



JIS G 3444

Dimension and Mass of Carbon Steel Tubes for General Structural Purposes		
Outside Diameter	Wall Thickness	Weight
mm	mm	kg/m
21.7	2	0.972
27.2	2	1.24
	2.3	1.41
31	2.3	1.8
42.7	2.3	2.29
	2.5	2.48
48.6	2.3	2.63
	2.5	2.84
	2.8	3.16
	3.2	3.58
60.5	2.3	3.3
	3.2	4.52
	4	5.57
76.3	2.8	5.08
	3.2	5.77
	4	7.13
89.1	2.8	5.96
	3.2	6.78
101.6	3.2	7.76
	4	9.63
	5	11.9
114.3	3.2	8.77
	3.5	9.58

Dimension and Mass of Carbon Steel Tubes for General Structural Purposes		
Outside Diameter	Wall Thickness	Weight
mm	mm	kg/m
114.3	4.5	12.2
139.8	3.6	12.1
	4	13.4
	4.5	15
	6	19.8
165.2	4.5	17.8
	5	19.8
	6	23
	7.1	27.7
190.7	4.5	20.7
	5.3	24.2
	6	27.3
	7	31.7
219.3	8.2	36.9
	4.5	23.5
	5.8	30.1
	6	31.1
	7	36.1
273.1	8	41.1
	8.2	42.1
	6	38.7
	6.6	42.1
	7	45
	8	51.2
9	57.3	
	9.3	59.2

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Mechanical properties	Tensile strength N/mm ²	Yield point or proof stress N/mm ²	Elongation		Bend ability		Flattening
			No.11 & No.12 test	No.5 test pieces	Bend Angle	Inside radius (l) outside diameter of tube	Distance between flattening plates (H)
			Longitudinal Direction	Transverse Direction			(l) outside diameter of tube
Method of Manufacturing		Electric Resistance Welding Process		Electric Resistance Welding Process		Electric Resistance Welding	
Outside Diameter	Full Range	Full Range	Over 40 mm		50 mm and under		Full Range
STK 290	290 min	-	30 min	25 min	90°	6 D	2/3 D
STK 400	400 min	235 min	23 min	18 min	90°	6 D	2/3 D
STK 500	500 min	355 min	15 min	10 min	90°	8 D	7/8 D
STK 490	490 min	315 min	23 min	18 min	90°	6 D	7/8 D
STK 540	540 min	390 min	20 min	16 min	90°	6 D	7/8 D

Note : The Bend test instead of the flattening test, shall be applied to the tube 50mm or under in outside diameter only when specified by the purchaser.

Thickness Tolerance	
Under 4mm	+0.6 mm
	-0.5 mm
4 mm or Over to and exclusive 12 mm	+ 15%
	- 12.5 %

Tolerance on OD	
Class 1	
Under 50 mm	± 0.5 mm
50 mm or Over	± 1%
Class 2	
Under 50 mm	± 0.25 mm
50 mm or Over	± 0.5%

Chemical Composition					
Symbol of Grade	C	Si	Mn	P	S
STK 290	-	-	-	0.050 Max	0.050 Max
STK 400	0.25 Max	-	-	0.040 Max	0.040 Max
STK 500	0.24 Max	0.35 Max	0.30 to 1.30	0.040 Max	0.040 Max
STK 490	0.18 Max	0.55 Max	1.50 Max	0.040 Max	0.040 Max
STK 540	0.23 Max	0.55 Max	1.50 Max	0.040 Max	0.040 Max