973	7,402	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	114,860	121,930	12,920	11,630	5,627	5,974	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	122,640	130,190	13,900	12,510	5,987	6,356	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	132,060	140,190	15,110	13,600	6,415	6,809	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	141,380	150,080	16,310	14,680	6,829	7,249	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	157,240	166,910	18,390	15,000	7,514	7,976	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	169,550	179,980	19,710	15,000	7,927	8,415	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	180,880	192,010	21,240	15,000	8,391	8,908	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	196,780	208,890	23,430	15,000	9,021	9,576	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	206,170	218,850	24,740	15,000	9,381	9,958	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	216,970	230,320	26,270	15,000	9,784	10,386	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	236,600	251,160	29,120	15,000	10,486	11,131	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	136,320	144,710	12,580	11,320	7,428	7,885	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	146,860	155,900	13,670	12,300	7,969	8,460	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	157,300	166,980	14,760	13,280	8,495	9,018	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	175,100	185,880	16,640	14,980	9,370	9,946	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	188,950	200,580	17,830	15,000	9,900	10,509	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	201,710	214,120	19,220	15,000	10,497	11,143	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	219,650	233,170	21,200	15,000	11,313	12,009	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	230,260	244,430	22,380	15,000	11,782	12,507	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	242,490	257,410	23,770	15,000	12,309	13,067	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	264,780	281,070	26,350	15,000	13,235	14,049	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	161,670	171,620	12,480	11,230	9,693	10,290	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	173,230	183,890	13,470	12,120	10,345	10,981	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	192,970	204,850	15,190	13,670	11,432	12,135	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	208,350	221,170	16,280	14,650	12,093	12,838	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	222,530	236,230	17,540	15,000	12,842	13,632	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	242,520	257,450	19,350	15,000	13,868	14,721	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	254,360	270,010	20,440	15,000	14,460	15,350	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	268,020	284,510	21,700	15,000	15,129	16,060	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	292,960	310,990	24,060	15,000	16,310	17,314	337.24	8.03	220.17	5.24