

Carbon Steel Tubes For Machine Structural Purposes

JIS G 3445 - STKM 11A

Nominal Size	Outside Diameter		Thickness											
			SWG 16				SWG 15				SWG 14			
			1.6 mm				1.8 mm				2.0 mm			
			0.063 in				0.071 in				0.079 in			
mm	in	mm	kg/m	kg/6m	kg/ft	lb/ft	kg/m	kg/6m	kg/ft	lb/ft	kg/m	kg/6m	kg/ft	lb/ft
12	1/2	12.7	0.438	2.628	0.134	0.296	0.484	2.904	0.148	0.326	0.528	3.168	0.161	0.355
16	5/8	15.9	0.564	3.384	0.172	0.379	0.626	3.756	0.191	0.421	0.686	4.116	0.209	0.461
19	3/4	19.1	0.691	4.146	0.211	0.465	0.768	4.608	0.234	0.516	0.844	5.064	0.257	0.567
22	7/8	22.2	0.813	4.878	0.248	0.547	0.906	5.436	0.276	0.609	0.996	5.976	0.304	0.670
25	1	25.4	0.939	5.634	0.286	0.631	1.048	6.288	0.319	0.703	1.154	6.924	0.352	0.776
28	1 1/8	28.6	1.066	6.396	0.325	0.717	1.190	7.140	0.363	0.800	1.312	7.872	0.400	0.882
32	1 1/4	31.8	1.192	7.152	0.363	0.800	1.332	7.992	0.406	0.895	1.470	8.820	0.448	0.988
35	1 3/8	34.9	1.318	7.908	0.402	0.886	1.469	8.814	0.448	0.988	1.623	9.738	0.495	1.091
38	1 1/2	38.1	1.440	8.640	0.439	0.968	1.612	9.672	0.491	1.083	1.781	10.686	0.543	1.197
41	1 5/8	41.3	1.567	9.402	0.478	1.054	1.754	10.524	0.534	1.177	1.938	11.628	0.591	1.303
44	1 3/4	44.5	1.693	10.158	0.516	1.138	1.896	11.376	0.578	1.274	2.096	12.576	0.639	1.409
47	1 7/8	47.6	1.815	10.890	0.553	1.219	2.033	12.198	0.620	1.367	2.249	13.494	0.686	1.512
50	2	50.8	1.942	11.652	0.592	1.305	2.175	13.050	0.663	1.462	2.407	14.442	0.734	1.618
54	2 1/8	54.0	2.068	12.408	0.630	1.389	2.317	13.902	0.706	1.557	2.565	15.390	0.782	1.724
57	2 1/4	57.2	2.194	13.164	0.669	1.475	2.459	14.754	0.750	1.654	2.723	16.338	0.830	1.830
60	2 3/8	60.3	2.316	13.896	0.706	1.557	2.597	15.582	0.792	1.746	2.876	17.256	0.877	1.934
65	2 1/2	63.5	2.443	14.658	0.745	1.642	2.739	16.434	0.835	1.841	3.033	18.198	0.925	2.039
80	3	76.2	2.944	17.644	0.897	1.978	3.303	19.818	1.007	2.220	3.660	21.960	1.116	2.460

Carbon Steel Tubes For General Structural Purposes

JIS G 3444 - 1988 - STK 290 JIS G 3444 - 1988 - STK 500
 JIS G 3444 - 1988 - STK 400 JIS G 3444 - 1988 - STK 540

Outside Diameter	Wall Thickness	Calculated Weight	Cross-Sectional Area	Geometrical Moment of Inertia	Modulus of Section	Radius of Gyration of Area
mm	mm	kg/mm	cm ²	cm ⁴	cm ³	cm
21.7	2.0	0.972	1.238	0.607	0.560	0.700
27.2	2.0	1.24	1.583	1.26	0.930	0.890
	2.3	1.41	1.799	1.41	1.03	0.880
34.0	2.3	1.80	2.291	2.89	1.70	1.12
42.7	2.3	2.29	2.919	5.97	2.80	1.43
	2.5	2.49	3.157	6.40	3.00	1.42
	2.8	2.76	3.510	7.02	3.29	1.41
48.6	2.3	2.63	3.345	8.99	3.70	1.64
	2.5	2.84	3.621	9.65	3.97	1.63
	2.8	3.16	4.029	10.6	4.36	1.62
	3.2	3.58	4.564	11.8	4.86	1.61
60.5	2.3	3.30	4.205	17.8	5.90	2.06
	3.2	4.52	5.760	23.7	7.84	2.03
	4.0	5.57	7.100	28.5	9.41	2.00
76.3	2.8	5.08	6.465	43.7	11.5	2.60
	3.2	5.77	7.349	49.2	12.9	2.59
	4.0	7.13	9.085	59.5	15.6	2.56
89.1	2.8	5.96	7.591	70.7	15.9	3.05
	3.2	6.78	8.636	79.8	17.9	3.04
	4.0	8.39	10.69	97.0	21.8	3.01
101.6	3.2	7.76	9.892	120	23.6	3.48
	4.0	9.63	12.26	146	28.8	3.45
	5.0	11.9	15.17	177	34.9	3.42
114.3	3.2	8.77	11.17	172	30.2	3.93
	3.6	9.83	12.52	192	33.6	3.92
	4.5	12.2	15.52	234	41.0	3.89
	5.6	15.0	19.12	283	49.6	3.85
139.9	3.6	12.1	15.40	357	51.1	4.82
	4.0	13.4	17.07	394	56.3	4.80
	4.5	15.0	19.13	438	62.7	4.79
	6.0	19.8	25.22	566	80.9	4.74
165.2	4.5	17.8	22.72	734	88.90	5.68
	5.0	19.8	25.16	808	97.8	5.67
	6.0	23.6	30.01	952	115	5.63
	7.0	27.3	34.79	1090	132	5.60