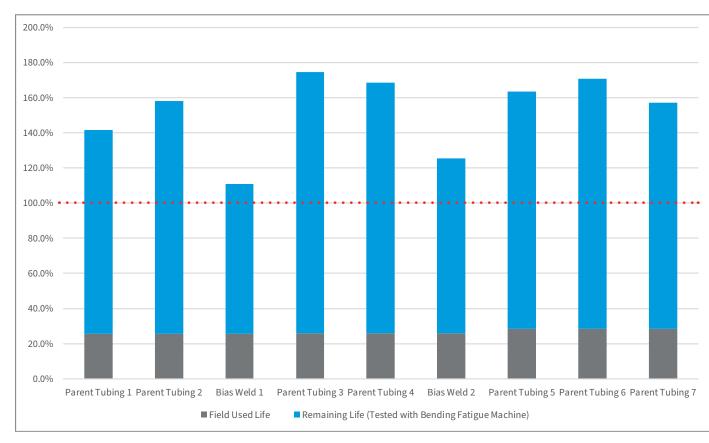
Untapped potential of a 1M running feet string

In 2019, Quality Tubing launched a new product line that was designed to combat industry challenges: ATP. Sourcing an automated equipment package and proprietary steel grade designed for quenching and tempering, Quality Tubing is committed to delivering dependable products with consistent properties.

Through extensive testing, this product line has demonstrated its ability to mitigate pitting corrosion at the bias weld, allowing service companies to confidently complete one job after another.

A major US service company recently voluntarily retired their first ATP-130 string after it reached the operator-mandated retirement criteria of 1 million running feet maximum. They tasked NOV to find out the remaining life in the retired string.

Quality Tubing obtained samples from the ATP-130 string including parent material and bias welds after field use and performed additional fatigue testing. Data shows all retired ATP-130 samples exceeded the statistical-modeled fatigue life after withstanding difficult operating conditions. These tests demonstrate the untapped potential in string fatigue life of the parent material and bias welds. This serves as a testament to the increased reliability despite pitting and the deceased operational risks brought by the ATP product line.



Compounding field used fatigue life as recorded by Cerberus™ suite with laboratory test data on the retired string, all samples including those containing bias welds surpassed the 100% mark of predicted fatigue life. Despite the presence of pitting, ATP-130 provides service companies and operators peace of mind while helping deliver full revenue potentials.

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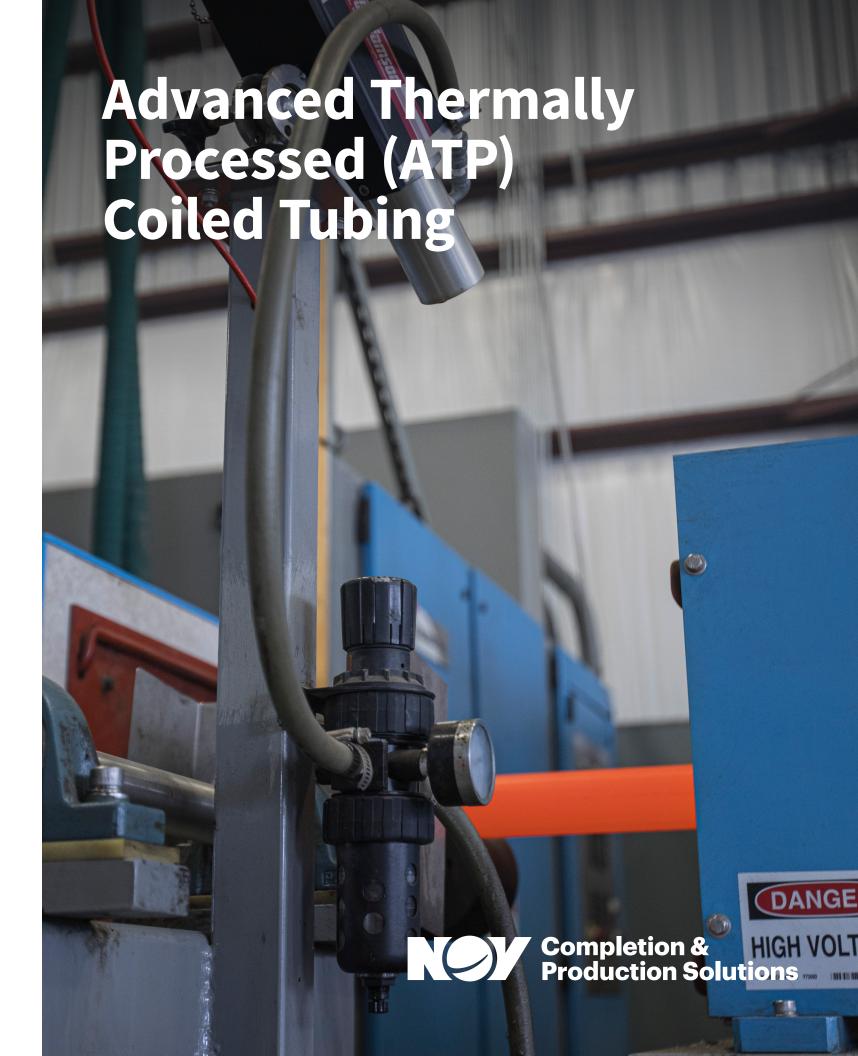
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Process and performance consistency improve your operations

For over 40 years, Quality Tubing™ coiled tubing has been the most trusted well servicing strings in the world. Our proven processes and dedicated team of metallurgists provide quality coiled tubing that leads to our customers' success and improved confidence within the industry. Through years of research and development and strategic partnerships with leading providers of quench and tempered process equipment, we have developed the most consistent advanced thermally processed (ATP) coiled tubing. ATP coiled tubing offers a major advantage over conventional coiled tubing in a vast range of applications. The normalization of the bias weld to the parent material in ATP coiled tubing eliminates the bias weld fatigue spikes, which are often the number one cause of retirement in the conventional offering.

In a highly diverse coiled tubing landscape, it's crucial that the right string is used for the job at hand. Each region has its own characteristics, which means different coiled tubing strings are needed in a variety of applications. To meet the unique demands across these regions, NOV now offers ATP-110, ATP-120, and ATP-130. This gives customers the ability to choose the grade that fits their need, which helps maximize string performance and ROI.

We make reaching longer laterals easier when you partner ATP with our TRUE-TAPER™ XR technology. With millions of feet milled to date and used by all major service companies in every basin in North America, our ATP line of coiled tubing is improving operations due to its process and performance consistency.

Features and benefits

- Utilizes fit-for-purpose raw material and most advanced manufacturing process
- Resistance to premature failure due to OD damage
- No bias weld fatigue derating
- Lower fatigue accumulation at bias welds
- Compatible with existing surface equipment

Surface equipment compatibility

Partnering with leading coiled tubing equipment manufacturers, we have proven that ATP coiled tubing is compatible with your existing surface equipment.

NOV's complete coiled tubing system—including Hydra Rig™ HR-6120 injectors and high-capacity coiled tubing units, Texas Oil Tools™ BOPs and pressure control solutions, and CTES™ monitoring software and condition-based maintenance platform—provides the most innovative fleet to overcome the most challenging well conditions.

Product details

ATP-110 mechanical properties and technical data

	ec. DD	Spe Wa Thick	ll	Cal	c. ID		n End ass	Ten Lo		Inte Yie Pres			o Test ssure
	mm		mm			lb/ft	kg/m		kg	psi	MPa	psi	MPa
1¾	44.5	0.134	3.4	1.482	37.64	2.314	3.444	78,910	35,780	16,210	111.7	12,900	88.9
1¾	44.5	0.145	3.7	1.460	37.08	2.487	3.701	84,800	38,450	17,600	121.3	14,000	96.5
1¾	44.5	0.156	4.0	1.438	36.53	2.658	3.955	90,610	41,090	18,980	130.8	15,000	103.4
1¾	44.5	0.175	4.4	1.400	35.56	2.946	4.384	100,440	45,550	21,370	147.3	15,000	103.4
1¾	44.5	0.188	4.8	1.374	34.90	3.138	4.670	107,010	48,530	23,000	158.5	15,000	103.4
1¾	44.5	0.203	5.2	1.344	34.14	3.356	4.995	114,440	51,900	24,890	171.6	15,000	103.4
13/4	44.5	0.224	5.7	1.302	33.07	3.653	5.437	124,560	56,480	27,530	189.8	15,000	103.4
2	50.8	0.134	3.4	1.732	43.99	2.672	3.977	91,110	41,310	14,190	97.8	11,300	77.9
2	50.8	0.145	3.7	1.710	43.43	2.875	4.278	98,010	44,440	15,400	106.1	12,300	84.8
2	50.8	0.156	4.0	1.688	42.88	3.074	4.575	104,820	47,530	16,610	114.5	13,200	91.0
2	50.8	0.175	4.4	1.650	41.91	3.413	5.080	116,380	52,780	18,700	128.9	14,900	102.7
2	50.8	0.188	4.8	1.624	41.25	3.641	5.418	124,130	56,290	20,130	138.7	15,000	103.4
2	50.8	0.203	5.2	1.594	40.49	3.899	5.802	132,930	60,280	21,780	150.1	15,000	103.4
2	50.8	0.224	5.7	1.552	39.42	4.252	6.327	144,970	65,740	24,090	166.0	15,000	103.4
2	50.8	0.236	6.0	1.528	38.81	4.449	6.621	151,700	68,790	25,410	175.1	15,000	103.4
2	50.8	0.250	6.4	1.500	38.10	4.676	6.958	159,430	72,300	26,950	185.8	15,000	103.4
2¾	60.3	0.134	3.4	2.107	53.52	3.209	4.776	109,430	49,620	11,940	82.3	9,500	65.5
23/8	60.3	0.145	3.7	2.085	52.96	3.456	5.143	117,830	53,430	12,960	89.3	10,300	71.0
23/8	60.3	0.156	4.0	2.063	52.40	3.700	5.506	126,140	57,200	13,980	96.3	11,100	76.5

Spec. OD		Spe Wa Thick	ıll	Cal	c. ID		n End ass		sile ad	Yie	rnal eld sure	Hydr Pres	o Tes ssure
	mm		mm			lb/ft	kg/m		kg	psi	MPa	psi	MP
2¾	60.3	0.175	4.4	2.025	51.44	4.115	6.123	140,290	63,620	15,740	108.5	12,500	86.1
2¾	60.3	0.188	4.8	1.999	50.77	4.394	6.539	149,830	67,950	16,950	116.8	13,500	93.0
2¾	60.3	0.203	5.2	1.969	50.01	4.712	7.013	160,670	72,860	18,340	126.4	14,600	100.
2¾	60.3	0.224	5.7	1.927	48.95	5.149	7.663	175,580	79,620	20,280	139.8	15,000	103.
2¾	60.3	0.236	6.0	1.903	48.34	5.395	8.029	183,950	83,420	21,390	147.4	15,000	103.
2¾	60.3	0.250	6.4	1.875	47.63	5.678	8.449	193,590	87,790	22,690	156.4	15,000	103.
2¾	60.3	0.276	7.0	1.823	46.30	6.191	9.214	211,110	95,740	25,100	173.0	15,000	103.
2¾	60.3	0.281	7.1	1.813	46.05	6.289	9.358	214,420	97,240	25,560	176.2	15,000	103.
25/8	66.7	0.156	4.0	2.313	58.75	4.116	6.126	140,350	63,650	12,650	87.2	10,100	69.6
2%	66.7	0.175	4.4	2.275	57.79	4.582	6.819	156,240	70,850	14,240	98.1	11,300	77.9
25/8	66.7	0.188	4.8	2.249	57.12	4.896	7.287	166,950	75,710	15,330	105.6	12,200	84.1
25/8	66.7	0.203	5.2	2.219	56.36	5.255	7.820	179,160	81,250	16,590	114.3	13,200	91.0
2%	66.7	0.224	5.7	2.177	55.30	5.748	8.554	195,990	88,880	18,350	126.5	14,600	100.
2%	66.7	0.236	6.0	2.153	54.69	6.026	8.967	205,450	93,170	19,360	133.4	15,000	103.
2%	66.7	0.250	6.4	2.125	53.98	6.346	9.443	216,370	98,120	20,530	141.5	15,000	103.
2%	66.7	0.276	7.0	2.073	52.65	6.929	10.311	236,250	107,140	22,710	156.5	15,000	103.
25/8	66.7	0.281	7.1	2.063	52.40	7.039	10.476	240,020	108,850	23,130	159.4	15,000	103.
2%	66.7	0.300	7.6	2.025	51.44	7.454	11.093	254,170	115,260	24,720	170.4	15,000	103.

ATP-120 mechanical properties and technical data

	ec. DD	Spe Wa Thick	ıll	Cal	c. ID		n End ass	Ten Lo		Yie	rnal eld sure		o Test ssure
	mm		mm		mm	lb/ft	kg/m		kg	psi	MPa	psi	MPa
1¾	44.5	0.134	3.4	1.482	37.70	2.315	3.450	85,000	38,540	17,690	121.9	14,100	97.2
1¾	44.5	0.145	3.7	1.460	37.10	2.488	3.707	91,370	41,430	19,200	132.3	15,000	103.4
1¾	44.5	0.156	4.0	1.438	36.60	2.658	3.961	97,620	44,270	20,700	142.7	15,000	103.4
1¾	44.5	0.175	4.4	1.400	35.60	2.946	4.391	108,250	49,090	23,310	160.7	15,000	103.4
1¾	44.5	0.188	4.8	1.374	34.90	3.139	4.678	115,370	52,320	25,090	172.9	15,000	103.4
13/4	44.5	0.203	5.2	1.344	34.20	3.357	5.003	123,370	55,950	27,150	187.1	15,000	103.4
1¾	44.5	0.224	5.7	1.302	33.10	3.654	5.444	134,250	60,880	30,030	207.0	15,000	103.4
2	50.8	0.134	3.4	1.732	44.00	2.673	3.978	98,250	44,550	15,480	106.7	12,300	84.8
2	50.8	0.145	3.7	1.710	43.40	2.875	4.280	105,620	47,900	16,800	115.8	13,400	92.3
2	50.8	0.156	4.0	1.688	42.90	3.075	4.577	113,000	51,240	18,120	124.9	14,400	99.2
2	50.8	0.175	4.4	1.650	41.90	3.414	5.081	125,370	56,850	20,400	140.6	15,000	103.4
2	50.8	0.188	4.8	1.624	41.20	3.642	5.420	133,750	60,650	21,960	151.4	15,000	103.4
2	50.8	0.203	5.2	1.594	40.50	3.900	5.804	143,250	64,960	23,760	163.8	15,000	103.4
2	50.8	0.224	5.7	1.552	39.40	4.253	6.327	156,250	70,860	26,280	181.1	15,000	103.4
2	50.8	0.236	6.0	1.528	38.80	4.450	6.623	163,500	74,140	27,720	191.1	15,000	103.4
2	50.8	0.250	6.4	1.500	38.10	4.677	6.961	171,750	77,890	29,400	202.7	15,000	103.4
23/8	60.3	0.134	3.4	2.107	53.50	3.210	4.776	117,870	53,450	13,030	89.8	10,400	71.7
23/8	60.3	0.145	3.7	2.085	52.90	3.457	5.142	127,000	57,590	14,140	97.4	11,300	77.9
23/8	60.3	0.156	4.0	2.063	52.40	3.700	5.505	136,000	61,670	15,250	105.1	12,200	84.1

	oec. OD	Wa Thick		Cal	c. ID		n End ass	Lo	sile ad	Yie Pres			o Test ssure
	mm		mm		mm	lb/ft	kg/m		kg	psi	MPa	psi	MPa
2¾	60.3	0.175	4.4	2.025	51.40	4.116	6.123	151,250	68,590	17,170	118.3	13,700	94.4
2¾	60.3	0.188	4.8	1.999	50.70	4.395	6.539	161,500	73,240	18,490	127.4	14,700	101.3
2¾	60.3	0.203	5.2	1.969	50.00	4.713	7.012	173,120	78,510	20,000	137.8	15,000	103.4
2¾	60.3	0.224	5.7	1.927	48.90	5.151	7.659	189,250	85,820	22,130	152.5	15,000	103.4
2¾	60.3	0.236	6.0	1.903	48.30	5.396	8.028	198,250	89,900	23,340	160.9	15,000	103.4
2%	60.3	0.250	6.4	1.875	47.60	5.679	8.449	208,620	94,610	24,750	170.6	15,000	103.4
2¾	60.3	0.276	7.0	1.823	46.30	6.191	9.214	227,493	103,170	27,380	188.7	15,000	103.4
2¾	60.3	0.281	7.1	1.813	46.10	6.289	9.358	231,063	104,790	27,890	192.2	15,000	103.4
2%	66.7	0.156	4.0	2.313	58.80	4.117	6.131	151,250	68,590	13,800	95.1	11,000	75.8
2%	66.7	0.175	4.4	2.275	57.80	4.583	6.824	168,370	76,350	15,540	107.1	12,400	85.4
2%	66.7	0.188	4.8	2.249	57.10	4.898	7.292	179,870	81,570	16,730	115.3	13,300	91.7
2%	66.7	0.203	5.2	2.219	56.40	5.256	7.826	193,120	87,580	18,100	124.7	14,400	99.2
2%	66.7	0.224	5.7	2.177	55.30	5.749	8.557	211,250	95,800	20,020	138.0	15,000	103.4
2%	66.7	0.236	6.0	2.153	54.70	6.027	8.974	221,370	100,390	21,120	145.6	15,000	103.4
2%	66.7	0.250	6.4	2.125	54.00	6.347	9.451	233,120	105,720	22,400	154.4	15,000	103.4
2%	66.7	0.276	7.0	2.073	52.70	6.929	10.311	254,589	115,450	24,770	170.7	15,000	103.4
25/8	66.7	0.281	7.1	2.063	52.50	7.039	10.476	258,649	117,300	25,230	173.9	15,000	103.4
2%	66.7	0.300	7.6	2.025	51.50	7.454	11.093	273,900	124,210	26,970	185.9	15,000	103.4

Spec. Spec. Internal

ATP-130 mechanical properties and technical data

Spec. OD		Spec. Wall Thickness		Calc. ID		Plain End Mass		Tensile Load		Internal Yield Pressure		Hydro Test Pressure	
in.	mm		mm		mm	lb/ft	kg/m		kg	psi	MPa	psi	MPa
13/4	44.5	0.134	3.4	1.482	37.64	2.314	3.444	91,830	41,640	19,160	132.1	15,000	103.4
13/4	44.5	0.145	3.7	1.460	37.08	2.487	3.701	98,690	44,750	20,800	143.4	15,000	103.4
13/4	44.5	0.156	4.0	1.438	36.53	2.658	3.955	105,450	47,820	22,430	154.6	15,000	103.4
13/4	44.5	0.175	4.4	1.400	35.56	2.946	4.384	116,890	53,010	25,250	174.0	15,000	103.4
13/4	44.5	0.188	4.8	1.374	34.90	3.138	4.670	124,540	56,480	27,180	187.3	15,000	103.4
13/4	44.5	0.203	5.2	1.344	34.14	3.356	4.995	133,180	60,390	29,410	202.7	15,000	103.4
13/4	44.5	0.224	5.7	1.302	33.07	3.653	5.437	144,960	65,740	32,530	224.2	15,000	103.4
2	50.8	0.134	3.4	1.732	43.99	2.672	3.977	106,040	48,090	16,770	115.6	13,400	92.3
2	50.8	0.145	3.7	1.710	43.43	2.875	4.278	114,070	51,730	18,200	125.4	14,500	99.9
2	50.8	0.156	4.0	1.688	42.88	3.074	4.575	121,990	55,320	19,630	135.3	15,000	103.4
2	50.8	0.175	4.4	1.650	41.91	3.413	5.080	135,440	61,420	22,100	152.3	15,000	103.4
2	50.8	0.188	4.8	1.624	41.25	3.641	5.418	144,470	65,510	23,790	164.0	15,000	103.4
2	50.8	0.203	5.2	1.594	40.49	3.899	5.802	154,700	70,150	25,740	177.4	15,000	103.4
2	50.8	0.224	5.7	1.552	39.42	4.252	6.327	168,710	76,510	28,470	196.2	15,000	103.4
2	50.8	0.236	6.0	1.528	38.81	4.449	6.621	176,550	80,060	30,030	207.0	15,000	103.4
2	50.8	0.250	6.4	1.500	38.10	4.676	6.958	185,540	84,140	31,850	219.5	15,000	103.4
23/8	60.3	0.134	3.4	2.107	53.52	3.209	4.776	127,350	57,750	14,120	97.3	11,200	77.2
23/8	60.3	0.145	3.7	2.085	52.96	3.456	5.143	137,130	62,190	15,320	105.6	12,200	84.1
23/8	60.3	0.156	4.0	2.063	52.40	3.700	5.506	146,800	66,570	16,530	113.9	13,200	91.0

	ec. DD	Spe Wa Thick	ll	Cal	c. ID		n End ass	Ten Lo	sile ad	Yie	rnal eld sure		o Test ssure
	mm		mm			lb/ft	kg/m		kg	psi	MPa	psi	MPa
2¾	60.3	0.175	4.4	2.025	51.44	4.115	6.123	163,270	74,040	18,610	128.3	14,800	102.0
2¾	60.3	0.188	4.8	1.999	50.77	4.394	6.539	174,370	79,070	20,030	138.1	15,000	103.4
2¾	60.3	0.203	5.2	1.969	50.01	4.712	7.013	186,990	84,800	21,670	149.4	15,000	103.4
2¾	60.3	0.224	5.7	1.927	48.95	5.149	7.663	204,340	92,670	23,970	165.2	15,000	103.4
2¾	60.3	0.236	6.0	1.903	48.34	5.395	8.029	214,080	97,080	25,280	174.2	15,000	103.4
2¾	60.3	0.250	6.4	1.875	47.63	5.678	8.449	225,300	102,170	26,820	184.9	15,000	103.4
23/8	60.3	0.276	7.0	1.823	46.30	6.191	9.214	245,690	111,420	29,660	204.4	15,000	103.4
2¾	60.3	0.281	7.1	1.813	46.05	6.289	9.358	249,540	113,170	30,210	208.2	15,000	103.4
2%	66.7	0.156	4.0	2.313	58.75	4.116	6.126	163,340	74,070	14,950	103.0	11,900	82.0
2%	66.7	0.175	4.4	2.275	57.79	4.582	6.819	181,830	82,460	16,830	116.0	13,400	92.3
2%	66.7	0.188	4.8	2.249	57.12	4.896	7.287	194,300	88,110	18,120	124.9	14,400	99.2
2%	66.7	0.203	5.2	2.219	56.36	5.255	7.820	208,510	94,560	19,610	135.2	15,000	103.4
25/8	66.7	0.224	5.7	2.177	55.30	5.748	8.554	228,090	103,440	21,690	149.5	15,000	103.4
2%	66.7	0.236	6.0	2.153	54.69	6.026	8.967	239,110	108,430	22,880	157.7	15,000	103.4
2%	66.7	0.250	6.4	2.125	53.98	6.346	9.443	251,810	114,190	24,260	167.2	15,000	103.4
2%	66.7	0.276	7.0	2.073	52.65	6.929	10.311	274,950	124,690	26,840	185.0	15,000	103.4
2%	66.7	0.281	7.1	2.063	52.40	7.039	10.476	279,340	126,680	27,330	188.4	15,000	103.4
2%	66.7	0.300	7.6	2.025	51.44	7.454	11.093	295,810	134,150	29.210	201.3	15,000	103.4

ATP-140 mechanical properties and technical data

Minimum yield strength.......140,000 psi (965 MPa)
Minimum tensile strength......145,000 psi (999 MPa)
Maximum hardness......39 HRC

Spec. OD		Spe Wa Thick	ll	Cal	c. ID		n End ass	Tensile Load		Internal Yield Pressure		Hydro Test Pressure	
	mm		mm		mm	lb/ft	kg/m		kg		MPa	psi	MPa
1¾	44.5	0.134	3.4	1.482	37.64	2.314	3.444	98,630	44,730	20,640	142.3	15,000	103.4
1¾	44.5	0.145	3.7	1.460	37.08	2.487	3.701	106,010	48,070	22,400	154.4	15,000	103.4
1¾	44.5	0.156	4.0	1.438	36.53	2.658	3.955	113,270	51,360	24,160	166.5	15,000	103.4
1¾	44.5	0.175	4.4	1.400	35.56	2.946	4.384	125,550	56,930	27,200	187.5	15,000	103.4
13/4	44.5	0.188	4.8	1.374	34.90	3.138	4.670	133,760	60,660	29,280	201.8	15,000	103.4
1¾	44.5	0.203	5.2	1.344	34.14	3.356	4.995	143,050	64,870	31,680	218.4	15,000	103.4
1¾	44.5	0.224	5.7	1.302	33.07	3.653	5.437	155,700	70,610	35,040	241.5	15,000	103.4
2	50.8	0.134	3.4	1.732	43.99	2.672	3.977	113,890	51,650	18,060	124.5	14,400	99.2
2	50.8	0.145	3.7	1.710	43.43	2.875	4.278	122,520	55,560	19,600	135.1	15,000	103.4
2	50.8	0.156	4.0	1.688	42.88	3.074	4.575	131,030	59,420	21,140	145.7	15,000	103.4
2	50.8	0.175	4.4	1.650	41.91	3.413	5.080	145,480	65,970	23,800	164.0	15,000	103.4
2	50.8	0.188	4.8	1.624	41.25	3.641	5.418	155,170	70,370	25,620	176.6	15,000	103.4
2	50.8	0.203	5.2	1.594	40.49	3.899	5.802	166,160	75,350	27,720	191.1	15,000	103.4
2	50.8	0.224	5.7	1.552	39.42	4.252	6.327	181,210	82,180	30,660	211.3	15,000	103.4
2	50.8	0.236	6.0	1.528	38.81	4.449	6.621	189,630	86,000	32,340	222.9	15,000	103.4
2	50.8	0.250	6.4	1.500	38.10	4.676	6.958	199,280	90,370	34,300	236.4	15,000	103.4
23/8	60.3	0.134	3.4	2.107	53.52	3.209	4.776	136,780	62,030	15,200	104.8	12,100	83.4
23/8	60.3	0.145	3.7	2.085	52.96	3.456	5.143	147,290	66,790	16,500	113.7	13,200	91.0
23/8	60.3	0.156	4.0	2.063	52.40	3.700	5.506	157,680	71,510	17,800	122.7	14,200	97.9

O	OD Wall Thickness			Cal	c. ID	Ma	ass	Lo	ad	Pres				
	mm		mm		mm	lb/ft	kg/m		kg		MPa	psi	MPa	
	60.3	0.175	4.4	2.025	51.44	4.115	6.123	175,370	79,530	20,040	138.1	15,000	103.4	
	60.3	0.188	4.8	1.999	50.77	4.394	6.539	187,280	84,930	21,570	148.7	15,000	103.4	
	60.3	0.203	5.2	1.969	50.01	4.712	7.013	200,840	91,080	23,340	160.9	15,000	103.4	
	60.3	0.224	5.7	1.927	48.95	5.149	7.663	219,470	99,530	25,810	177.9	15,000	103.4	
	60.3	0.236	6.0	1.903	48.34	5.395	8.029	229,940	104,280	27,230	187.7	15,000	103.4	
	60.3	0.250	6.4	1.875	47.63	5.678	8.449	241,990	109,740	28,880	199.1	15,000	103.4	
	60.3	0.276	7.0	1.823	46.3	6.191	9.214	263,890	119,670	31,940	220.2	15,000	103.4	
	60.3	0.281	7.1	1.813	46.05	6.289	9.358	268,030	121,550	32,530	224.2	15,000	103.4	
	66.7	0.156	4.0	2.313	58.75	4.116	6.126	175,440	79,560	16,100	111.0	12,800	88.2	
	66.7	0.175	4.4	2.275	57.79	4.582	6.819	195,300	88,570	18,130	125.0	14,500	99.9	
	66.7	0.188	4.8	2.249	57.12	4.896	7.287	208,690	94,640	19,520	134.5	15,000	103.4	
	66.7	0.203	5.2	2.219	56.36	5.255	7.820	223,960	101,560	21,120	145.6	15,000	103.4	
	66.7	0.224	5.7	2.177	55.3	5.748	8.554	244,980	111,100	23,360	161.0	15,000	103.4	
	66.7	0.236	6.0	2.153	54.69	6.026	8.967	256,820	116,470	24,640	169.8	15,000	103.4	
	66.7	0.250	6.4	2.125	53.98	6.346	9.443	270,460	122,650	26,130	180.1	15,000	103.4	
	66.7	0.276	7.0	2.073	52.65	6.929	10.311	295,320	133,930	28,900	199.2	15,000	103.4	
	66.7	0.281	7.1	2.063	52.4	7.039	10.476	300,030	136,060	29,440	202.9	15,000	103.4	
	66.7	0.300	7.6	2.025	51.44	7.454	11.093	317,720	144,090	31,460	216.9	15,000	103.4	

Disclaimer: Coiled tubing grades and related information are provided for general information for any particular customer's coiled tubing operations. The customer acknowledges that any use or interpretation of this information is at his own risk.

