

Macaroni Tubing Performance Ratings - Metric



Designation			O.D. (mm)	Nominal Weight (kg/m)		Grade	Collapse Resistance (mPa)	Internal Yield Pressure at Minimum Yield, (mPa)			Joint Strength (kg.)			Pipe Body Yield (kg)	Wall (mm)	I.D. (mm)	Drift (mm)
Size (in.)	Weight			Non-Upset T&C	Upset T&C			Non-Upset T&C	Integral Joint T&C	External Upset T&C	Non-Upset T&C	Integral Joint T&C	External Upset T&C				
	Non-Upset T&C (lb/ft.)	Upset T&C (lb/ft.)															
1.050	1.14	1.20	26.67	1.70	1.79	J-55	72.81	71.43	71.43	4,000	8,300	8,300	2.87	20.93	18.55		
1.050	1.14	1.20	26.67	1.70	1.79	L-80	105.98	103.91	103.91	5,800	12,100	12,100	2.87	20.93	18.55		
1.050	1.14	1.20	26.67	1.70	1.79	N-80	105.98	103.91	103.91	5,800	12,100	12,100	2.87	20.93	18.55		
1.315	1.70	1.80	33.40	2.53	2.68	J-55	68.95	67.09	67.09	6,800	10,000	12,300	3.38	26.64	24.26		
1.315	1.70	1.80	33.40	2.53	2.68	L-80	100.32	97.63	97.63	9,900	14,500	17,900	3.38	26.64	24.26		
1.315	1.70	1.80	33.40	2.53	2.68	N-80	100.32	97.63	97.63	9,900	14,500	17,900	3.38	26.64	24.26		
1.660	2.30	2.40	42.16	3.43	3.57	J-55	58.54	55.99	55.99	9,700	13,800	16,700	3.56	35.05	32.67		
1.660	2.30	2.40	42.16	3.43	3.57	L-80	85.22	81.43	81.43	14,100	20,100	24,300	3.56	35.05	32.67		
1.660	2.30	2.40	42.16	3.43	3.57	N-80	85.22	81.43	81.43	14,100	20,100	24,300	3.56	35.05	32.67		
1.900	2.75	2.90	48.26	4.10	4.32	J-55	53.44	50.68	50.68	11,900	16,800	20,000	3.68	40.89	38.51		
1.900	2.75	2.90	48.26	4.10	4.32	L-80	77.78	73.64	73.64	17,300	24,400	29,100	3.68	40.89	38.51		
1.900	2.75	2.90	48.26	4.10	4.32	N-80	77.78	73.64	73.64	17,300	24,400	29,100	3.68	40.89	38.51		
2 1/6	3.25	3.25	52.40	4.84	4.84	J-55	53.02	50.20	50.20	22,300	22,300	23,300	3.96	44.48	42.10		
2 1/6	3.25	3.25	52.40	4.84	4.84	L-80	77.84	73.02	73.02	32,400	32,400	33,900	3.96	44.48	42.10		
2 1/6	3.25	3.25	52.40	4.84	4.84	N-80	77.84	73.02	73.02	32,400	32,400	33,900	3.96	44.48	42.10		
2 1/6	3.25	3.25	52.40	4.84	4.84	P-110	100.67	100.39	100.39	44,500	46,700	46,700	3.96	44.48	42.10		

Tubing Performance Ratings - Metric



Designation			O.D. (mm)	Nominal Weight (kg/m)		Grade	Collapse Resistance (mPa)	Internal Yield Pressure at Minimum Yield, (mPa)			Joint Strength, (kg)		Pipe Body Yield (kg)	Wall (mm)	I.D. (mm)	Drift (mm)
Size (in.)	Weight			Non-Upset T&C	Upset T&C			PE,BTC, Non-Upset	EUE T&C		Non-Upset T&C	BTC Upset T&C				
	Non-Upset T&C (lb/ft.)	Upset T&C (lb/ft.)	Reg. Cpl.			Spec. Cpl.										
2 3/8	4.60	4.70	60.33	6.85	7.00	J-55	55.85	53.09	53.09	53.09	22,500	32,600	32,600	4.83	50.67	48.29
2 3/8	4.60	4.70	60.33	6.85	7.00	L-80	81.22	77.22	77.22	77.22	32,600	47,400	47,400	4.83	50.67	48.29
2 3/8	4.60	4.70	60.33	6.85	7.00	N-80	81.22	77.22	77.22	77.22	32,600	47,400	47,400	4.83	50.67	48.29
2 3/8	4.60	4.70	60.33	6.85	7.00	P-110	111.22	106.18	106.18	106.18	44,900	65,100	65,100	4.83	50.67	48.29
2 3/8	5.80	5.95	60.33	8.64	8.86	L-80	105.36	103.22	102.39	78.81	46,800	61,500	61,500	6.45	47.42	45.04
2 3/8	5.80	5.95	60.33	8.64	8.86	N-80	105.36	103.22	102.39	78.81	46,800	61,500	61,500	6.45	47.42	45.04
2 3/8	5.80	5.95	60.33	8.64	8.86	P-110	144.86	141.97	140.86	108.38	64,300	84,500	84,500	6.45	47.42	45.04
2 7/8	6.40	6.50	73.03	9.53	9.68	J-55	52.95	50.06	50.06	50.05	33,000	45,300	45,300	5.51	62.00	59.62
2 7/8	6.40	6.50	73.03	9.53	9.68	L-80	77.02	72.88	72.88	72.88	47,900	65,800	65,800	5.51	62.00	59.62
2 7/8	6.40	6.50	73.03	9.53	9.68	N-80	77.02	72.88	72.88	72.88	47,900	65,800	65,800	5.51	62.00	59.62
2 7/8	6.40	6.50	73.03	9.53	9.68	P-110	100.32	100.18	100.18	100.18	65,900	90,500	90,500	5.51	62.00	59.62
2 7/8	7.80	7.90	73.03	11.62	11.77	L-80	95.77	92.67	92.67	76.12	64,000	81,900	81,900	7.01	59.00	56.62
2 7/8	7.80	7.90	73.03	11.62	11.77	N-80	95.77	92.67	92.67	76.12	64,000	81,900	81,900	7.01	59.00	56.62
2 7/8	7.80	7.90	73.03	11.62	11.77	P-110	131.63	127.42	127.42	104.66	87,900	112,500	112,500	7.01	59.00	56.62
2 7/8	8.60	8.70	73.03	12.81	12.96	L-80	105.49	103.43	103.08	76.12	72,300	90,200	90,200	7.82	57.38	54.99
2 7/8	8.60	8.70	73.03	12.81	12.96	N-80	105.49	103.43	103.08	76.12	72,300	90,200	90,200	7.82	57.38	54.99
2 7/8	8.60	8.70	73.03	12.81	12.96	P-110	145.07	142.17	141.76	104.67	99,500	124,000	124,000	7.82	57.38	54.99
3 1/2	7.70	7.70	88.90	11.47	11.47	J-55	41.16	40.96	40.96	40.96	40,600	55,700	55,700	5.49	77.93	74.75
3 1/2	7.70	7.70	88.90	11.47	11.47	L-80	54.26	59.57	59.57	59.57	59,100	80,900	80,900	5.49	77.93	74.75
3 1/2	7.70	7.70	88.90	11.47	11.47	N-80	54.26	59.57	59.57	59.57	59,100	80,900	80,900	5.49	77.93	74.75
3 1/2	9.20	9.30	88.90	13.70	13.85	J-55	51.02	48.20	48.20	48.20	49,700	64,700	64,700	6.45	76.00	72.82
3 1/2	9.20	9.30	88.90	13.70	13.85	L-80	72.67	70.05	70.05	70.05	72,200	94,100	94,100	6.45	76.00	72.82
3 1/2	9.20	9.30	88.90	13.70	13.85	N-80	72.67	70.05	70.05	70.05	72,200	94,100	94,100	6.45	76.00	72.82
3 1/2	9.20	9.30	88.90	13.70	13.85	P-110	93.29	96.32	96.32	96.32	99,300	129,300	129,300	6.45	76.00	72.82
3 1/2	10.20	10.20	88.90	15.19	15.19	J-55	57.44	54.82	54.82	54.82	57,800	72,800	72,800	7.34	74.22	71.04
3 1/2	10.20	10.20	88.90	15.19	15.19	L-80	83.57	79.71	79.71	79.71	84,000	105,900	105,900	7.34	74.22	71.04
3 1/2	10.20	10.20	88.90	15.19	15.19	N-80	83.57	79.71	79.71	79.71	84,000	105,900	105,900	7.34	74.22	71.04
3 1/2	12.70	12.95	88.90	18.92	19.29	L-80	105.56	103.43	103.43	73.50	111,900	133,700	133,700	9.53	69.85	66.67
3 1/2	12.70	12.95	88.90	18.92	19.29	N-80	105.56	103.43	103.43	73.50	111,900	133,700	133,700	9.53	69.85	66.67
3 1/2	12.70	12.95	88.90	18.92	19.29	P-110	145.14	142.24	142.24	101.01	153,800	183,900	183,900	9.53	69.85	66.67
4	9.50	9.50	101.60	14.15	14.15	J-55	35.23	37.51	37.51	37.51	44,900	66,900	66,900	5.74	90.12	86.94

Tubing Performance Ratings - Metric



GLOBAL STEEL LTD.

Designation			Nominal Weight (kg/m)		Grade	Collapse Resistance (mPa)	Internal Yield Pressure at Minimum Yield, (mPa)			Joint Strength, (kg)		Pipe Body Yield	Wall	I.D.	Drift	
Size (in.)	Weight		O.D (mm)	Non-Upset T&C			Upset T&C	PE,BTC, Non-Upset	EUE T&C		Non-Upset T&C	BTC Upset T&C	(kg)	(mm)	(mm)	(mm)
	Non-Upset T&C (lb/ft.)	Upset T&C (lb/ft.)			Reg. Cpl.	Spec. Cpl.										
4	9.50		101.60	14.15		L-80	45.44	54.54			65,400	97,300	5.74	90.12	86.94	
4	9.50		101.60	14.15		N-80	45.44	54.54			65,400	97,300	5.74	90.12	86.94	
4		11.00	101.60		16.38	J-55	45.44	43.44	43.44		76,800	76,800	6.65	88.29	85.11	
4		11.00	101.60		16.38	L-80	60.68	63.23	63.23		111,700	111,700	6.65	88.29	85.11	
4		11.00	101.60		16.38	N-80	60.68	63.23	63.23		111,700	111,700	6.65	88.29	85.11	
4 1/2	12.60	12.75	114.30	18.77	18.99	J-55	39.51	39.99	39.99		65,100	89,900	89,900	6.88	100.53	97.35
4 1/2	12.60	12.75	114.30	18.77	18.99	L-80	51.71	58.12	58.12		94,700	130,800	130,800	6.88	100.53	97.35
4 1/2	12.60	12.75	114.30	18.77	18.99	N-80	51.71	58.12	58.12		94,700	130,800	130,800	6.88	100.53	97.35