



JIS G 3444 : 2006

Product Characteristic

Outside Diameter	Thickness	Unit mass	Informative reference			
			Cross sectional Area	Geometrical moment of Inertia	Modulus of section	Radius of gyration of area
mm.	mm.	kg/m.	cm ²	cm ⁴	cm ³	cm
21.7	2.00	0.972	1.238	0.607	0.560	0.700
27.2	2.00	1.24	1.583	1.26	0.930	0.890
	2.30	1.41	1.799	1.41	1.03	0.880
34.0	2.30	1.80	2.291	2.89	1.70	1.12
42.7	2.30	2.29	2.919	5.97	2.80	1.43
	2.50	2.48	3.157	6.40	3.00	1.42
48.6	2.30	2.63	3.345	8.99	3.70	1.64
	2.50	2.84	3.621	9.65	3.97	1.63
	2.80	3.16	4.029	10.60	4.36	1.62
	3.20	3.58	4.564	11.80	4.86	1.61
60.5	2.30	3.30	4.205	17.80	5.90	2.06
	3.20	4.52	5.760	23.70	7.84	2.03
	4.00	5.57	7.100	28.50	9.41	2.00
76.3	2.80	5.08	6.465	43.70	11.50	2.60
	3.20	5.77	7.349	49.20	12.90	2.59
89.1	4.00	7.13	9.850	59.50	15.60	2.58
	2.80	5.96	7.591	70.70	15.90	3.05
101.6	3.20	6.78	8.636	79.80	17.90	3.04
	4.00	9.63	12.260	146.00	28.80	3.48
114.3	5.00	11.90	15.170	177.00	34.90	3.42
	3.20	8.77	11.170	172.00	30.20	3.93
	3.50	9.58	12.180	187.00	32.70	3.92
139.8	4.50	12.20	15.520	234.00	41.00	3.89
	3.60	12.10	15.400	357.00	51.10	4.82
	4.00	13.40	17.070	3914.00	56.30	4.80
	4.50	15.00	19.130	438.00	62.70	4.79
165.2	6.00	19.80	25.220	566.00	80.20	4.74
	4.50	17.80	22.720	734.00	88.90	5.68
	5.00	19.80	25.160	808.00	97.80	5.67
	6.00	23.60	30.010	952.00	115.00	5.63
190.7	7.10	27.70	35.260	110 x 10	134.00	5.60
	4.50	20.70	26.320	114 x 10	120.00	6.59
	5.30	24.20	30.870	133 x 10	139.00	6.56
	6.00	27.30	34.820	149 x 10	156.00	6.53
	7.00	31.70	40.400	171 x 10	179.00	6.50
216.3	8.20	36.90	47.010	196 x 10	206.00	6.46
	4.50	23.50	29.940	168 x 10	155.00	7.49
	5.80	30.10	38.360	213 x 10	197.00	7.45
	6.00	31.10	39.640	219 x 10	203.00	7.44
	7.00	36.10	46.030	252 x 10	233.00	7.40
	8.00	41.10	52.350	284 x 10	263.00	7.37
	8.20	42.10	53.610	291 x 10	269.00	7.36

TOLERANCE

On outside diameter Under 50mm +/- 0.5 mm, 50 mm or over +/-1.0%
 On wall thickness Under 4.0 mm +0.6 mm, -0.5 mm, 4.0 mm or over to and excl. 12.0 mm +15 %, -12.5 %
 12.0 mm or over +15 %, -1.5 mm

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SCOPE

This Japanese Industrial Standard specifies the carbon steel tubes used for civil engineering, architecture, steel towers, scaffoldings, struts, piles for suppression of landslide and other structures.

MANUFACTURE OF PRODUCT

COTCO-SV tubes outside diameter and inclusive 216.3mm shall be manufactured by Electrical Resistance Welding process. And outside diameter greater than 216.3 mm shall be manufactured by Submerge Arc Spiral Welding process. Our quality production process had been certified by international inspection agent "SGS" under ISO 9001: 2000.

PRODUCTION CAPACITY

- Carbon steel pipes and tubes 8,500 Mt. per Month
- Galvanized steel pipes and tubes 6,000 Mt. per Month.

Mechanical Properties

Mechanical properties	Tensile Strength N/mm ²	Yield point or proof stress N/mm ²	Elongation %		Bendability (2)		Flattening Distance between flattening plates (H) (D: outside diameter of tube)	Tensile Strength in welded zone N/mm ²
			No.11 & No.12 test pieces		Bend angle	Inside radius (D: outside diameter of tube)		
			Longitudinal direction	Transverse direction				
Outside diameter	Full range	Full range	Over 40 mm		50 mm or under		Full range	Over 350 mm
STK290	290 min.	-	30 min.	25 min.	90°	6D	2 / 3 D	290 min.
STK400	400 min.	235 min.	23 min.	18 min.	90°	6D	2 / 3 D	400 min.
STK500	500 min.	355 min.	15 min.	10 min.	90°	8D	7 / 8 D	500 min.
STK490	490 min.	315 min.	23 min.	18 min.	90°	6D	7 / 8 D	490 min.
STK540	540 min.	390 min.	20 min.	16 min.	90°	6D	7 / 8 D	540 min.

Chemical Composition Unit:%

Symbol of grade	C	Si	Mn	P	S
STK290	-	-	-	0.050 max	0.050 max
STK400	0.25 max	-	-	0.040 max	0.040 max
STK500	0.24 max	0.35 max	0.30 to 1.30	0.040 max	0.040 max
STK490	0.18 max	0.55 max	1.50 max	0.040 max	0.040 max
STK540	0.23 max	0.55 max	1.50 max	0.040 max	0.040 max



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