

Seamless hot-rolled steel tubes - GOST 8731-74/GOST 8732-78

Application: for transportation of gas, air, water and oil, as well as general purpose

Pipe dimensions and weight																						
Outside diameter, mm	Weight per meter, kg, for wall thickness, mm																					
	3.0	3.2	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	11.0	12.0	13.0	14.0	15.0	16.0
32	2.15	2.27	2.46	2.76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33.7	2.27	2.41	2.61	2.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	2.59	2.75	2.98	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	2.89	3.06	3.32	3.75	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42.4	2.91	3.09	3.36	3.79	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	3.11	3.30	3.58	4.04	4.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48.3	3.35	3.56	3.87	4.37	4.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	3.48	3.69	4.01	4.54	5.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	3.55	3.77	4.10	4.64	5.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	-	-	4.62	5.23	5.83	6.41	6.99	7.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	-	-	4.88	5.52	6.16	6.78	7.39	7.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60.3	-	-	4.90	5.55	6.19	6.82	7.43	8.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63.5	-	-	5.18	5.87	6.55	7.21	7.87	8.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70	-	-	5.74	6.51	7.27	8.02	8.75	9.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
73	-	-	6.00	6.81	7.60	8.39	9.16	9.91	10.66	11.39	12.12	12.82	13.52	14.21	14.88	15.54	16.82	-	-	-	-	-
76	-	-	6.26	7.10	7.94	8.76	9.56	10.36	11.14	11.91	12.67	13.42	14.15	14.87	15.58	16.28	17.63	-	-	-	-	-
83	-	-	6.86	7.79	8.71	9.62	10.51	11.39	12.26	13.12	13.96	14.80	15.62	16.43	17.22	18.00	19.53	21.01	22.44	23.82	25.16	26.44
89	-	-	7.38	8.39	9.38	10.36	11.33	12.28	13.23	14.16	15.07	15.98	16.88	17.76	18.63	19.48	21.16	22.70	24.37	25.90	27.37	28.81
95	-	-	-	8.98	10.04	11.10	12.14	13.17	14.19	15.19	16.18	17.16	18.13	19.09	20.03	20.96	22.79	24.56	26.29	27.97	29.59	31.17
102	-	-	-	9.67	10.82	11.96	13.09	14.21	15.31	16.40	17.48	18.55	19.60	20.64	21.67	22.69	24.69	26.63	28.53	30.38	32.18	33.93
108	-	-	-	10.26	11.49	12.70	13.90	15.09	16.27	17.44	18.59	19.73	20.86	21.97	23.08	24.17	26.31	28.41	30.46	32.46	34.40	36.30
114	-	-	-	10.85	12.15	13.44	14.72	15.98	17.23	18.47	19.70	20.91	22.12	23.31	24.48	25.65	27.94	30.19	32.38	34.53	36.62	38.67
121	-	-	-	-	14.30	15.67	17.02	18.35	19.68	20.99	22.29	23.58	24.84	26.12	27.37	29.84	32.26	34.62	36.94	39.21	41.63	44.63
127	-	-	-	-	15.04	16.48	17.90	19.32	20.72	22.10	23.48	24.84	26.19	27.53	28.85	31.47	34.03	36.55	39.01	41.43	43.80	46.17
133	-	-	-	-	15.78	17.29	18.79	20.28	21.75	23.21	24.66	26.10	27.52	28.93	30.33	33.10	35.81	38.47	41.09	43.65	46.17	48.65
140	-	-	-	-	16.65	18.24	19.83	21.40	22.96	24.51	26.04	27.57	29.08	30.57	32.06	35.00	37.88	40.72	43.50	46.24	48.93	51.30
146	-	-	-	-	17.39	19.06	20.72	22.36	24.00	25.62	27.23	28.82	30.41	31.98	33.54	36.62	39.66	42.64	45.57	48.46	51.30	54.17
152	-	-	-	-	18.13	19.87	21.60	23.32	25.03	26.73	28.41	30.08	31.74	33.39	35.05	38.25	41.43	44.56	47.65	50.68	53.66	56.60
159	-	-	-	-	18.99	20.82	22.64	24.45	26.24	28.02	29.79	31.55	33.29	35.03	36.75	40.15	43.50	46.81	50.06	53.27	56.43	59.56
168	-	-	-	-	-	-	23.97	25.89	27.79	29.69	31.57	33.44	35.29	37.13	38.97	42.59	46.17	49.69	53.17	56.60	59.98	63.32
180	-	-	-	-	-	-	-	-	29.87	31.91	33.93	35.95	37.95	39.95	41.93	45.85	49.72	53.54	57.31	61.04	64.71	68.34
194	-	-	-	-	-	-	-	-	32.28	34.50	36.70	38.89	41.06	43.23	45.38	49.64	53.86	58.03	62.15	66.22	70.24	74.22
203	-	-	-	-	-	-	-	-	33.84	36.16	38.47	40.77	43.06	45.33	47.60	52.09	56.52	60.91	65.25	69.55	73.79	78.00
219	-	-	-	-	-	-	-	-	36.60	39.12	41.63	44.13	46.61	49.08	51.54	56.43	61.26	66.04	70.78	75.46	80.10	84.74
245	-	-	-	-	-	-	-	-	41.09	43.93	46.76	49.58	52.38	55.17	57.95	63.48	68.95	74.38	79.76	85.08	90.36	95.64
273	-	-	-	-	-	-	-	-	45.92	49.11	52.28	55.45	58.60	61.73	64.86	71.07	77.24	83.36	89.42	95.44	101.41	107.34
299	-	-	-	-	-	-	-	-	-	-	57.41	60.90	64.37	67.83	71.27	78.13	84.93	91.69	98.40	105.06	111.67	118.24
325	-	-	-	-	-	-	-	-	-	-	62.54	66.35	70.14	73.92	77.68	85.18	92.63	100.03	107.38	114.68	121.93	129.14
351	-	-	-	-	-	-	-	-	-	-	-	-	75.91	80.01	84.10	92.23	100.32	108.36	116.35	124.29	132.19	140.04
356	-	-	-	-	-	-	-	-	-	-	-	-	-	77.02	81.17	85.33	93.59	101.80	109.97	119.08	126.14	134.16
377	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81.68	86.10	90.51	99.29	108.02	116.70	125.33	133.91

The sizes are produced upon agreement. Intermediate sizes are subject to additional agreement.

Pipe dimensions and weight (continued)

Outside diameter, mm	Weight per meter, kg, for wall thickness, mm																					
	17.0	18.0	19.0	20.0	22.0	24.0	25.0	26.0	28.0	30.0	32.0	34.0	35.0	36.0	38.0	40.0	42.0	45.0	48.0	50.0	56.0	60.0
89	30.19	31.52	32.80	34.03	36.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
95	32.70	34.18	35.61	36.99	39.61	42.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102	35.64	37.29	38.89	40.45	43.40	46.17	46.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
108	38.15	39.95	41.70	43.40	46.66	49.72	51.17	52.58	55.24	-	-	-	-	-	-	-	-	-	-	-	-	-
114	40.67	42.62	44.51	46.36	49.92	53.27	54.87	56.43	59.39	-	-	-	-	-	-	-	-	-	-	-	-	-
121	43.60	45.72	47.79	49.82	53.71	57.41	59.19	60.91	64.22	-	-	-	-	-	-	-	-	-	-	-	-	-
127	46.12	48.39	50.61	52.78	56.97	60.96	62.89	64.76	68.36	71.77	-	-	-	-	-	-	-	-	-	-	-	-
133	48.63	51.05	53.42	55.74	60.22	64.51	66.58	68.61	72.51	76.20	79.71	-	-	-	-	-	-	-	-	-	-	-
140	51.57	54.16	56.70	59.19	64.02	68.66	70.90	73.10	77.34	81.38	85.23	88.88	90.63	92.33	-	-	-	-	-	-	-	-
146	54.08	56.82	59.51	62.15	67.28	72.21	74.60	76.94	81.48	85.82	89.97	93.51	95.81	97.66	-	-	-	-	-	-	-	-
152	56.60	59.48	62.32	65.11	71.53	75.76	78.30	80.79	85.73	90.26	94.70	98.54	100.99	102.99	-	-	-	-	-	-	-	-
159	59.53	62.59	65.60	68.56	74.33	79.90	82.62	85.28	90.46	95.44	100.22	104.81	107.03	109.20	-	-	-	-	-	-	-	-
168	63.31	66.59	69.82	73.00	79.21	85.23	88.16	91.05	96.67	102.10	107.33	112.36	114.80	117.19	121.83	126.27	130.51	136.50	-	-	-	-
180	68.34	71.91	75.44	78.92	85.72	92.33	95.56	98.75	104.96	110.98	116.80	122.42	125.16	127.85	133.07	138.10	142.94	149.82	-	-	-	-
194	74.21	78.13	82.00	85.82	93.32	100.62	104.20	107.72	114.63	121.34	127.85	134.16	137.24	140.28	146.19	151.92	157.44	165.36	-	-	-	-
203	77.98	82.12	86.22	90.26	98.20	105.95	109.74	113.49	120.84	127.99	134.95	141.71	145.01	148.27	154.63	160.79	166.76	175.34	183.48	208.39	-	-
219	84.69	89.23	93.71	98.15	106.88	115.42	119.61	123.75	131.89	139.83	147.57	155.12	158.82	162.47	169.62	176.58	183.33	193.10	202.42	208.39	-	-
245	95.59	100.77	105.90	110.98	120.99	130.80	135.64	140.42	149.84	159.07	168.09	176.92	181.26	185.55	193.99	202.22	210.26	221.95	233.20	240.45	-	-
273	107.33	113.20	119.02	124.79	136.18	147.38	152.90	158.38	169.18	179.78	190.19	200.40	205.43	210.41	220.23	229.85	239.27	253.03	266.34	274.98	-	-
299	118.23	124.74	131.20	137.61	150.29	162.77	168.93	175.05	187.13	199.02	210.71	222.20	227.87	233.50	244.59	255.19	266.20	281.88	297.12	307.04	335.59	353.65
325	129.13	136.28	143.38	150.44	164.39	178.16	184.96	191.72	205.09	218.25	231.23	244.00	250.31	256.58	268.96	281.14	293.13	310.74	327.90	339.10	371.50	392.12
351	140.03	147.82	155.57	163.26	178.50	193.54	200.99	208.39	223.04	237.49	251.74	265.80	272.76	279.66	293.32	306.79	320.06	338.59	358.68	371.16	407.41	430.59
356	142.11	150.04	157.90	165.72	181.21	196.49	204.07	211.58	226.49	241.19	255.67	269.98	277.05	284.08	297.99	311.70	325.22	345.12	364.57	377.30	414.29	437.96
377	150.93	159.36	167.75	176.08	192.61	208.93	217.02	225.06	240.99	256.73	272.26	287.60	295.20	302.74	317.69	332.44	346.99	368.44	389.45	403.22	442.32	469.06

The sizes are produced upon agreement. Intermediate sizes are subject to additional agreement.

Tolerances

Outside diameter, mm	Outside diameter permissible deviation		Wall thickness, mm	Wall thickness permissible deviation	
	extra accuracy	regular accuracy		extra accuracy	regular accuracy
up to 50 cold-formed	± 0.4 mm	± 0.4 mm	up to 5 mm	± 10%	± 10%
hot-rolled	± 0.5 mm	± 0.5 mm	above 5 up to 12 mm (cold-formed)	± 8%	± 8%
above 50 up to 219	± 0.8 %	± 1.0 %	up to 15 (hot-rolled)	+ 12.5%	+ 12.5%
			above 15 up to 30	+ 10.0%	± 12.5%
			above 30	± 10.0%	- 12.5%
above 219	± 1.0 %	± 1.25 %	up to 15	+ 12.5%	+ 12.5%
			above 15 up to 30	± 12.5%	- 15.0%
			above 30	+ 10.0%	- 12.5%

Length supplied

- random from 4.5 up to 12.5 meters
- fixed within the random length range

Mechanical properties of steel

Steel Grade	Tensile strength, N/mm ² (kgf/mm ²)		Yield strength, N/mm ² (kgf/mm ²)	Elongation, %
	not less than			
Ст2сп	343 (35)		216 (22)	24
Ст4сп	412 (42)		245 (25)	20
Ст5сп	490 (50)		274 (28)	17
Ст6сп	588 (60)		304 (31)	14
10	353 (36)		216 (22)	24
20	412 (42)		245 (25)	21
35	510 (52)		294 (30)	17
45	588 (60)		323 (33)	14
20X	431 (44)		-	16
40X	657 (67)		-	9
30XГСА	686 (70)		-	11
15XM	431 (44)		225 (23)	21
15XMA	588 (60)		392 (40)	13