

DURACOIL 110

Coiled Tubing Technical Data

MECHANICAL PROPERTIES

Specified Min Yield Strength (SMYS)	110,000 psi
Specified Min Tensile Strength (SMTS)	115,000 psi
Max Hardness	30 HRC
Min. Elongation, % (2" Gage Length)	Per API: Min% = 625000 * Area ^{0.2} / 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	42,980	44,930	18,300	15,000	1,050	1,097	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	45,460	47,520	19,540	15,000	1,101	1,151	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	48,600	50,810	20,770	15,000	1,151	1,203	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	51,680	54,030	22,350	15,000	1,211	1,267	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	55,370	57,890	24,290	15,000	1,281	1,340	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	58,980	61,660	26,220	15,000	1,347	1,408	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	65,010	67,970	29,570	15,000	1,449	1,515	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	69,600	72,760	31,680	15,000	1,508	1,576	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	73,740	77,090	34,140	15,000	1,571	1,642	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	52,400	54,780	15,250	13,730	1,577	1,648	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	55,480	58,000	16,280	14,650	1,659	1,734	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	59,400	62,100	17,310	15,000	1,739	1,818	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	63,260	66,130	18,630	15,000	1,837	1,921	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	67,900	70,980	20,240	15,000	1,952	2,041	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	72,450	75,750	21,850	15,000	2,061	2,155	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	80,130	83,770	24,640	15,000	2,235	2,337	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	86,010	89,920	26,400	15,000	2,337	2,443	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	91,360	95,520	28,450	15,000	2,448	2,559	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	98,770	103,260	31,390	15,000	2,592	2,710	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	61,810	64,620	13,070	11,760	2,212	2,312	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	65,500	68,480	13,950	12,560	2,332	2,438	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	70,200	73,390	14,830	13,350	2,449	2,561	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	74,830	78,230	15,970	14,370	2,595	2,713	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	80,420	84,080	17,350	15,000	2,766	2,892	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	85,930	89,840	18,730	15,000	2,930	3,063	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	95,250	99,580	21,120	15,000	3,195	3,341	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	102,430	107,080	22,630	15,000	3,352	3,505	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	108,990	113,940	24,390	15,000	3,526	3,686	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	118,130	123,500	26,900	15,000	3,755	3,926	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	123,480	129,090	28,410	15,000	3,883	4,060	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	129,590	135,480	30,170	15,000	4,024	4,207	124.95	2.97	63.75	1.52

Specified Dimensions				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	71,230	74,470	11,440	10,300	2,955	3,089	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	75,520	78,960	12,210	10,990	3,121	3,262	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	80,990	84,680	12,980	11,680	3,282	3,431	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	86,410	90,340	13,970	12,570	3,484	3,643	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	92,950	97,180	15,180	13,660	3,723	3,892	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	99,410	103,930	16,390	14,750	3,953	4,133	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	110,370	115,390	18,480	15,000	4,330	4,526	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	118,840	124,250	19,800	15,000	4,554	4,761	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	126,610	132,370	21,340	15,000	4,805	5,023	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	137,480	143,730	23,540	15,000	5,140	5,374	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	143,860	150,400	24,860	15,000	5,329	5,572	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	151,190	158,060	26,400	15,000	5,540	5,791	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	164,430	171,910	29,260	15,000	5,900	6,168	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	97,190	101,610	10,930	9,840	4,762	4,978	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	103,770	108,490	11,760	10,580	5,066	5,296	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	111,740	116,820	12,780	11,500	5,428	5,674	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	119,630	125,060	13,800	12,420	5,778	6,041	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	133,050	139,090	15,560	14,000	6,358	6,647	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	143,470	149,990	16,670	15,000	6,708	7,013	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	153,050	160,010	17,970	15,000	7,100	7,423	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	166,510	174,080	19,820	15,000	7,633	7,980	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	174,450	182,380	20,930	15,000	7,937	8,298	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	183,590	191,930	22,230	15,000	8,278	8,655	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	200,200	209,300	24,640	15,000	8,873	9,276	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	115,350	120,590	10,640	9,580	6,285	6,571	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	124,270	129,920	11,570	10,410	6,743	7,050	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	133,100	139,150	12,490	11,240	7,188	7,515	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	148,170	154,900	14,080	12,670	7,928	8,289	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	159,880	167,150	15,090	13,580	8,377	8,758	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	170,670	178,430	16,260	14,630	8,882	9,286	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	185,860	194,310	17,940	15,000	9,573	10,008	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	194,840	203,690	18,940	15,000	9,969	10,422	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	205,190	214,510	20,110	15,000	10,415	10,889	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	224,050	234,230	22,290	15,000	11,199	11,708	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	136,800	143,010	10,560	9,500	8,202	8,575	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	146,580	153,240	11,400	10,260	8,753	9,151	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	163,280	170,710	12,860	11,570	9,673	10,113	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	176,300	184,310	13,770	12,390	10,233	10,698	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	188,300	196,860	14,850	13,370	10,866	11,360	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	205,210	214,540	16,380	14,740	11,734	12,268	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	215,230	225,010	17,290	15,000	12,235	12,792	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	226,780	237,090	18,370	15,000	12,801	13,383	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	247,890	259,160	20,350	15,000	13,801	14,428	337.24	8.03	220.17	5.24