

DURACOIL 120

Coiled Tubing Technical Data

MECHANICAL PROPERTIES

Specified Min Yield Strength (SMYS)	120,000 psi
Specified Min Tensile Strength (SMTS)	125,000 psi
Max Hardness	33 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	46,890	48,840	19,970	15,000	1,145	1,193	63.75	1.52	43.45	1.03
1.250	0.116	1.018	1.41	49,590	51,660	21,310	15,000	1,201	1,251	63.75	1.52	42.28	1.01
1.250	0.125	1.000	1.51	53,010	55,220	22,660	15,000	1,255	1,308	63.75	1.52	40.80	0.97
1.250	0.134	0.982	1.60	56,380	58,730	24,380	15,000	1,322	1,377	63.75	1.52	39.34	0.94
1.250	0.145	0.960	1.72	60,400	62,920	26,500	15,000	1,398	1,456	63.75	1.52	37.60	0.90
1.250	0.156	0.938	1.83	64,340	67,020	28,610	15,000	1,469	1,530	63.75	1.52	35.90	0.85
1.250	0.175	0.900	2.01	70,920	73,880	32,260	15,000	1,581	1,647	63.75	1.52	33.05	0.79
1.250	0.190	0.870	2.16	75,930	79,090	34,560	15,000	1,645	1,714	63.75	1.52	30.88	0.74
1.250	0.204	0.842	2.28	80,440	83,800	37,250	15,000	1,713	1,785	63.75	1.52	28.93	0.69
1.500	0.109	1.282	1.62	57,160	59,540	16,640	14,980	1,720	1,792	91.80	2.19	67.06	1.60
1.500	0.116	1.268	1.72	60,520	63,050	17,760	15,000	1,810	1,885	91.80	2.19	65.60	1.56
1.500	0.125	1.250	1.84	64,800	67,500	18,880	15,000	1,897	1,976	91.80	2.19	63.75	1.52
1.500	0.134	1.232	1.96	69,010	71,880	20,320	15,000	2,004	2,088	91.80	2.19	61.93	1.47
1.500	0.145	1.210	2.10	74,070	77,160	22,080	15,000	2,130	2,218	91.80	2.19	59.74	1.42
1.500	0.156	1.188	2.24	79,040	82,340	23,840	15,000	2,248	2,342	91.80	2.19	57.58	1.37
1.500	0.175	1.150	2.48	87,420	91,060	26,880	15,000	2,439	2,540	91.80	2.19	53.96	1.28
1.500	0.190	1.120	2.66	93,830	97,740	28,800	15,000	2,549	2,656	91.80	2.19	51.18	1.22
1.500	0.204	1.092	2.83	99,670	103,820	31,040	15,000	2,670	2,782	91.80	2.19	48.65	1.16
1.500	0.224	1.052	3.06	107,750	112,240	34,240	15,000	2,828	2,946	91.80	2.19	45.15	1.08
1.750	0.109	1.532	1.91	67,430	70,240	14,260	12,830	2,413	2,514	124.95	2.97	95.76	2.28
1.750	0.116	1.518	2.03	71,460	74,430	15,220	13,700	2,544	2,650	124.95	2.97	94.02	2.24
1.750	0.125	1.500	2.17	76,580	79,770	16,180	14,560	2,672	2,783	124.95	2.97	91.80	2.19
1.750	0.134	1.482	2.32	81,640	85,040	17,420	15,000	2,831	2,949	124.95	2.97	89.61	2.13
1.750	0.145	1.460	2.49	87,740	91,390	18,930	15,000	3,017	3,143	124.95	2.97	86.97	2.07
1.750	0.156	1.438	2.66	93,740	97,650	20,430	15,000	3,196	3,329	124.95	2.97	84.37	2.01
1.750	0.175	1.400	2.95	103,910	108,240	23,040	15,000	3,486	3,631	124.95	2.97	79.97	1.90
1.750	0.190	1.370	3.17	111,740	116,400	24,690	15,000	3,657	3,810	124.95	2.97	76.58	1.82
1.750	0.204	1.342	3.38	118,900	123,850	26,610	15,000	3,846	4,006	124.95	2.97	73.48	1.75
1.750	0.224	1.302	3.66	128,860	134,230	29,350	15,000	4,097	4,267	124.95	2.97	69.16	1.65
1.750	0.236	1.278	3.83	134,700	140,310	30,990	15,000	4,237	4,413	124.95	2.97	66.64	1.59
1.750	0.250	1.250	4.01	141,370	147,260	32,910	15,000	4,390	4,573	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	77,710	80,940	12,480	11,230	3,224	3,358	163.20	3.89	129.56	3.08
2.000	0.116	1.768	2.34	82,390	85,820	13,320	11,990	3,404	3,546	163.20	3.89	127.53	3.04
2.000	0.125	1.750	2.51	88,360	92,040	14,160	12,740	3,581	3,730	163.20	3.89	124.95	2.97
2.000	0.134	1.732	2.68	94,260	98,190	15,240	13,720	3,801	3,960	163.20	3.89	122.39	2.91
2.000	0.145	1.710	2.88	101,400	105,630	16,560	14,900	4,062	4,231	163.20	3.89	119.30	2.84
2.000	0.156	1.688	3.08	108,450	112,970	17,880	15,000	4,312	4,492	163.20	3.89	116.25	2.77
2.000	0.175	1.650	3.42	120,400	125,420	20,160	15,000	4,723	4,920	163.20	3.89	111.08	2.64
2.000	0.190	1.620	3.68	129,650	135,050	21,600	15,000	4,968	5,175	163.20	3.89	107.08	2.55
2.000	0.204	1.592	3.92	138,120	143,880	23,280	15,000	5,241	5,460	163.20	3.89	103.41	2.46
2.000	0.224	1.552	4.26	149,980	156,230	25,680	15,000	5,607	5,841	163.20	3.89	98.27	2.34
2.000	0.236	1.528	4.46	156,940	163,480	27,120	15,000	5,814	6,056	163.20	3.89	95.26	2.27
2.000	0.250	1.500	4.68	164,930	171,810	28,800	15,000	6,043	6,295	163.20	3.89	91.80	2.19
2.000	0.276	1.448	5.09	179,380	186,860	31,920	15,000	6,436	6,705	163.20	3.89	85.55	2.04
2.375	0.125	2.125	3.01	106,030	110,450	11,920	10,730	5,194	5,411	230.14	5.48	184.24	4.39
2.375	0.134	2.107	3.21	113,210	117,930	12,830	11,550	5,527	5,757	230.14	5.48	181.13	4.31
2.375	0.145	2.085	3.46	121,900	126,980	13,950	12,560	5,921	6,168	230.14	5.48	177.37	4.22
2.375	0.156	2.063	3.71	130,500	135,940	15,060	13,550	6,303	6,566	230.14	5.48	173.64	4.13
2.375	0.175	2.025	4.12	145,140	151,190	16,980	15,000	6,936	7,225	230.14	5.48	167.30	3.98
2.375	0.190	1.995	4.44	156,510	163,030	18,190	15,000	7,317	7,622	230.14	5.48	162.38	3.87
2.375	0.204	1.967	4.74	166,960	173,920	19,600	15,000	7,746	8,069	230.14	5.48	157.86	3.76
2.375	0.224	1.927	5.16	181,640	189,210	21,630	15,000	8,327	8,674	230.14	5.48	151.50	3.61
2.375	0.236	1.903	5.40	190,310	198,240	22,840	15,000	8,659	9,020	230.14	5.48	147.75	3.52
2.375	0.250	1.875	5.69	200,280	208,620	24,250	15,000	9,031	9,407	230.14	5.48	143.44	3.42
2.375	0.276	1.823	6.20	218,400	227,500	26,880	15,000	9,679	10,083	230.14	5.48	135.59	3.23
2.625	0.134	2.357	3.57	125,840	131,080	11,610	10,450	6,857	7,142	281.14	6.69	226.66	5.40
2.625	0.145	2.335	3.85	135,570	141,210	12,620	11,360	7,356	7,663	281.14	6.69	222.45	5.30
2.625	0.156	2.313	4.12	145,200	151,250	13,620	12,260	7,842	8,169	281.14	6.69	218.28	5.20
2.625	0.175	2.275	4.59	161,640	168,370	15,360	13,820	8,649	9,009	281.14	6.69	211.16	5.03
2.625	0.190	2.245	4.95	174,420	181,680	16,460	14,810	9,138	9,519	281.14	6.69	205.63	4.90
2.625	0.204	2.217	5.29	186,190	193,950	17,740	15,000	9,690	10,094	281.14	6.69	200.53	4.77
2.625	0.224	2.177	5.76	202,760	211,200	19,570	15,000	10,443	10,878	281.14	6.69	193.36	4.60
2.625	0.236	2.153	6.04	212,550	221,410	20,660	15,000	10,875	11,329	281.14	6.69	189.12	4.50
2.625	0.250	2.125	6.36	223,840	233,170	21,940	15,000	11,362	11,836	281.14	6.69	184.24	4.39
2.625	0.276	2.073	6.94	244,410	254,600	24,320	15,000	12,217	12,726	281.14	6.69	175.33	4.17

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2.875	0.145	2.585	4.24	149,230	155,450	11,520	10,370	8,948	9,320	337.24	8.03	272.63	6.49
2.875	0.156	2.563	4.54	159,910	166,570	12,440	11,200	9,549	9,947	337.24	8.03	268.01	6.38
2.875	0.175	2.525	5.06	178,130	185,550	14,020	12,620	10,552	10,992	337.24	8.03	260.12	6.19
2.875	0.190	2.495	5.46	192,320	200,340	15,030	13,530	11,163	11,628	337.24	8.03	253.98	6.05
2.875	0.204	2.467	5.83	205,420	213,980	16,190	14,570	11,854	12,348	337.24	8.03	248.31	5.91
2.875	0.224	2.427	6.36	223,870	233,190	17,860	15,000	12,801	13,335	337.24	8.03	240.32	5.72
2.875	0.236	2.403	6.67	234,790	244,580	18,870	15,000	13,348	13,904	337.24	8.03	235.60	5.61
2.875	0.250	2.375	7.03	247,400	257,710	20,030	15,000	13,965	14,547	337.24	8.03	230.14	5.48
2.875	0.276	2.323	7.68	270,430	281,690	22,210	15,000	15,056	15,683	337.24	8.03	220.17	5.24