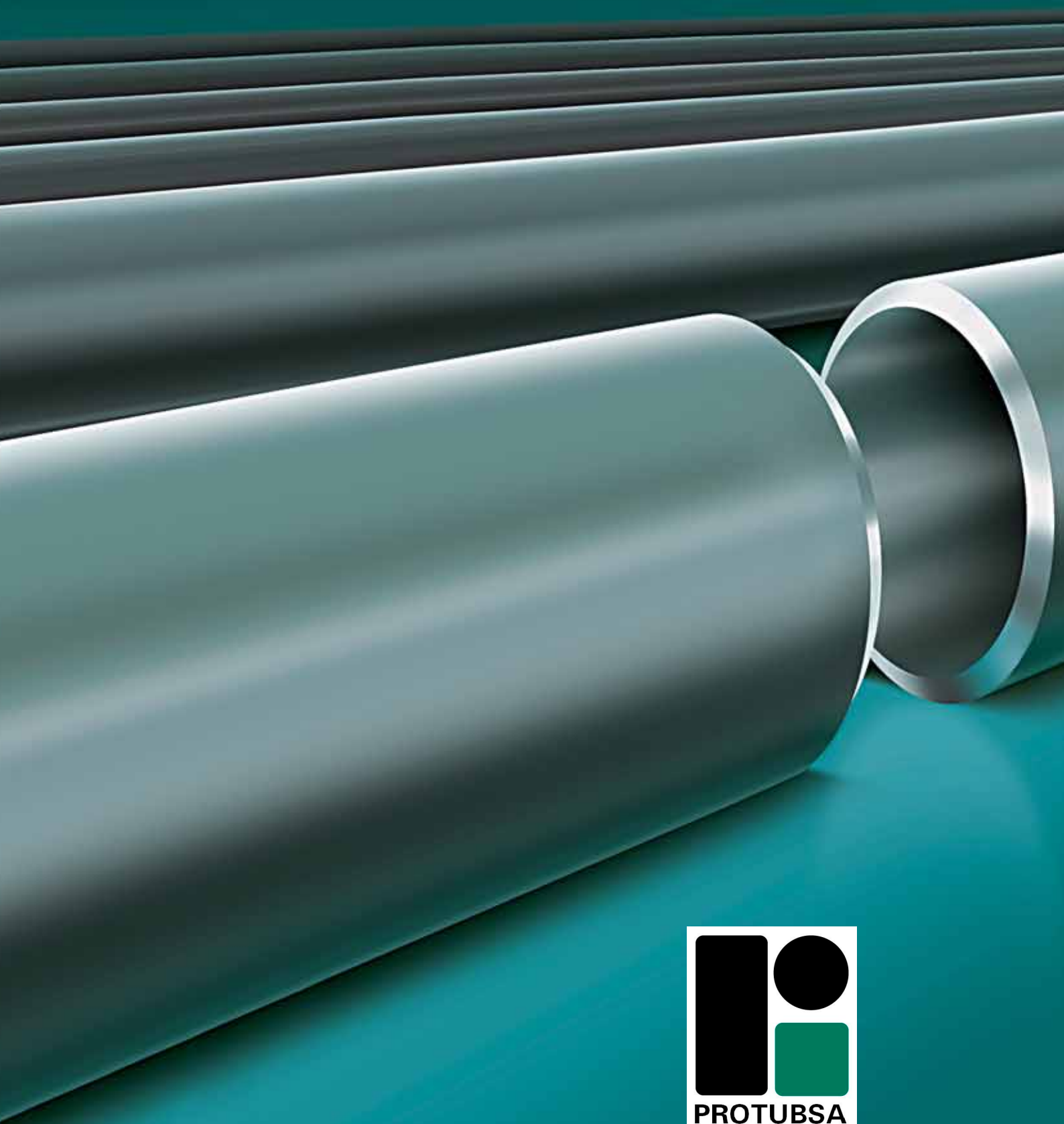




Lines pipe









Line pipe

Line pipe

APPLICATIONS

Pipes for conveying water, gaseous and liquid hydrocarbons and for the construction of chemical and industrial plants, oil refineries, etc.

QUALITY

API 5L PSL1* Grade: A - B* - X 42* - X 46 - X 52 - X 56 - X 60 - X 65 - X 70
ASTM A 53*/ASME SA 53* Grade: A - B*

PRODUCTION

Seamless hot rolled pipes, cold or hot finished pipes - ERW up to 24", SAW for larger sizes.

CHEMICAL AND MECHANICAL PROPERTIES

Standard	Delivery Condition(2)	Grade	Chemical composition % (1)				Cr max.	Tensile Strength min. N/mm²	Yield point min. N/mm²	
			C max.	Mn max.	P max.	S max.				
API 5L	S	A	0,22	0,90	0,03	0,03	—	—	331	207
	S	B	0,28	1,20	0,03	0,03	—	—	414	241
	S	X 42	0,28	1,30	0,03	0,03	—	—	414	290
	S	X 46	0,28	1,40	0,03	0,03	—	—	434	359
	S	X 52	0,28	1,40	0,03	0,03	—	—	455	359
	S	X 56	0,28	1,40	0,03	0,03	—	—	490	386
	S	X 60	0,28	1,40	0,03	0,03	—	—	517	414
	S	X 65	0,28	1,40	0,03	0,03	—	—	531	448
	W	X 70 (3)	0,26	1,65	0,03	0,03	—	—	565	483
ASTM A 53	S	A	0,25	0,95	0,05	0,045	0,40	—	330	205
	S	B	0,30	1,20	0,05	0,045	0,40	—	415	240

(1) On manufacturers' discretion and acc. to API 5L, vanadium, Titanium, Niobium can be added

(2) S = Seamless W = Welded

(3) For seamless pipes analysis on request.

* Stock supply.

N.B.: Elongation: not less than the minimum values calculated according to API 5L.

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
1/8	0.405	10,3	0.068	1,73	0.24	0,36	STD	40
			0.095	2,41	0.31	0,46	XS	80
1/4	0.540	13,7	0.088	2,24	0.42	0,63	STD	40
			0.119	3,02	0.54	0,80	XS	80
3/8	0.675	17,1	0.091	2,3	0.57	0,85	STD	40
			0.126	3,2	0.74	1,10	XS	80
1/2	0.840	21,3	0.109	2,8	0.85	1,28	STD	40
			0.147	3,7	1.09	1,62	XS	80
			0.188	4,8	1.31	1,95		160
			0.294	7,5	1.71	2,55	XXS	
3/4	1.050	26,7	0.113	2,9	1.13	1,70	STD	40
			0.154	3,9	1.47	2,19	XS	80
			0.219	5,6	1.94	2,89		160
			0.308	7,8	2.44	3,63	XXS	
1	1.315	33,4	0.133	3,4	1.68	2,52	STD	40
			0.179	4,5	2.17	3,21	XS	80
			0.250	6,4	2.84	4,23		160
			0.358	9,1	3.66	5,45	XXS	
1 1/4	1.660	42,2	0.140	3,6	2.27	3,43	STD	40
			0.191	4,9	3.00	4,51	XS	80
			0.250	6,4	3.76	5,60		160
			0.382	9,7	5.21	7,76	XXS	
1 1/2	1.900	48,3	0.145	3,7	2.72	4,07	STD	40
			0.200	5,1	3.63	5,43	XS	80
			0.281	7,1	4.86	7,23		160
			0.400	10,2	6.41	9,55	XXS	
2	2.375	60,3	0.109	2,8	2.64	3,97		10
			0.125	3,2	3.00	4,51		
			0.141	3,6	3.36	5,03		

Line pipe

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
2	2.375	60,3	0.154	3,9	3.65	5,42	STD	40
			0.172	4,4	4.05	6,07		
			0.188	4,8	4.39	6,57		
			0.218	5,5	5.02	7,43	XS	80
			0.250	6,4	5.67	8,51		
			0.281	7,1	6.28	9,31		
			0.344	8,7	7.46	11,11		160
			0.436	11,1	9.03	13,45	XXS	
2¹/₂	2.875	73,0	0.109	2,8	3.22	4,85		
			0.125	3,2	3.67	5,51		
			0.141	3,6	4.12	6,16		
			0.156	4,0	4.53	6,81		
			0.172	4,4	4.97	7,44		
			0.188	4,8	5.40	8,07		
			0.203	5,2	5.79	8,69	STD	40
			0.216	5,5	6.13	9,16		
			0.250	6,4	7.01	10,51		
			0.276	7,0	7.66	11,39	XS	80
			0.375	9,5	10.01	14,91		160
			0.552	14,0	13.69	20,37	XXS	
3	3.500	88,9	0.125	3,2	4.51	6,76		
			0.141	3,6	5.06	7,57		
			0.156	4,0	5.57	8,37		
			0.172	4,4	6.11	9,17		
			0.188	4,8	6.65	9,95		30
			0.216	5,5	7.58	11,31	STD	40
			0.250	6,4	8.68	13,02		
			0.281	7,1	9.66	14,32		
			0.300	7,6	10.25	15,24	XS	80
			0.438	11,1	14.32	21,33		160
			0.600	15,3	18.58	27,67	XXS	
3¹/₂	4.000	101,6	0.156	4,0	6.40	9,63		
			0.172	4,4	7.03	10,55		
			0.188	4,8	7.65	11,46		30

Line pipe

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
3¹/₂	4.000	101,6	0.226	5,7	9.11	13,48	STD	40
			0.250	6,4	10.01	15,02		
			0.281	7,1	11.16	16,55		
			0.318	8,1	12.50	18,68	XS	80
4	4.500	114,3	0.156	4,0	7.24	10,88		
			0.172	4,4	7.95	11,92		
			0.188	4,8	8.66	12,96		30
			0.203	5,2	9.32	13,99		
			0.219	5,6	10.01	15,01		
			0.237	6,0	10.79	16,02	STD	40
			0.250	6,4	11.35	17,03		
			0.281	7,1	12.66	18,77		
			0.312	7,9	13.96	20,73		
			0.337	8,6	14.98	22,42	XS	80
			0.438	11,1	19.00	28,25		120
			0.531	13,5	22.51	33,56		160
			0.674	17,1	27.54	40,99	XXS	
5	5.563	141,3	0.156	4,0	9.01	13,54		
			0.188	4,8	10.79	16,16		
			0.219	5,6	12.50	18,74		
			0.258	6,6	14.62	21,92	STD	40
			0.281	7,1	15.85	23,50		
			0.312	7,9	17.50	25,99		
			0.344	8,7	19.17	28,45		
			0.375	9,5	20.78	30,88	XS	80
			0.500	12,7	27.04	40,28		120
			0.625	15,9	32.96	49,17		160
			0.750	19,1	38.55	57,56	XXS	
6	6.625	168,3	0.172	4,4	11.85	17,78		
			0.188	4,8	12.92	19,35		
			0.203	5,2	13.92	20,91		
			0.219	5,6	14.98	22,47		
			0.250	6,4	17.02	25,55		
			0.280	7,1	18.97	28,22	STD	40

Line pipe

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch		inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
6	6.625	168,3	0.312	7,9	21.04	31,25			
			0.344	8,7	23.08	34,24			
			0.375	9,5	25.03	37,20			
			0.432	11,0	28.57	42,67		XS	80
			0.500	12,7	32.71	48,73			
			0.562	14,3	36.89	54,31			120
			0.625	15,9	40.05	59,76			
			0.712	18,3	45.35	67,69			160
			0.750	19,1	47.06	70,27			
			0.875	22,2	53.73	79,98			
8	8.625	219,1	0.188	4,8	16.94	25,37			
			0.203	5,2	18.26	27,43			
			0.219	5,6	19.66	29,49			
			0.250	6,4	22.36	33,57			20
			0.277	7,0	24.70	36,61			30
			0.312	7,9	27.70	41,14			
			0.322	8,2	28.55	42,65		STD	40
			0.344	8,7	30.42	45,14			
			0.375	9,5	33.04	49,10			
			0.438	11,1	38.30	56,94			
			0.500	12,7	43.39	64,64		XS	80
			0.562	14,3	48.40	72,22			
			0.625	15,9	53.40	79,68			
			0.719	18,3	60.71	90,62			120
			0.750	19,1	63.08	94,21			
			0.812	20,6	67.76	100,84			140
			0.875	22,2	72.42	107,79		XXS	
			1.000	25,4	81.40	121,32			
10	10.750	273,1	0.250	6,4	28.04	42,09			20
			0.279	7,1	31.20	46,57			
			0.307	7,8	34.24	51,03			30
			0.344	8,7	38.23	56,72			
			0.365	9,3	40.48	60,50		STD	40
			0.438	11,1	48.24	71,72			
			0.500	12,7	54.74	81,55		XS	60

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
10	10.750	273,1	0.562	14,3	61.15	91,26		
			0.625	15,9	67.58	100,85		
			0.719	18,3	77.03	114,99		100
			0.812	20,6	86.18	128,27		
			0.875	22,2	92.28	137,36		
			0.938	23,8	98.30	146,30		
			1.000	25,4	104.13	155,15	XXS	140
			1.250	31,8	126.83	188,75		
12	12.750	323,9	0.250	6,4	33.38	50,11		20
			0.281	7,1	37.42	55,47		
			0.312	7,9	41.45	61,56		
			0.330	8,4	43.77	65,35		30
			0.344	8,7	45.58	67,62		
			0.375	9,5	49.56	73,65	STD	
			0.406	10,3	53.52	79,65		40
			0.438	11,1	57.59	85,62		
			0.500	12,7	65.42	97,46	XS	
			0.562	14,3	73.15	109,18		60
			0.625	15,9	80.93	120,76		
			0.688	17,5	88.63	132,23		80
			0.750	19,1	96.12	143,56		
			0.812	20,6	103.53	154,08		
			0.875	22,2	110.97	165,17		
			0.938	23,8	118.33	176,13		
			1.000	25,4	125.49	186,97	XXS	120
			1.062	27,0	132.57	197,68		
			1.125	28,6	139.67	208,27		140
			1.250	31,8	153.53	229,06		
14	14.000	355,6	0.281	7,1	41.17	61,02		
			0.312	7,9	45.61	67,74		20
			0.344	8,7	50.17	74,42		
			0.375	9,5	54.57	81,08	STD	30
			0.406	10,3	58.94	87,71		
			0.438	11,1	63.44	94,30		40
			0.469	11,9	67.78	100,86		

Line pipe

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
14	14.000	355,6	0.500	12,7	72.09	107,39	XS	
			0.562	14,3	80.66	120,36		
			0.625	15,9	89.28	133,19		60
			0.688	17,5	97.81	145,91		
			0.750	19,1	106.13	158,49		80
			0.812	20,6	114.37	170,18		
			0.875	22,2	122.65	182,52		
			0.938	23,8	130.85	194,74		100
			1.000	25,4	138.84	206,83		
			1.062	27,0	146.74	218,79		120
			1.125	28,6	154.69	230,63		
			1.250	31,8	170.21	253,31		140
16	16.000	406,4	0.281	7,1	47.17	69,91		
			0.312	7,9	52.27	77,63		20
			0.344	8,7	57.52	85,32		
			0.375	9,5	62.58	92,98	STD	30
			0.406	10,3	67.62	100,61		
			0.438	11,1	72.80	108,20		
			0.469	11,9	77.79	115,77		
			0.500	12,7	82.77	123,30	XS	40
			0.562	14,3	92.66	138,27		
			0.625	15,9	102.63	153,11		
			0.688	17,5	112.51	167,83		
			0.750	19,1	122.15	182,42		
			0.812	20,6	131.71	195,98		
			0.875	22,2	141.34	210,30		
			0.938	23,8	150.89	224,55		
			1.000	25,4	160.20	238,64		
			1.062	27,0	169.43	252,61		
			1.125	28,6	178.72	266,45		
			1.188	30,2	187.93	280,17		
			1.250	31,8	196.91	293,76		
18	18.000	457,0	0.312	7,9	58.94	87,49		20
			0.344	8,7	64.87	96,18		
			0.375	9,5	70.59	104,84	STD	

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
18	18.000	457,0	0.406	10,3	76.29	113,46		
			0.438	11,1	82.15	122,05		30
			0.469	11,9	87.81	130,62		
			0.500	12,7	93.45	139,15	XS	
			0.562	14,3	104.67	156,11		40
			0.625	15,9	115.98	172,95		
			0.688	17,5	127.21	189,67		
			0.750	19,1	138.17	206,25		60
			0.812	20,6	149.06	221,69		
			0.875	22,2	160.03	238,03		
			0.938	23,8	170.92	254,25		80
			1.000	25,4	181.56	270,34		
			1.062	27,0	192.11	286,30		
			1.125	28,6	202.75	302,14		
			1.188	30,2	213.31	317,85		
			1.250	31,8	223.61	333,44		
20	20.000	508,0	0.344	8,7	72.21	107,12		
			0.375	9,5	78.60	116,78	STD	20
			0.406	10,3	84.96	126,41		
			0.438	11,1	91.51	136,01		
			0.469	11,9	97.83	145,58		
			0.500	12,7	104.13	155,12	XS	30
			0.562	14,3	116.67	174,10		
			0.625	15,9	129.33	192,95		
			0.688	17,5	141.90	211,68		
			0.750	19,1	154.19	230,27		
			0.812	20,6	166.40	247,60		60
			0.875	22,2	178.72	265,95		
			0.938	23,8	190.96	284,18		
			1.000	25,4	202.92	302,28		
			1.062	27,0	214.80	320,26		
			1.125	28,6	226.78	338,11		
			1.188	30,2	238.68	355,83		
			1.250	31,8	250.31	373,43		
			1.312	33,3	261.86	389,81		
			1.375	34,9	273.51	407,17		

Line pipe

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
22	22.000	559,0	0.375	9,5	86.61	128,73	STD	20
			0.406	10,3	93.63	139,37		
			0.438	11,1	100.86	149,97		
			0.469	11,9	107.85	160,55		
			0.500	12,7	114.81	171,09	XS	30
			0.562	14,3	128.67	192,08		
			0.625	15,9	142.68	212,95		
			0.688	17,5	156.60	233,68		
			0.750	19,1	170.21	254,30		
			0.812	20,6	183.75	273,51		
			0.875	22,2	197.41	293,87		60
			0.938	23,8	211.00	314,11		
			1.000	25,4	224.28	334,34		
			1.062	27,0	237.48	354,22		
			1.125	28,6	250.81	374,08		80
			1.188	30,2	264.06	393,81		
			1.250	31,8	277.01	413,42		
			1.312	33,3	289.88	431,69		
			1.375	34,9	302.88	451,06		100
			1.438	36,5	315.79	470,30		
			1.500	38,1	328.41	489,41		
24	24.000	610,0	0.375	9,5	94.62	140,68	STD	20
			0.406	10,3	102.31	152,32		
			0.438	11,1	110.22	163,93		
			0.469	11,9	117.86	175,51		
			0.500	12,7	125.49	187,06	XS	
			0.562	14,3	140.68	210,07		30
			0.625	15,9	156.03	232,94		
			0.688	17,5	171.29	255,69		40
			0.750	19,1	186.23	278,32		
			0.812	20,6	201.09	299,41		
			0.875	22,2	216.10	321,79		
			0.938	23,8	231.03	344,05		
			1.000	25,4	245.64	366,17		
			1.062	27,0	260.17	388,17		
			1.125	28,6	274.84	410,05		

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
24	24.000	610,0	1.188	30,2	289.44	431,80		
			1.250	31,8	303.71	453,42		
			1.312	33,3	317.91	473,57		
			1.375	34,9	332.25	494,95		
			1.438	36,5	346.50	516,20		
			1.500	38,1	360.45	537,33		
			1.562	39,7	374.31	558,32		
26	26.000	660,0	0.375	9,5	102.63	152,39	STD	
			0.406	10,3	110.98	165,05		
			0.438	11,1	119.57	177,62		
			0.469	11,9	127.88	190,19		
			0.500	12,7	136.17	202,72	XS	20
			0.562	14,3	152.68	227,70		30
			0.625	15,9	168.38	252,55		
			0.688	17,5	185.99	277,27		40
			0.750	19,1	202.25	301,87		
			0.812	20,6	218.43	324,81		
			0.875	22,2	234.79	349,16		
			0.938	23,8	251.07	373,39		
			1.000	25,4	267.00	397,49		
28	28.000	711,0	0.375	9,5	110.64	164,34	STD	
			0.406	10,3	119.65	177,98		
			0.438	11,1	128.93	191,58		
			0.469	11,9	137.90	205,15		
			0.500	12,7	146.85	218,65	XS	20
			0.562	14,3	164.69	245,68		
			0.625	15,9	182.73	272,54		30
			0.688	17,5	200.68	299,26		
			0.750	19,1	218.27	325,89		
			0.812	20,6	235.78	350,72		
			0.875	22,2	253.48	377,08		
			0.938	23,8	271.10	403,32		
			1.000	25,4	288.36	429,44		
30	30.000	762,0	0.375	9,5	118.65	176,29	STD	

Line pipe

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
30	30.000	762,0	0.406	10,3	128.32	190,93		
			0.438	11,1	138.29	205,54		
			0.469	11,9	147.92	220,12		
			0.500	12,7	157.53	234,67	XS	20
			0.562	14,3	176.69	263,67		
			0.625	15,9	196.08	292,54		30
			0.688	17,5	215.38	321,29		
			0.750	19,1	234.29	349,91		
			0.812	20,6	253.12	376,63		
			0.875	22,2	272.17	405,00		
			0.938	23,8	291.14	433,26		
			1.000	25,4	307.72	461,38		
			1.062	27,0	328.22	489,38		
			1.125	28,6	346.93	517,25		
			1.188	30,2	365.56	544,99		
			1.250	31,8	383.81	572,61		
32	32.000	813,0	0.375	9,5	126.66	188,24	STD	
			0.406	10,3	136.99	203,88		
			0.438	11,1	147.64	219,50		
			0.469	11,9	157.94	235,09		
			0.500	12,7	168.21	250,64	XS	20
			0.562	14,3	188.70	281,65		
			0.625	15,9	209.43	312,54		30
			0.688	17,5	230.08	343,30		40
			0.750	19,1	250.31	373,93		
			0.812	20,6	270.47	402,54		
			0.875	22,2	290.84	432,93		
			0.938	23,8	311.17	463,19		
			1.000	25,4	331.08	493,32		
			1.062	27,0	350.90	523,33		
			1.125	28,6	370.96	553,22		
			1.188	30,2	390.94	582,98		
			1.250	31,8	410.51	612,61		
34	34.000	864,0	0.375	9,5	134.67	200,18	STD	
			0.406	10,3	145.67	216,84		

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
34	34.000	864,0	0.438	11,1	157.00	233,46		
			0.469	11,9	167.95	250,05		
			0.500	12,7	178.89	266,61	XS	20
			0.562	14,3	200.70	299,64		
			0.625	15,9	222.78	332,53		30
			0.688	17,5	244.77	365,31		40
			0.750	19,1	266.33	397,95		
			0.812	20,6	287.81	428,44		
			0.875	22,2	309.55	460,85		
			0.938	23,8	331.21	493,12		
			1.000	25,4	352.44	525,27		
			1.062	27,0	373.59	557,29		
			1.125	28,6	394.99	589,19		
36	36.000	914,0	0.375	9,5	142.68	211,90	STD	
			0.406	10,3	154.34	229,54		
			0.438	11,1	166.35	247,15		
			0.469	11,9	177.97	264,72		
			0.500	12,7	189.57	282,27	XS	20
			0.562	14,3	212.70	317,27		
			0.625	15,9	236.13	352,14		30
			0.688	17,5	259.47	386,88		





*High temperature-
line pipe*

High temperature - line pipe

APPLICATIONS

These pipes are suitable for bending and are used for the construction of high temperature and pressure plants.

QUALITY

ASTM A 106* GR. A, B* e C; ASTM A 335 P1, P5, P9, P11, P22; C14, C18, 16 Mo 5, 14 Cr Mo 3, 12 Cr Mo 910; St 35.8⁽¹⁾

CHEMICAL AND MECHANICAL PROPERTIES

Standard	Grade	Chemical composition % (1)							Mechanical properties		
		C	Mn	P≤	S≤	Si	Mo	Cr	Tensile strength min. N/mm ²	Yield point min. N/mm ²	Elonga- tion min. %
ASTM A 106 ASME SA 106	A	≤ 0,25	0,27 ÷ 0,93	0,035	0,035	≥ 0,10	≤ 0,15	≤ 0,40	330	205	35
	B	≤ 0,30	0,29 ÷ 1,06	0,035	0,035	≥ 0,10	≤ 0,15	≤ 0,40	415	240	30
	C	≤ 0,35	0,29 ÷ 1,06	0,035	0,035	≥ 0,10	≤ 0,15	≤ 0,40	485	275	30
ASTM A 335 ASME SA 335	P1	0,10 ÷ 0,20	0,30 ÷ 0,80	0,025	0,025	0,10 ÷ 0,50	0,44 ÷ 0,65	—	380	205	30
	P5	≤ 0,15	0,30 ÷ 0,60	0,025	0,025	≤ 0,50	0,45 ÷ 0,65	4,00 ÷ 0,65	415	205	30
	P9	≤ 0,15	0,30 ÷ 0,60	0,025	0,025	0,25 ÷ 1,00	0,90 ÷ 1,10	8,00 ÷ 10,00	415	205	30
	P11	0,05 ÷ 0,15	0,30 ÷ 0,60	0,025	0,025	0,50 ÷ 1,00	0,44 ÷ 0,65	1,00 ÷ 1,50	415	205	30
	P22	0,05 ÷ 0,15	0,30 ÷ 0,60	0,025	0,025	≤ 0,50	0,87 ÷ 1,13	1,90 ÷ 2,60	415	205	30
UNI 5462	C14	≤ 0,17	≥ 0,40	0,035	0,035	0,10 ÷ 0,35	—	—	345 ÷ 440	235	28
	C18	≤ 0,21	≥ 0,50	0,035	0,035	0,10 ÷ 0,35	—	—	440 ÷ 540	255	23
	16 Mo 5	0,12 ÷ 0,20	0,50 ÷ 0,80	0,035	0,035	0,15 ÷ 0,35	0,45 ÷ 0,65	—	440 ÷ 540	285	22
	14 Cr Mo 3	0,10 ÷ 0,18	0,40 ÷ 0,70	0,035	0,035	0,15 ÷ 0,35	0,45 ÷ 0,65	0,70 ÷ 1,00	440 ÷ 570	295	22
	12 Cr Mo 910	≤ 0,15	0,40 ÷ 0,60	0,035	0,035	0,15 ÷ 0,50	0,90 ÷ 1,10	2,00 ÷ 2,50	440 ÷ 590	265	20
DIN 17175	St 35,8	≤ 0,17	0,40 ÷ 0,80	0,040	0,040	0,10 ÷ 0,35	—	—	360 ÷ 480	235 ⁽²⁾	25

* Stock supply.

(1) Pipes are supplied acc. to two steel grades **I** and **III** which must be mentioned: - Grade **I** identifies non alloyed and alloyed pipes - Grade **III** identifies only alloyed steel pipes.

(2) W. T. max 16 mm; W. T. from 17 to 40 mm: 225 and from 41 to 60 mm: 215.

High temperature - line pipe

SIZE TABLES

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
1/2	0.840	21,3	0.109	2,77	0.85	1,27	STD	40
3/4	1.050	26,7	0.154	3,91	1.47	2,20	XS	80
1	1.315	33,4	0.133	3,38	1.68	2,50	STD	40
			0.179	4,55	2.17	3,24	XS	80
1 1/4	1.660	42,2	0.140	3,56	2.27	3,39	STD	40
			0.191	4,85	3.00	4,47	XS	80
			0.250	6,35	3.76	5,61		160
1 1/2	1.900	48,3	0.145	3,68	2.72	4,05	STD	40
			0.200	5,08	3.63	5,41	XS	80
			0.281	7,14	4.86	7,25		160
			0.400	10,15	6.41	9,56	XXS	
2	2.375	60,3	0.125	3,18	3.00	4,48		
			0.141	3,58	3.36	5,01		
			0.154	3,91	3.65	5,44	STD	40
			0.172	4,37	4.05	6,03		
			0.188	4,78	4.39	6,54		
			0.218	5,54	5.02	7,48	XS	80
			0.250	6,35	5.67	8,45		
			0.281	7,14	6.28	9,36		
			0.344	8,74	7.46	11,11		160
			0.436	11,07	9.03	13,44	XXS	
2 1/2	2.875	73,0	0.125	3,18	3.67	5,48		
			0.141	3,58	4.12	6,13		
			0.156	3,96	4.53	6,74		
			0.172	4,37	4.97	7,40		
			0.188	4,78	5.40	8,04		
			0.203	5,16	5.79	8,63	STD	40
			0.216	5,49	6.13	9,14		
			0.250	6,35	7.01	10,44		
			0.276	7,01	7.66	11,41	XS	80

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
2 1/2	2.875	73,0	0.375	9,53	10.01	14,92		160
			0.552	14,02	13.69	20,39	XXS	
3	3.500	88,9	0.125	3,18	4.51	6,72		
			0.141	3,58	5.06	7,53		
			0.156	3,96	5.57	8,29		
			0.172	4,37	6.11	9,11		
			0.188	4,78	6.65	9,92		
			0.216	5,49	7.58	11,29	STD	40
			0.250	6,35	8.68	12,93		
			0.281	7,14	9.66	14,40		
			0.300	7,62	10.25	15,27	XS	80
			0.438	11,13	14.32	21,35		160
			0.600	15,24	18.58	27,68	XXS	
3 1/2	4.000	101,6	0.156	3,96	6.40	9,53		
			0.172	4,37	7.03	10,48		
			0.188	4,78	7.65	11,41		
			0.266	5,74	9.11	13,57	STD	40
			0.250	6,35	10.01	14,92		
			0.281	7,14	11.16	16,63		
			0.318	8,08	12.50	18,63	XS	80
4	4.500	114,3	0.156	3,96	7.24	10,78		
			0.172	4,37	7.95	11,85		
			0.188	4,78	8.66	12,91		
			0.203	5,16	9.32	13,89		
			0.219	5,56	10.01	14,91		
			0.237	6,02	10.79	16,07	STD	40
			0.250	6,35	11.35	16,90		
			0.281	7,14	12.66	18,87		
			0.312	7,92	13.96	20,78		
			0.337	8,56	14.98	22,32	XS	80
			0.438	11,13	19.00	28,32		120
			0.531	13,49	22.51	33,54		160
			0.674	17,12	27.54	41,03	XXS	

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335
SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter			W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
5	5.563	141,3	0.156	3,96	9.01	13,41		
			0.188	4,78	10.79	16,89		
			0.219	5,56	12.50	18,61		
			0.258	6,55	14.62	21,77	STD	40
			0.281	7,14	15.85	23,62		
			0.312	7,92	17.50	26,05		
			0.344	8,74	19.17	28,57		
			0.375	9,53	20.78	30,97	XS	80
			0.500	12,70	27.04	40,28		120
			0.625	15,88	32.96	49,11		160
			0.750	19,05	38.55	57,43	XXS	
6	6.625	168,3	0.188	4,78	12.92	19,27		
			0.203	5,16	13.92	20,76		
			0.219	5,56	14.48	22,31		
			0.250	6,35	17.02	25,36		
			0.280	7,11	18.97	28,26	STD	40
			0.312	7,92	21.04	31,32		
			0.344	8,74	23.08	34,39		
			0.375	9,53	25.03	37,31		
			0.432	10,97	28.57	42,56	XS	80
			0.500	12,70	32.71	48,73		
			0.562	14,27	36.39	54,20		120
			0.625	15,88	40.05	56,69		
			0.719	18,26	45.35	67,56		160
			0.750	19,05	47.06	70,11		
			0.864	21,95	53.16	79,22	XXS	
			0.875	22,23	53.73	80,07		
8	8.625	219,1	0.188	4,78	16.49	25,26		
			0.203	5,16	18.26	27,22		
			0.219	5,56	19.66	29,28		
			0.250	6,35	22.36	33,31		20
			0.277	7,04	24.70	36,81		30
			0.312	7,92	27.70	41,24		
			0.322	8,18	28.55	42,55	STD	40

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter			Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule		
8	8.625	219,1	0.344	8,74	30.42	45,34				
			0.375	9,53	33.04	49,25				
			0.406	10,31	35.64	53,08			60	
			0.438	11,13	38.30	57,08				
			0.500	12,70	43.39	64,64	XS		80	
			0.562	14,27	48.40	72,08				
			0.594	15,09	50.95	75,92			100	
			0.625	15,88	53.40	79,85				
			0.719	18,26	60.71	90,44			120	
			0.750	19,05	63.08	93,98				
			0.812	20,26	67.76	100,92			140	
			0.875	22,23	72.42	107,92	XXS			
			0.906	23,01	74.69	111,27			160	
			1.000	25,40	81.44	121,33				
10	10.750	273,0	0.250	6,35	28.04	41,77			20	
			0.279	7,09	31.20	46,51				
			0.307	7,80	34.24	51,03			30	
			0.344	8,74	38.23	56,98				
			0.365	9,27	40.48	60,31	STD		40	
			0.438	11,13	48.24	71,90				
			0.500	12,70	54.74	81,55	XS		60	
			0.562	14,27	61.15	91,08				
			0.594	15,09	64.43	96,01			80	
			0.625	15,88	67.58	100,73				
			0.719	18,26	77.03	114,75			100	
			0.812	20,62	86.18	128,38				
			0.844	21,44	89.29	133,06			120	
			0.875	22,23	92.28	137,52				
			0.938	23,83	98.30	146,48				
			1.000	25,40	104.13	155,15	XXS		140	
			1.125	28,58	115.64	172,33			160	
			1.250	31,75	126.83	188,47				
12	12.750	323,8	0.330	8,38	43.77	65,20			30	
			0.344	8,74	45.58	67,93				

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335
SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter			W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
12	12.750	323,8	0.375	9,53	49.56	73,88	STD	
			0.406	10,31	53.52	79,73		40
			0.438	11,13	57.59	85,84		
			0.500	12,70	65.42	97,46	XS	
			0.562	14,27	73.15	108,96		60
			0.625	15,88	80.93	120,62		
			0.688	17,48	88.63	132,08		80
			0.750	19,05	96.12	143,21		
			0.812	20,62	103.53	154,21		
			0.844	21,44	107.32	159,61		100
			0.875	22,23	110.97	165,37		
			0.938	23,83	118.33	176,33		
			1.000	25,40	125.49	186,47	XXS	120
			1.062	26,97	132.57	197,48		
			1.125	28,58	139.67	208,14		140
			1.250	31,75	153.53	228,74		
			1.312	33,32	160.27	238,76		160
14	14.000	355,6	0.344	8,74	50.17	74,76		
			0.375	9,53	54.57	81,33	STD	30
			0.406	10,31	58.94	87,79		
			0.438	11,13	63.44	94,55		40
			0.469	11,91	67.78	100,94		
			0.500	12,70	72.09	107,39	XS	
			0.562	14,27	80.66	120,11		
			0.594	15,09	85.05	126,71		60
			0.625	15,88	89.28	133,03		
			0.688	17,48	97.81	145,75		
			0.750	19,05	106.13	158,10		80
			0.812	20,62	114.37	170,33		
			0.875	22,23	122.65	182,75		
			0.938	23,83	130.85	194,96		100
			1.000	25,40	138.84	206,83		
			1.062	26,97	146.74	218,57		
			1.094	27,79	150.79	224,65		120
			1.125	28,58	154.69	230,48		

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m		Class	Schedule
14	14.000	355,6	1.250	31,75	170.21	253,56			140
			1.406	35,71	189.11	281,70			160
			2.000	50,80	256.32	381,83			
			2.125	53,98	269.50	401,50			
			2.200	55,88	277.25	413,01			
			2.500	63,50	307.05	457,40			
16	16.000	406,4	0.344	8,74	57.52	85,71			
			0.375	9,53	62.58	93,27		STD	30
			0.406	10,31	67.62	100,70			
			0.438	11,13	72.80	108,49			
			0.469	11,91	77.79	115,86			
			0.500	12,70	82.77	123,30		XS	40
			0.562	14,27	92.66	137,99			
			0.625	15,88	102.63	152,93			
			0.656	16,66	107.50	160,12			60
			0.688	17,48	112.51	167,65			
			0.750	19,05	122.15	181,97			
			0.812	20,62	131.71	196,16			
			0.844	21,44	136.61	203,53			80
			0.875	22,23	141.34	210,60			
			0.938	23,83	150.89	224,82			
			1.000	25,40	160.20	238,64			
			1.031	26,19	164.82	245,56			100
			1.062	26,97	169.43	252,35			
			1.125	28,58	178.72	266,28			
			1.188	30,18	187.93	280,00			
			1.219	30,96	192.43	286,64			120
			1.250	31,75	196.91	293,33			
			1.438	36,53	223.64	333,19			140
			1.594	40,49	245.25	265,35			160
18	18.000	457,0	0.344	8,74	64.87	96,61			
			0.375	9,53	70.59	105,16		STD	
			0.406	10,31	76.29	113,57			
			0.438	11,13	82.15	122,38			30

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335
SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m		Class	Schedule
18	18.000	457,0	0.469	11,91	87.81	130,72			
			0.500	12,70	93.45	139,15		XS	
			0.562	14,27	104.67	155,80			40
			0.625	15,88	115.98	172,74			
			0.688	17,48	127.21	189,46			
			0.750	19,05	138.17	205,74			60
			0.812	20,62	149.06	221,89			
			0.875	22,23	160.03	238,34			
			0.938	23,83	170.92	254,55			80
			1.000	25,40	181.56	270,34			
			1.062	26,97	192.11	286,00			
			1.125	28,58	202.75	301,94			
			1.156	29,36	207.96	309,62			100
			1.188	30,18	213.31	317,66			
			1.250	31,75	223.61	332,95			
			1.375	34,93	244.14	363,56			120
			1.562	39,67	274.22	408,26			140
			1.781	45,24	308.50	459,37			160
20	20.000	508,0	0.344	8,74	72.21	107,60			
			0.375	9,53	78.60	117,15		STD	20
			0.406	10,31	84.96	126,53			
			0.438	11,13	91.51	136,37			
			0.469	11,91	97.83	145,70			
			0.500	12,70	104.13	155,12		XS	30
			0.562	14,27	116.67	173,74			
			0.594	15,09	123.11	183,42			40
			0.625	15,88	129.33	192,71			
			0.688	17,48	141.90	211,44			
			0.750	19,05	154.19	229,70			
			0.812	20,62	166.40	247,83			60
			0.875	22,23	178.72	266,29			
			0.938	23,83	190.96	284,52			
			1.000	25,40	202.92	302,28			
			1.031	26,19	208.87	311,17			80
			1.062	26,97	214.80	319,92			

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter			Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule		
20	20.000	508,0	1.125	28,58	226.78	337,89				
			1.188	30,18	238.68	355,61				
			1.250	31,75	250.31	372,88				
			1.281	32,54	256.10	381,53			100	
			1.312	33,32	261.86	390,03				
			1.375	34,93	273.51	407,49				
			1.500	38,10	296.37	441,49			120	
			1.750	44,45	341.09	508,11			140	
			1.969	50,01	379.17	564,81			160	
22	22.000	559,0	0.406	10,31	93.63	139,50				
			0.438	11,13	100.86	150,37				
			0.469	11,91	107.85	160,68				
			0.500	12,70	114.81	171,09			XS	30
			0.562	14,27	128.67	191,69				
			0.625	15,88	142.68	212,69				
			0.688	17,48	156.60	233,43				
			0.750	19,05	170.21	253,65				
			0.812	20,62	183.75	273,76				
			0.875	22,23	197.41	294,25				60
			0.938	23,83	211.00	314,49				
			1.000	25,40	224.28	334,23				
			1.062	26,97	237.48	353,84				
			1.125	28,58	250.81	373,83				80
			1.188	30,18	264.06	393,57				
			1.250	31,75	277.01	412,81				
			1.312	33,32	289.88	431,94				
			1.375	34,93	302.88	451,42				100
			1.438	36,53	315.79	470,66				
			1.500	38,10	328.41	489,41				
			1.625	41,28	353.61	527,02				120
			1.875	47,63	403.00	600,63				140
			2.125	53,98	451.06	672,26				160
24	24.000	610,0	0.375	9,53	94.62	141,12			STD	20
			0.406	10,31	102.31	152,47				

High temperature - line pipe

QUALITY: ASTM A106 - ASTM A 335
SIZE AND MASS ASME/ANSI B 36.10 M

Nominal Diameter			Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule		
24	24.000	610,0	0.438	11,13	110.22	164,37				
			0.469	11,91	117.86	175,66				
			0.500	12,70	125.49	187,06	XS			
			0.562	14,27	140.68	209,64			30	
			0.625	15,88	156.03	232,66				
			0.688	17,48	171.29	255,41			40	
			0.750	19,05	186.23	277,61				
			0.812	20,62	201.09	299,69				
			0.875	22,23	216.10	322,21				
			0.938	23,83	274.84	344,46				
			0.969	24,61	289.44	355,26			60	
			1.000	25,40	296.58	366,17				
			1.062	26,97	303.71	387,76				
			1.125	28,58	317.91	409,77				
			1.188	30,18	332.25	431,52				
			1.219	30,96	346.50	442,08			80	
			1.250	31,75	360.45	452,74				
			1.312	33,32	367.39	473,84				
			1.375	34,93	374.31	495,35				
			1.438	36,53	429.39	516,80				
			1.500	38,10	360.45	537,33				
			1.531	38,89	367.39	547,71			100	
			1.562	39,67	374.31	557,43				
			1.812	46,02	429.39	640,03			120	
			2.062	52,37	483.12	720,15			140	
			2.344	59,54	542.13	808,22			160	
26	26.000	660,0	0.406	10,31	110.98	165,18				
			0.438	11,13	119.57	178,09				
			0.469	11,91	127.88	190,34				
			0.500	12,70	136.17	202,72	XS		20	
			0.562	14,27	152.68	227,23				
			0.625	15,88	169.38	252,24				
			0.688	17,48	185.99	276,96				
			0.750	19,05	202.25	301,10				
			0.812	20,26	218.43	325,12				

High temperature - line pipe

QUALITY: ASTM A 106 - ASTM A 335

SIZES AND MASS ASME/ANSI B 36.10 M

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
26	26.000	660,0	0.875	22,23	234.79	349,62			
			0.938	23,83	251.07	373,84			
			1.000	25,40	267.00	397,44			
28	28.000	711,0	0.406	10,31	119.65	178,15			
			0.438	11,13	128.93	191,09			
			0.469	11,91	137.90	205,32			
			0.500	12,70	146.85	218,69	XS	20	
			0.562	14,27	164.69	245,18			
			0.625	15,88	182.73	271,21		30	
			0.688	17,48	200.68	298,95			
			0.750	19,05	218.27	325,06			
			0.812	20,62	235.78	351,05			
			0.875	22,23	253.48	377,58			
			0.938	23,83	271.10	403,81			
			1.000	25,40	288.36	429,44			

High temperature - line pipe

QUALITY: UNI 5462

SIZES AND MASS UNI 5463

O. D. mm	W. T. - mm																	
	2,30	2,60	2,90	3,20	3,60	4,00	4,50	5,00	5,40	5,60	5,90	6,30	7,10	8,00	8,80	10,00	11,00	12,50
	Mass kg/m																	
21,30	1,09	1,21	1,33	1,44														
30,00	1,59	1,77	1,96	2,14	2,37	2,59	2,88	3,08	3,28	3,37	3,52							
33,70	1,79	2,01	2,22	2,42	2,69	2,95	2,32	3,54	3,76	3,87	4,04							
38,00		2,29	2,53	2,77	3,08	3,38	3,71	4,07	4,34	4,47	4,67	4,95						
44,50		2,70	2,99	3,28	3,65	4,02	4,42	4,87	5,20	5,35	5,61	5,95	6,56	7,17	7,72			
51,00		3,12	3,46	3,79	4,23	4,66	5,13	5,67	6,05	6,24	6,54	6,95	7,69	8,43	9,10			
54,00		3,32	3,68	4,04	4,50	4,97	5,47	6,04	6,46	6,66	6,99	7,43	8,23	9,04	9,77	10,90		
57,00			3,90	4,28	4,78	5,27	5,81	6,41	6,87	7,08	7,44	7,91	8,77	9,65	10,04	11,06		
60,30			4,14	5,54	5,07	5,59	6,17	6,82	7,30	7,53	7,91	8,42	9,34	10,30	11,10	12,40		
63,50			4,36	4,79	5,36	5,91	6,52	7,21	7,72	7,87	8,37	8,91	9,90	10,90	11,80	13,20		
70,00			4,88	5,30	5,93	6,55	7,24	8,01	8,58	8,85	9,31	9,92	11,00	12,20	13,20	14,80	16,00	
76,10			5,28	5,80	6,49	7,17	7,92	8,77	9,41	9,71	10,20	10,90	12,10	13,40	14,60	16,30	17,70	
82,50				6,31	7,06	7,80	8,63	9,56	10,30	10,80	11,10	11,90	13,20	14,60	15,90	17,90	19,50	
88,90				6,81	7,63	8,43	9,33	10,30	11,10	11,50	12,10	12,90	14,40	15,90	17,30	19,50	21,20	
101,60						9,63	10,80	11,90	12,80	13,30	14,80	16,50	18,50	20,10	22,60	24,60		
108,00						10,30	11,50	12,70	13,70	14,10	15,80	17,70	19,70	21,50	24,20	26,30		
114,30						11,00	12,10	13,50	14,50	15,00	15,80	16,80	18,80	20,90	22,80	25,70	28,10	
127,00						12,20	13,50	15,00	16,20	16,70	17,60	18,80	21,00	23,40	25,50	28,90	31,60	
133,00						12,80	14,20	15,80	17,00	17,60	18,50	19,80	22,10	24,60	26,90	30,30	33,30	
139,70						13,50	14,90	16,60	17,90	18,50	19,40	20,30	23,30	25,90	28,30	32,00	35,10	
152,40							16,40	18,20	19,50	20,20	21,30	22,80	25,50	28,40	31,00	35,10	38,50	43,50
159,00							17,10	19,00	20,40	21,10	22,20	23,30	26,60	29,60	32,40	36,70	40,30	45,40
168,50							18,10	20,10	21,70	22,40	23,60	25,30	28,30	31,50	34,50	39,00	42,90	48,40
177,80							19,20	21,30	22,90	23,70	25,00	26,70	30,00	33,40	36,50	41,40	45,40	51,30
193,70								23,30	25,00	25,90	27,30	29,20	32,80	36,50	40,00	45,30	49,80	56,20

High temperature - line pipe

QUALITY: UNI 5742

SIZES AND MASS ISO 4200

O. D. mm	W. T. - mm																
	2,30	2,60	2,90	3,20	3,60	4,00	4,50	5,00	5,40	5,60	6,30	7,10	8,00	8,80	10,00	11,00	12,50
	Mass kg/m																
21,30	1,08	1,20	1,32	1,43													
26,90	1,40	1,56	1,72	1,87	2,07	2,26	2,49										
30,00	1,57	1,76	1,94	2,11	2,34	2,56	2,83	3,08									
33,70	1,78	1,99	2,20	2,41	2,67	2,93	3,24	3,54	3,77	3,88							
35,00	1,85	2,08	2,30	2,51	2,79	3,06	3,38										
38,00		2,27	2,51	2,75	3,05	3,35	3,72	4,07	4,34	4,47	4,93						
42,40		2,55	2,82	3,09	3,44	3,79	4,21	4,61	4,93	5,08	5,61	6,18					
44,50		2,69	2,98	3,26	3,63	4,00	4,44	4,87	5,21	5,37	5,94	6,55	7,20	7,75			
48,30		2,93	3,25	3,56	3,97	4,37	4,86	5,34	5,71	5,90	6,53	7,21	7,95	8,57			
51,00		3,10	3,44	3,77	4,21	4,64	5,16	5,67	6,07	6,27	6,94	7,69	8,48	9,16			
54,00		3,30	3,65	4,01	4,47	4,93	5,49	6,04	6,47	6,68	7,41	8,21	9,08	9,81	10,90		
57,00			3,87	4,25	4,74	5,23	5,83	6,41	6,87	7,10	7,88	8,74	9,67	10,50	11,60		
60,30			4,11	4,51	5,03	5,55	6,19	6,82	7,31	7,55	8,39	9,32	10,30	11,20	12,40		
63,50			4,33	4,76	5,32	5,87	6,55	7,21	7,74	8,00	8,89	9,88	10,90	11,90	13,20		
70,00			4,80	5,27	5,90	6,51	7,27	8,01	8,60	8,89	9,90	11,00	12,20	13,30	14,80	16,00	17,70
73,00			5,01	5,51	6,16	6,81	7,60	8,38	9,00	9,31	10,40	11,50	12,80	13,90	15,50	16,80	18,70
76,10			5,24	5,75	6,44	7,11	7,95	8,77	9,42	9,74	10,80	12,10	13,40	14,60	16,30	17,70	19,60
82,50				6,26	7,00	7,74	8,66	9,56	10,30	10,60	11,80	13,20	14,70	16,00	17,90	19,40	21,60
88,90				6,76	7,57	8,38	9,37	10,30	11,10	11,50	12,80	14,30	16,00	17,40	19,50	21,10	23,60
101,60						9,63	10,80	11,90	12,80	13,30	14,80	16,50	18,50	20,10	22,60	24,60	27,50
108,00						10,30	11,50	12,70	13,70	14,10	15,80	17,70	19,70	21,50	24,20	26,30	29,40
114,30						10,90	12,20	13,50	14,50	15,00	16,80	18,80	21,00	22,90	25,70	28,00	31,40
127,00						12,10	13,60	15,00	16,20	16,80	18,80	21,00	23,50	25,70	28,90	31,50	35,30
133,00						12,70	14,30	15,80	17,00	17,60	19,70	22,00	24,70	27,00	30,30	33,10	37,10
139,70						13,40	15,00	16,60	17,90	18,50	20,70	23,20	26,00	28,40	32,00	34,90	39,20
152,40							16,40	18,20	19,60	20,30	22,70	25,40	28,50	31,20	35,10	38,40	43,10
159,00							17,10	19,00	20,50	21,20	23,70	26,60	29,80	32,60	36,70	40,10	45,20
168,30							18,20	20,10	21,70	22,50	25,20	28,20	31,60	34,60	39,00	42,70	48,00
177,80							19,20	21,30	23,00	23,80	26,60	29,90	33,50	36,70	41,40	45,20	51,00
193,70								23,30	25,10	26,00	29,10	32,70	38,60	40,10	45,30	49,60	55,90
219,10								26,40	28,50	29,50	33,10	37,10	41,60	45,60	51,60	56,50	63,70
244,50											37,00	41,60	46,70	51,20	57,80	63,30	71,50
273,00											41,40	46,60	52,30	57,30	64,90	71,10	80,30
323,90													62,30	68,40	77,40	84,90	96,00
355,60													63,60	75,30	85,20	93,50	106,00
406,40													78,60	86,30	97,80	107,00	121,00
457,00													88,60	97,30	110,00	121,00	137,00
508,00														108,00	123,00	135,00	153,00
559,00															135,00	149,00	168,00
610,00															148,00	162,00	184,00
660,00															160,00	176,00	200,00
711,00															173,00	190,00	215,00

High temperature - line pipe

QUALITY: UNI 5742
SIZES AND MASS ISO 4200

W. T. - mm

14,20	16,00	17,50	20,00	22,20	25,00	28,00	30,00	32,00	36,00	40,00	45,00	50,00	55,00	60,00	65,00	O. D. mm
Mass kg/m																
																21,30
																26,90
																30,00
																33,70
																35,00
																38,00
																42,40
																44,50
																48,30
																51,00
																54,00
																57,00
																60,33
																63,50
																19,50
																20,60
																21,70
																23,90
																26,20
																30,60
																32,80 36,30
																35,10 38,80 41,80 46,50
																39,50 43,80 47,30 52,80
																41,60 46,20 49,80 55,70
																43,90 48,80 52,70 59,00
																48,40 53,80 58,20 65,30 71,30 78,50
																50,70 56,40 61,10 68,60 74,80 82,60
																54,00 60,10 65,10 73,10 80,00 88,30
																57,30 63,80 69,20 77,80 85,20 90,20
																62,90 70,10 76,00 85,75 93,90 104,00 114,00 121,00 128,00 140,00 152,00
																71,80 80,10 87,00 98,20 108,00 120,00 132,00 140,00 148,00 163,00 177,00
																80,60 90,20 98,00 111,00 122,00 135,00 149,00 159,00 168,00 185,00 202,00 221,00
																90,60 101,00 110,00 125,00 137,00 153,00 169,00 180,00 190,00 210,00 230,00 253,00 275,00 296,00 315,00 333,00
																108,00 121,00 132,00 150,00 165,00 184,00 204,00 217,00 230,00 256,00 280,00 310,00 338,00 365,00 390,00 415,00
																120,00 134,00 146,00 166,00 183,00 204,00 226,00 241,00 255,00 284,00 311,00 345,00 377,00 408,00 437,00 466,00
																137,00 154,00 168,00 191,00 210,00 235,00 261,00 278,00 295,00 329,00 361,00 401,00 439,00 477,00 513,00 547,00
																155,00 174,00 190,00 216,00 238,00 266,00 296,00 316,00 335,00 374,00 411,00 457,00 502,00 545,00 587,00 628,00
																173,00 194,00 212,00 241,00 266,00 298,00 331,00 354,00 376,00 419,00 462,00 514,00 565,00 614,00 663,00 710,00
																191,00 214,00 234,00 266,00 294,00 329,00 367,00 391,00 416,00 464,00 512,00 570,00 628,00 684,00 738,00 792,00
																209,00 234,00 256,00 291,00 322,00 361,00 402,00 429,00 456,00 510,00 562,00 627,00 691,00 753,00 814,00 874,00
																226,00 254,00 277,00 316,00 349,00 392,00 436,00 466,00 496,00 554,00 612,00 683,00 752,00 821,00 888,00 954,00
																224,00 274,00 299,00 341,00 377,00 423,00 472,00 504,00 536,00 599,00 662,00 739,00

High temperature - line pipe

QUALITY: DIN 17175

SIZES AND MASS DIN 2448

O. D. mm	W. T. - mm												
	2,60	2,90	3,20	3,60	4,00	4,50	5,00	5,60	6,30	7,10	8,00	8,80	10,00
	Mass kg/m												
21,30	1,20	1,32	1,43										
26,90	1,56	1,72	1,87	2,07	2,26								
30,00	1,76	1,94	2,11	2,34	2,56	2,83	3,08						
33,70	1,99	2,20	2,41	2,67	2,93	3,24	3,54	3,88					
38,00	2,27	2,51	2,75	3,05	3,35	3,72	4,07	4,47	4,93				
42,40		2,82	3,09	3,44	3,79	4,21	4,61	5,08	5,61	6,18			
44,50		2,98	3,26	3,63	4,00	4,44	4,87	5,37	5,94	6,55	7,20	7,75	
48,30		3,25	3,56	3,97	4,37	4,86	5,34	5,90	6,53	7,21	7,95	8,57	
51,00		3,44	3,77	4,21	4,64	5,16	5,67	6,27	6,94	7,69	8,48	9,16	
54,00		3,65	4,01	4,47	4,93	5,49	6,04	6,68	7,41	8,21	9,08	9,81	10,90
57,00		3,87	4,25	4,74	5,23	5,83	6,41	7,10	7,88	8,74	9,67	10,50	11,60
60,30		4,11	4,51	5,03	5,55	6,19	6,82	7,55	8,39	9,32	10,30	11,20	12,40
63,50		4,33	4,76	5,32	5,87	6,55	7,21	8,00	8,89	9,88	10,90	11,90	13,20
70,00		4,80	5,27	5,90	6,51	7,27	8,01	8,89	9,90	11,00	12,20	13,30	14,80
73,00		5,01	5,51	6,16	6,81	7,60	8,38	9,31	10,40	11,50	12,80	13,90	15,50
76,10		5,24	5,75	6,44	7,11	7,95	8,77	9,74	10,80	12,10	13,40	14,60	16,30
82,50			6,26	7,00	7,74	8,66	9,56	10,60	11,80	13,20	14,70	16,00	17,90
88,90			6,76	7,57	8,38	9,37	10,30	11,50	12,80	14,30	16,00	17,40	19,50
101,60					9,63	10,80	11,90	13,30	14,80	16,50	18,50	20,10	22,60
108,00					10,30	11,50	12,70	14,10	15,80	17,70	19,70	21,50	24,20
114,30					10,90	12,20	13,50	15,00	16,80	18,80	21,00	22,90	25,70
127,00					12,10	13,60	15,00	16,80	18,80	21,00	23,50	25,70	28,90
133,00					12,70	14,30	15,80	17,60	19,70	22,00	24,70	27,00	30,30
139,70					13,40	15,00	16,60	18,50	20,70	23,20	26,00	28,40	32,00
152,40						16,40	18,20	20,30	22,70	25,40	28,50	31,20	35,10
159,00						17,10	19,00	21,20	23,70	26,60	29,80	32,60	36,70
168,30						18,20	20,10	22,50	25,20	28,20	31,60	34,60	39,00
177,80						19,20	21,30	23,80	26,60	29,90	33,50	36,70	41,40
193,70							23,30	26,00	29,10	32,70	36,60	40,10	45,30
219,10							26,40	29,50	33,10	37,10	41,60	45,60	51,60

High temperature - line pipe

QUALITY: DIN 17175
SIZES AND MASS 2448

W. T. - mm													O. D. mm
11,00	12,50	14,20	16,00	17,50	20,00	22,20	25,00	28,00	30,00	32,00	36,00	40,00	
Mass kg/m													
													21,30
													26,90
													30,00
													33,70
													38,00
													42,40
													44,50
													48,30
													51,00
													54,00
													57,00
													60,33
													63,50
16,00	17,70	19,50											70,00
16,80	18,70	20,60											73,00
17,70	19,60	21,70											76,10
19,40	21,60	23,90											82,50
21,10	23,60	26,20											88,90
24,60	27,50	30,60	33,80	36,30	40,20	43,50	47,20	50,80					101,60
26,30	29,40	32,80	36,30	39,10	43,40	47,00	51,20	55,20	57,70				108,00
28,00	31,40	35,10	38,80	41,80	46,50								114,30
31,50	35,30	39,50	43,80	47,30	52,80								127,00
33,10	37,10	41,60	46,20	49,80	55,70								133,00
34,90	39,20	43,90	48,80	52,70	59,00								139,70
38,40	43,10	48,40	53,80	58,20	65,30	71,30	78,50						152,40
40,10	45,20	50,70	56,40	61,10	68,60	74,80	82,60						159,00
42,70	48,00	54,00	60,10	65,10	73,10	80,00	88,30						168,30
45,20	51,00	57,30	63,80	69,20	77,80	85,20	94,20						177,80
49,60	55,90	62,90	70,10	76,00	85,70	93,90	104,00	114,00	121,00	128,00	140,00	152,00	193,70
56,50	63,70	71,80	80,10	87,00	98,20	108,00	120,00	132,00	140,00	148,00	163,00	177,00	219,00





*Low temperature-
line pipe*

Low temperature - line pipe

APPLICATIONS

These pipes are used for the construction of pipelines at low temperatures.

QUALITY

C15, C20; ASTM A 333* GR. 1° - 3° - 6°*

CHEMICAL AND MECHANICAL PROPERTIES

Standard	Grade	Chemical composition % (1)						Mechanical properties				
		C≤	Mn	P≤	S≤	Si	Ni	Tensile strength N/mm ²	Yield point N/mm ²	Elongation min.	Impact test KCV long.	Joule medium (min.)
ASTM A 333 ASME SA 333	1°	0,30	0,40 ÷ 1,06	0,025	0,025	—	—	380	205	21	- 45°C	18 14
	3°	0,19	0,31 ÷ 0,64	0,025	0,025	0,18 ÷ 0,37	3,18 ÷ 3,82	450	240	18	-100°C	18 14
	6°	0,30	0,29 ÷ 1,06	0,025	0,025	> 0,10	—	415	240	18	- 45°C	18 14
UNI 5949	C15	0,15	≤ 1,00	0,035	0,035	0,15 ÷ 0,35	—	345 ÷ 490	215	28	- 45°C	20 14
	C20	0,20	≤ 1,00	0,035	0,035	0,15 ÷ 0,35	—	440 ÷ 590	245	24	- 40°C	20 14

* Stock supply.

Low temperature - line pipe

SIZE TABLES

QUALITY: ASTM A 333

SIZES MASS ANSI B 36.10

Nominal Diameter	Outside Diameter		W. T.		Mass		Designation	
	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
1/2	0.840	21,3	0.109	2,77	0.85	1,27	STD	40
3/4	1.050	26,7	0.154	3,91	1.47	2,20	XS	80
1	1.315	33,4	0.133	3,38	1.68	2,50	STD	40
			0.179	4,55	2.17	3,24	XS	80
1 1/4	1.660	42,2	0.140	3,56	2.27	3,39	STD	40
			0.191	4,85	3.00	4,47	XS	80
			0.250	6,35	3.76	5,61		160
1 1/2	1.900	48,3	0.145	3,68	2.72	4,05	STD	40
			0.200	5,08	3.63	5,41	XS	80
			0.281	7,14	4.86	7,25		160
2	2.375	60,3	0.125	3,18	3.00	4,48		
			0.141	3,58	3.36	5,01		
			0.154	3,91	3.65	5,44	STD	40
			0.172	4,37	4.05	6,03		
			0.188	4,78	4.39	6,54		
			0.218	5,54	5.02	7,48	XS	80
			0.250	6,35	5.67	8,45		
			0.281	7,14	6.28	9,36		
			0.344	8,74	7.46	11,11		160
2 1/2	2.875	73,0	0.125	3,18	3.67	5,48		
			0.141	3,58	4.12	6,13		
			0.156	3,96	4.53	6,74		
			0.172	4,37	4.97	7,40		
			0.188	4,78	5.40	8,04		
			0.203	5,16	5.79	8,63	STD	40
			0.216	5,49	6.13	9,14		
			0.250	6,35	7.01	10,44		
			0.276	7,01	7.66	11,41	XS	80
			0.375	9,53	10.01	14,92		160
			0.552	14,02	13.69	20,39	XXS	

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch		inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
3	3.500	88,9	0.125	3,18	4.51	6,72			
			0.141	3,58	5.06	7,53			
			0.156	3,96	5.57	8,29			
			0.172	4,37	6.11	9,11			
			0.188	4,78	6.65	9,92			
			0.216	5,49	7.58	11,29		STD	40
			0.250	6,35	8.68	12,93			
			0.281	7,14	9.66	14,40			
			0.300	7,62	10.25	15,27		XS	80
			0.438	11,13	14.32	21,35			160
3¹/₂	4.000	101,6	0.156	3,96	6.40	9,53			
			0.172	4,37	7.03	10,48			
			0.188	4,78	7.65	11,41			
			0.226	5,74	9.11	13,57		STD	40
			0.250	6,35	10.01	14,92			
			0.281	7,14	11.16	16,63			
			0.318	8,08	12.51	18,63		XS	80
4	4.500	114,3	0.156	3,96	7.24	10,78			
			0.172	4,37	7.95	11,85			
			0.188	4,78	8.66	12,91			
			0.203	5,16	9.32	13,89			
			0.219	5,56	10.01	14,91			
			0.237	6,02	10.79	16,07		STD	
			0.250	6,35	11.35	16,90			
			0.281	7,14	12.66	18,87			
			0.312	7,92	13.96	20,78			
			0.337	8,56	14.98	22,32		XS	80
			0.438	11,13	19.00	28,32			120
			0.531	13,49	22.51	33,54			160
			0.674	17,12	27.54	41,03		XXS	
5	5.563	141,3	0.156	3,96	9.01	13,41			
			0.188	4,78	10.79	16,89			
			0.219	5,56	12.50	18,61			

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
5	5.563	141,3	0.258	6,55	14.62	21,77		STD	40
			0.281	7,14	15.85	23,62			
			0.312	7,92	17.50	26,05			
			0.344	8,74	19.17	28,57			
			0.375	9,53	20.78	30,97		XS	80
			0.500	12,70	27.04	40,28			120
			0.625	15,88	32.96	49,11			160
			0.750	19,05	38.55	57,43		XXS	
6	6.625	168,3	0.188	4,78	12.92	19,27			
			0.203	5,16	13.92	20,76			
			0.219	5,56	14.48	22,31			
			0.250	6,35	17.02	25,36			
			0.280	7,11	18.97	28,26		STD	40
			0.312	7,92	21.04	31,32			
			0.344	8,74	23.08	34,39			
			0.375	9,53	25.03	37,31			
			0.432	10,97	28.57	42,56		XS	80
			0.500	12,70	32.71	48,73			
			0.562	14,27	36.39	54,20			120
			0.625	15,88	40.05	59,69			
			0.719	18,26	45.35	67,56			160
			0.750	19,05	47.06	70,11			
			0.864	21,95	53.16	79,22		XXS	
			0.875	22,23	53.73	80,07			
8	8.625	219,1	0.188	4,78	16.49	25,26			
			0.203	5,16	18.26	27,22			
			0.219	5,56	19.66	29,28			
			0.250	6,35	22.36	33,31			20
			0.277	7,04	24.70	36,81			30
			0.312	7,92	27.70	41,24			
			0.322	8,18	28.55	42,55		STD	40
			0.344	8,74	30.42	45,34			
			0.375	9,53	33.04	49,25			
			0.406	10,31	35.64	53,08			60

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
8	8.625	219,1	0.438	11,13	38.30	57,08			
			0.500	12,70	43.39	64,64	XS	80	
			0.562	14,27	48.40	72,08			
			0.594	15,09	50.95	75,92			100
			0.625	15,88	53.40	79,85			
			0.719	18,26	60.71	90,44			120
			0.750	19,05	63.08	93,98			
			0.812	20,26	67.76	100,92			140
			0.875	22,23	72.42	107,92	XXS		
			0.906	23,01	74.69	111,27			160
			1.000	25,40	81.44	121,33			
10	10.750	273,0	0.250	6,35	28.04	41,77			20
			0.279	7,09	31.20	46,51			
			0.307	7,80	34.24	51,03			30
			0.344	8,74	38.23	56,98			
			0.365	9,27	40.48	60,31	STD	40	
			0.438	11,13	48.24	71,90			
			0.500	12,70	54.74	81,55	XS	60	
			0.562	14,27	61.15	91,08			
			0.594	15,09	64.43	96,01			80
			0.625	15,88	67.58	100,73			
			0.719	18,26	77.03	114,75			100
			0.812	20,62	86.18	128,38			
			0.844	21,44	89.29	133,06			120
			0.875	22,23	92.28	137,52			
			0.938	23,83	98.30	146,48			
			1.000	25,40	104.13	155,15	XXS	140	
			1.125	28,58	115.64	172,33			160
			1.250	31,75	126.83	188,47			
12	12.750	323,8	0.330	8,38	43.77	65,20			30
			0.344	8,74	45.58	67,93			
			0.375	9,53	49.56	73,88	STD		
			0.406	10,31	53.52	79,73			40
			0.438	11,13	57.59	85,84			

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
12	12.750	323,8	0.500	12,70	65.42	97,46	XS		
			0.562	14,27	73.15	108,96		60	
			0.625	15,88	80.93	120,62			
			0.688	17,48	88.63	132,08		80	
			0.750	19,05	96.12	143,21			
			0.812	20,62	103.53	154,21			
			0.844	21,44	107.32	159,91		100	
			0.875	22,23	110.97	165,37			
			0.938	23,83	118.33	176,33			
			1.000	25,40	125.49	186,47	XXS	120	
			1.062	26,97	132.57	197,48			
			1.125	28,58	139.67	208,14		140	
			1.250	31,75	153.53	228,74			
			1.312	33,32	160.27	238,76		160	
14	14.000	355,6	0.344	8,74	50.17	74,76			
			0.375	9,53	54.57	81,83	STD	30	
			0.406	10,31	58.94	87,79			
			0.438	11,13	63.44	94,55		40	
			0.469	11,91	67.78	100,94			
			0.500	12,70	72.09	107,39	XS		
			0.562	14,27	80.66	120,11			
			0.594	15,09	85.05	126,71		60	
			0.625	15,88	89.28	133,08			
			0.688	17,48	97.81	145,75			
			0.750	19,05	106.13	158,10		80	
			0.812	20,62	114.37	170,33			
			0.875	22,23	122.65	182,75			
			0.938	23,83	130.85	194,96		100	
			1.000	25,40	138.84	206,83			
			1.062	26,97	146.74	218,57			
			1.094	27,79	150.79	224,65		120	
			1.125	28,58	154.69	230,48			
			1.250	31,75	170.21	253,56		140	
			1.406	35,71	189.11	281,70		160	
			2.000	50,80	256.32	381,83			

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch		inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
14	14.000	355,6	2.125	53,98		269.50	401,50		
			2.200	55,88		277.25	413,01		
			2.500	63,50		307.05	457,40		
16	16.000	406,4	0.344	8,74		57.52	85,71		
			0.375	9,53		62.58	93,27	STD	30
			0.406	10,31		67.62	100,70		
			0.438	11,13		72.80	108,49		
			0.469	11,91		77.79	115,86		
			0.500	12,70		82.77	123,30	XS	40
			0.562	14,27		92.66	137,99		
			0.625	15,88		102.63	152,93		
			0.656	16,66		107.50	160,12		60
			0.688	17,48		112.51	167,65		
			0.750	19,05		122.15	181,97		
			0.812	20,62		131.71	196,16		
			0.844	21,44		136.61	203,53		80
			0.875	22,23		141.34	210,60		
			0.938	23,83		150.89	224,82		
			1.000	25,40		160.20	238,64		
			1.031	26,19		164.82	245,56		100
			1.062	26,97		169.43	252,35		
			1.125	28,58		178.72	266,28		
			1.188	30,18		187.93	280,00		
			1.219	30,96		192.43	286,64		120
			1.250	31,75		196.91	293,33		
			1.438	36,53		223.64	333,19		140
			1.594	40,49		245.25	365,35		160
18	18.000	457,0	0.344	8,74		64.87	96,61		
			0.375	9,53		70.59	105,16	STD	
			0.406	10,31		76.29	113,57		
			0.438	11,13		82.15	122,38		30
			0.469	11,91		87.81	130,72		
			0.500	12,70		93.45	139,15	XS	
			0.562	14,27		104.67	155,80		40

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
18	18.000	457,0	0.625	15,88	115.98	172,74			
			0.688	17,48	127.21	189,46			
			0.750	19,05	138.17	205,74		60	
			0.812	20,62	149.06	221,89			
			0.875	22,23	160.03	238,34			
			0.938	23,83	170.92	254,55		80	
			1.000	25,40	181.56	270,34			
			1.062	26,97	192.11	286,00			
			1.125	28,58	202.75	301,94			
			1.156	29,36	207.96	309,62		100	
			1.188	30,18	213.31	317,66			
			1.250	31,75	223.61	332,95			
			1.375	34,93	244.14	363,56		120	
			1.562	39,67	274.22	408,26		140	
			1.781	45,24	308.50	459,37		160	
20	20.000	508,0	0.344	8,74	72.21	107,60			
			0.375	9,53	78.60	117,15		STD	20
			0.406	10,31	84.96	126,53			
			0.438	11,13	91.51	136,37			
			0.469	11,91	97.83	145,70			
			0.500	12,70	104.13	155,12		XS	30
			0.562	14,27	116.67	173,74			
			0.594	15,09	123.11	183,42		40	
			0.625	15,88	129.33	192,71			
			0.688	17,48	141.90	211,44			
			0.750	19,05	154.19	229,70			
			0.812	20,62	166.40	247,83		60	
			0.875	22,23	178.72	266,29			
			0.938	23,83	190.96	284,52			
			1.000	25,40	202.92	302,28			
			1.031	26,19	208.87	311,17		80	
			1.062	26,97	214.80	319,92			
			1.125	28,58	226.78	337,89			
			1.188	30,18	238.68	355,61			
			1.250	31,75	250.31	372,88			

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch		inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule
20	20.000	508,0	1.281	32,54	256.10	381,53			100
			1.312	33,32	261.86	390,03			
			1.375	34,93	273.51	407,49			
			1.500	38,10	296.37	441,49			120
			1.750	44,45	341.09	508,11			140
			1.969	50,01	379.17	564,81			160
22	22.000	559,0	0.406	10,31	93.63	139,50			
			0.438	11,13	100.86	150,37			
			0.469	11,91	107.85	160,68			
			0.500	12,70	114.81	171,09		XS	30
			0.562	14,27	128.67	191,69			
			0.625	15,88	142.68	212,69			
			0.688	17,48	156.60	233,43			
			0.750	19,05	170.21	253,65			
			0.812	20,62	183.75	273,76			
			0.875	22,23	197.41	294,25			60
			0.938	23,83	211.00	314,49			
			1.000	25,40	224.28	334,23			
			1.062	26,97	237.48	353,84			
			1.125	28,58	250.81	373,83			80
			1.188	30,18	264.06	393,57			
			1.250	31,75	277.01	412,81			
			1.312	33,32	289.88	431,94			
			1.375	34,93	302.88	451,42			100
			1.438	36,53	315.79	470,66			
			1.500	38,10	328.41	489,41			
			1.625	41,28	353.61	527,02			120
			1.875	47,63	403.00	600,63			140
			2.125	53,98	451.06	672,26			160
24	24.000	610,0	0.375	9,53	94.62	141,12		STD	20
			0.406	10,31	102.31	152,47			
			0.438	11,13	110.22	164,37			
			0.469	11,91	117.86	175,66			
			0.500	12,70	125.49	187,06		XS	

Low temperature - line pipe

QUALITY: ASTM A 333

SIZES AND MASS ANSI B 36.10

Nominal Diameter		Outside Diameter		W. T.		Mass		Designation	
inch	inch	mm	inch	mm	lb/ft	kg/m	Class	Schedule	
24	24.000	610,0	0.562	14,27	140.68	209,64		30	
			0.625	15,88	156.03	232,66			
			0.688	17,48	171.29	255,41		40	
			0.750	19,05	186.23	277,61			
			0.812	20,62	201.09	299,69			
			0.875	22,23	216.10	322,21			
			0.938	23,83	274.84	344,46			
			0.969	24,61	289.44	355,26		60	
			1.000	25,40	296.58	366,17			
			1.062	26,97	303.71	387,76			
			1.125	28,58	317.91	409,77			
			1.188	30,18	332.25	431,52			
			1.219	30,96	346.50	442,08		80	
			1.250	31,75	360.45	452,74			
			1.312	33,32	367.39	473,84			
			1.375	34,93	374.31	495,35			
			1.438	36,53	429.39	516,80			
			1.500	38,10	360.45	537,33			
			1.531	38,89	367.39	547,71		100	
			1.562	39,67	374.31	557,43			
			1.812	46,02	429.39	640,03		120	
			2.062	52,37	483.12	720,15		140	
			2.344	59,54	542.13	808,22		160	

Low temperature - line pipe

QUALITY: UNI 5949

SIZES AND MASS

O. D. mm	W. T. - mm							
	2,60	2,90	3,20	3,60	4,00	4,50	5,00	5,40
	Mass kg/m							
21,30	1,20	1,32	1,43					
26,90	1,56	1,72	1,87	2,07	2,26	2,49		
30,00	1,76	1,94	2,11	2,34	2,56	2,83	3,08	
33,70	1,99	2,20	2,41	2,67	2,93	3,24	3,54	3,77
38,00	2,27	2,51	2,75	3,05	3,35	3,72	4,07	4,34
42,40		2,82	3,09	3,44	3,79	4,21	4,61	4,93
44,50		2,98	3,26	3,63	4,00	4,44	4,87	5,21
48,30		3,25	3,56	3,97	4,37	4,86	5,34	5,71
51,00		3,44	3,77	4,21	4,64	5,16	5,67	6,07
54,00		3,65	4,01	4,47	4,93	5,49	6,04	6,47
57,00		3,87	4,25	4,74	5,23	5,83	6,41	6,87
60,30		4,11	4,51	5,03	5,55	6,19	6,82	7,31
63,50		4,33	4,76	5,32	5,87	6,55	7,21	7,74
70,00		4,80	5,27	5,90	6,51	7,27	8,01	8,60
73,00		5,01	5,51	6,16	6,81	7,60	8,38	9,00
76,10		5,24	5,75	6,44	7,11	7,95	8,77	9,42
82,50			6,26	7,00	7,74	8,66	9,56	10,30
88,90			6,76	7,57	8,38	9,37	10,30	11,10
95,00					8,98	10,00	11,10	11,90
101,60					9,63	10,80	11,90	12,80
108,00					10,30	11,50	12,70	13,70
114,30					10,90	12,20	13,50	14,50
127,00					12,10	13,60	15,00	16,20
133,00					12,70	14,30	15,80	17,00
139,70					13,40	15,00	16,60	17,90
141,30					13,50	15,20	16,80	18,10
152,40						16,40	18,20	19,60
159,00						17,10	19,00	20,50
168,30						18,20	20,10	21,70
177,80						19,20	21,30	23,00
193,70							23,30	25,10
219,10							26,40	28,50
244,50								
273,00								
323,90								
355,60								
406,40								
457,00								
508,00								
559,00								
610,00								
660,00								

Low temperature - line pipe

QUALITY: UNI 5949
SIZES AND MASS

W. T. - mm								O. D. mm
5,60	6,30	7,10	8,00	8,80	10,00	11,00	12,50	
Mass kg/m								
								21,30
								26,90
								30,00
3,88								33,70
4,47	4,93							38,00
5,08	5,61	6,18						42,40
5,37	5,94	6,55	7,20	7,75				44,50
5,90	6,53	7,21	7,95	8,57				48,30
6,27	6,94	7,69	8,48	9,16				51,00
6,68	7,41	8,21	9,08	9,81	10,90			54,00
7,10	7,88	8,74	9,67	10,50	11,60			57,00
7,55	8,39	9,32	10,30	11,20	12,40			60,30
8,00	8,89	9,88	10,90	11,90	13,20			63,50
8,89	9,90	11,00	12,20	13,30	14,80	16,00	17,70	70,00
9,31	10,40	11,50	12,80	13,90	15,50	16,80	18,70	73,00
9,74	10,80	12,10	13,40	14,60	16,30	17,70	19,60	76,10
10,60	11,80	13,20	14,70	16,00	17,90	19,40	21,60	82,50
11,50	12,80	14,30	16,00	17,40	19,50	21,10	23,60	88,90
12,30	13,30	15,40	17,20	18,70	21,00	22,80	25,40	95,00
13,30	14,80	16,50	18,50	20,10	22,60	24,60	27,50	101,60
14,10	15,80	17,70	19,70	21,50	24,20	26,30	29,40	108,00
15,00	16,80	18,80	21,00	22,90	25,70	28,00	31,40	114,30
16,80	18,80	21,00	23,50	25,70	28,90	31,50	35,30	127,00
17,60	19,70	22,00	24,70	27,00	30,30	33,10	37,10	133,00
18,50	20,70	23,20	26,00	28,40	32,00	34,90	39,20	139,70
18,70	21,00	23,50	26,30	28,80	32,40	35,30	39,70	141,30
20,30	22,70	25,40	28,50	31,20	35,10	38,40	43,10	152,40
21,20	23,70	26,60	29,80	32,60	36,70	40,10	45,20	159,00
22,50	25,20	28,20	31,60	34,60	39,00	42,70	48,00	168,30
23,80	26,60	29,90	33,50	36,70	41,40	45,20	51,00	177,80
26,00	29,10	32,70	36,60	40,10	45,30	49,60	55,90	193,70
29,50	33,10	37,10	41,60	45,60	51,60	56,50	63,70	219,10
	37,00	41,60	46,70	51,20	57,80	63,30	71,50	244,50
	41,40	46,60	52,30	57,30	64,90	71,10	80,30	273,00
			62,30	68,40	77,40	84,90	96,00	323,90
			68,60	75,30	85,20	93,50	106,00	355,60
			78,60	86,30	97,80	107,00	121,00	406,40
			88,60	97,30	110,00	121,00	137,00	457,00
				108,00	123,00	135,00	153,00	508,00
					135,00	149,00	168,00	559,00
					148,00	162,00	184,00	610,00
					160,00	176,00	200,00	660,00

Low temperature - line pipe

QUALITY: UNI 5949

SIZES AND MASS

O. D. mm	W. T. - mm							
	14,20	16,00	17,50	20,00	22,20	25,00	28,00	30,00
Mass kg/m								
21,30								
26,90								
30,00								
33,70								
38,00								
42,40								
44,50								
48,30								
51,00								
54,00								
57,00								
60,33								
63,50								
70,00	19,50							
73,00	20,60							
76,10	21,70							
82,50	23,90							
88,90	26,20							
95,00	28,30							
101,60	30,60							
108,00	32,80	36,30						
114,30	35,10	38,80	41,80	46,50				
127,00	39,50	43,80	47,30	52,80				
133,00	41,60	46,20	49,80	55,70				
139,70	43,90	48,80	52,70	59,00				
141,30	44,50	49,40	53,40	59,80				
152,40	48,40	53,80	58,20	65,30	71,30	78,50		
159,00	50,70	56,40	61,10	68,60	74,80	82,60		
168,30	54,00	60,10	65,10	73,10	80,00	88,30		
177,80	57,30	63,80	69,20	77,80	85,20	94,20		
193,70	62,90	70,10	76,00	85,70	93,90	104,00	114,00	121,00
219,10	71,80	80,10	87,00	98,20	108,00	120,00	132,00	140,00
244,50	80,60	90,20	98,00	111,00	122,00	135,00	149,00	159,00
273,00	90,60	101,00	110,00	125,00	137,00	153,00	169,00	180,00
323,90	108,00	121,00	132,00	150,00	165,00	184,00	204,00	217,00
355,60	120,00	134,00	146,00	166,00	183,00	204,00	226,00	241,00
406,40	137,00	154,00	168,00	191,00	210,00	235,00	261,00	278,00
457,00	155,00	174,00	190,00	216,00	238,00	266,00	296,00	316,00
508,00	173,00	194,00	212,00	241,00	266,00	298,00	331,00	354,00
559,00	191,00	214,00	234,00	266,00	294,00	329,00	367,00	391,00
610,00	209,00	234,00	256,00	291,00	322,00	361,00	402,00	429,00
660,00	226,00	254,00	277,00	316,00	349,00	392,00	436,00	466,00

Low temperature - line pipe

QUALITY: UNI 5949
SIZES AND MASS

W. T. - mm								O. D. mm
32,00	36,00	40,00	45,00	50,00	55,00	60,00	65,00	
Mass kg/m								
								21,30
								26,90
								30,00
								33,70
								38,00
								42,40
								44,50
								48,30
								51,00
								54,00
								57,00
								60,33
								63,50
								70,00
								73,00
								76,10
								82,50
								88,90
								95,00
								101,60
								108,00
								114,30
								127,00
								133,00
								139,70
								141,30
								152,40
								159,00
								168,30
								177,80
128,00	140,00	152,00						193,70
148,00	163,00	177,00						219,10
168,00	185,00	202,00	221,00	240,00	257,00	273,00	288,00	244,50
190,00	210,00	230,00	253,00	275,00	296,00	315,00	333,00	273,00
230,00	256,00	280,00	310,00	338,00	365,00	390,00	415,00	323,90
255,00	284,00	311,00	345,00	377,00	408,00	437,00	466,00	355,60
295,00	329,00	361,00	401,00	439,00	477,00	513,00	547,00	406,40
335,00	374,00	411,00	457,00	502,00	545,00	587,00	628,00	457,00
376,00	419,00	462,00	514,00	565,00	614,00	663,00	710,00	508,00
416,00	464,00	512,00	570,00	628,00	684,00	738,00	792,00	559,00
456,00	510,00	562,00	627,00	691,00	753,00	814,00	874,00	610,00
496,00	554,00	612,00	683,00	752,00	821,00	889,00	954,00	660,00





Stock facility



STOCK SUPPLY

STEEL GRADE:

API 5L PSL1 GR. B - GR. X42
ASTM A 106 GR. B / ASME SA 106
ASTM A 53 GR. B / ASME SA 53
ASTM A 530 M / ASME SA 530
ASTM A 333 GR. 6 / ASME SA 333
API 5L GR.B / ASTM A 106 GR.B hot dipped galvanized (acc. to ASTM A 120) one side threaded, other side "NPT" coupled.

LENGTHS:

RANDOM LENGTHS: 4 - 8 m
DOUBLE RANDOM LENGTHS: 8 -13 m

PIPE ENDS:

According to API:
– plain ends for O.D. < 60,3 mm
– bevelled ends for O.D. ≥ 60,3 mm



SURFACE PROTECTION:

Standard supply provides oil coating as a temporary protection.

CERTIFICATES:

On request, certificates showing chemical analysis and mechanical test can be issued.
(EN 10204/3.1B - DIN 50049/ 3.1B)

TOLERANCES:

According to A.P.I. and ASTM.

MARKING:

According to API as follows:

O.D. $\leq$ 48.3 mm - markings are stenciled on metal tags attached to the bundles.

O.D. $\geq$ 60.3 mm - the following markings are painted on the pipe surface

- API monogram
- Trade mark
- Size
- Weight per foot or per meter (for O.D. $\geq$ 114,3 mm)
- Steel grade
- Manufacturing process.



Stock facility

ON SPECIAL REQUEST



STEEL GRADE:

API 5L PSL1 - PSL2 GR. A - B - X 42 - X 46 - X 52 - X 56 - X 60 - X 65 - X 70
ASTM A 106 GR. A, B, C
ASTM A 53 GR. A
ASTM A 335 GR. P1, P5, P9, P11, P22; C14, C18, 16 Mo 5, 14 Cr
Mo 910; St 35.8
ASTM A 333 GR. 1° - 3°; C15, C20

PIPE ENDS:

Threaded acc. to ANSI B1.20.1, NPT.



SURFACE PROTECTION:

Coatings available on request:

- Normal or heavy bitumen coating
- Polyethylene, epoxy resin coating
- Sandblasting, priming, pickling, oiling etc.
- Hot galvanized coating (ASTM A 120).

TESTS AND INSPECTIONS:

Chemical analysis, test and inspection documents can be supplied with the pipes.



Tubes and bars of steel for:

• Industry in general • Hydraulic/Pneumatic • Mechanics • Structure



Protubsa Store Alava (Spain)



Protubsa Store Tarragona (Spain)

PROTUBSA
Proveedora de Tubos Occidental S.L.



Pol. Ind. "Goiain"
Avda. San Blas, 24
01170 Legutiano
ALAVA

Export.:

Pol. Ind. "L'Empalme"
C/Girona, 18
43713 St. Jaume dels Domenys
TARRAGONA
P.: +34 902375375
F.: +34 902375376

www.protubsa.com
protubsa@protubsa.com

N.I.F. B-01267277

Other products to your disposition.



Structural tubes



Seamless tubes



Chromed bars



Cold drawn tubes



Bars
of
lamination



Bianco Group

