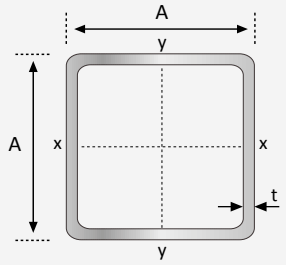
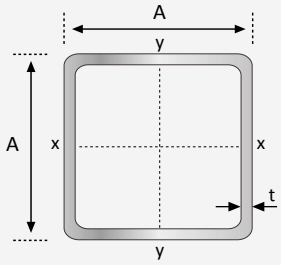
COLD FORMED HOLLOW SECTIONS - SQUARE



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Section Modulus		Radius Of Gyration		Plastic Modulus	
			A	I_x	I_y	Z_x	Z_y	i_x	i_y	S_x	S_y
A x A	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm^3	cm^3	cm	cm	cm^3	cm^3
16 x 16	1.0	0.464	0.591	0.221	0.221	0.276	0.276	0.611	0.611	0.331	0.331
	1.6	0.706	0.900	0.31	0.31	0.387	0.387	0.587	0.587	0.483	0.483
19 x 19	1.0	0.559	0.711	0.383	0.383	0.403	0.403	0.733	0.733	0.479	0.479
	1.2	0.661	0.842	0.443	0.443	0.466	0.466	0.725	0.725	0.56	0.56
25 x 25	1.2	0.887	1.13	1.06	1.06	0.85	0.85	0.97	0.97	1.01	1.01
	1.6	1.16	1.48	1.34	1.34	1.07	1.07	0.95	0.95	1.29	1.29
	2.3	1.60	2.04	1.75	1.75	1.40	1.40	0.93	0.93	1.73	1.73
	3.0	2.01	2.56	2.06	2.06	1.65	1.65	0.90	0.90	2.10	2.10
32 x 32	1.2	1.15	1.466	2.31	2.31	1.44	1.44	1.26	1.26	1.69	1.69
	1.6	1.51	1.92	2.95	2.95	1.84	1.84	1.24	1.24	2.19	2.19
	2.0	1.86	2.37	3.53	3.53	2.21	2.21	1.22	1.22	2.65	2.65
	2.3	2.11	2.69	3.93	3.93	2.46	2.46	1.21	1.21	2.98	2.98
	3.0	2.67	3.40	4.75	4.75	2.97	2.97	1.18	1.18	3.68	3.68
38 x 38	1.6	1.81	2.31	5.08	5.08	2.67	2.67	1.48	1.48	3.14	3.14
	2.0	2.23	2.85	6.12	6.12	3.22	3.22	1.47	1.47	3.83	3.83
	2.3	2.54	3.24	6.85	6.85	3.61	3.61	1.45	1.45	4.32	4.32
	3.0	3.24	4.12	8.38	8.38	4.41	4.41	1.43	1.43	5.38	5.38
50 x 50	1.6	2.41	3.08	12.0	12.0	4.79	4.79	1.97	1.97	5.57	5.57
	2.3	3.41	4.34	16.4	16.4	6.56	6.56	1.94	1.94	7.74	7.74
	3.0	4.25	5.41	19.5	19.5	7.79	7.79	1.90	1.90	9.39	9.39
	4.0	5.45	6.95	23.7	23.7	9.49	9.49	1.85	1.85	11.7	11.7
	4.5	6.02	7.67	25.5	25.5	10.2	10.2	1.82	1.82	12.8	12.8
	6.0	7.56	9.63	29.5	29.5	11.8	11.8	1.75	1.75	15.3	15.3
65 x 65	2.3	4.42	5.63	36.4	36.4	11.2	11.2	2.54	2.54	13.1	13.1
	3.0	5.66	7.21	45.4	45.4	14.0	14.0	2.51	2.51	16.6	16.6
	4.0	7.34	9.35	56.6	56.6	17.4	17.4	2.46	2.46	21.0	21.0
	4.5	8.14	10.37	61.6	61.6	18.9	18.9	2.44	2.44	23.1	23.1
	5.0	8.92	11.36	66.1	66.1	20.3	20.3	2.41	2.41	25.0	25.0
	6.0	10.40	13.23	73.9	73.9	22.7	22.7	2.36	2.36	28.5	28.5
75 x 75	2.3	5.14	6.55	57.1	57.1	15.2	15.2	2.95	2.95	17.7	17.7
	3.0	6.60	8.41	71.6	71.6	19.1	19.1	2.92	2.92	22.5	22.5
	4.0	8.60	10.95	90.2	90.2	24.0	24.0	2.87	2.87	28.8	28.8
	4.5	9.55	12.17	98.6	98.6	26.3	26.3	2.85	2.85	31.7	31.7
	6.0	12.30	15.63	120.0	120.0	32.0	32.0	2.77	2.77	39.6	39.6
100 x 100	2.3	6.95	8.85	140	140	27.9	27.9	3.97	3.97	32.3	32.3
	3.0	8.96	11.41	177	177	35.4	35.4	3.94	3.94	41.2	41.2
	4.0	11.70	14.95	226	226	45.3	45.3	3.89	3.89	53.3	53.3
	4.5	13.10	16.67	249	249	49.9	49.9	3.87	3.87	59.0	59.0
	6.0	17.00	21.63	311	311	62.3	62.3	3.79	3.79	75.1	75.1
	9.0	24.10	30.00	391	391	78.1	78.1	3.61	3.61	98.6	98.6

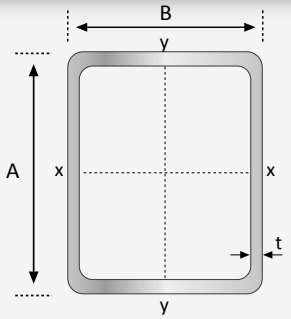
COLD FORMED HOLLOW SECTIONS - SQUARE



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Section Modulus		Radius Of Gyration		Plastic Modulus	
			A	I_x	I_y	Z_x	Z_y	i_x	i_y	S_x	S_y
A x A	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm^3	cm^3	cm	cm	cm^3	cm^3
125 x 125	3.0	11.30	14.41	354	354	56.7	56.7	4.96	4.96	65.6	65.6
	4.5	16.60	21.17	506	506	80.9	80.9	4.89	4.89	94.8	94.8
	6.0	21.70	27.63	641	641	103	103	4.82	4.82	122	122
	9.0	31.10	39.00	838	838	134	134	4.64	4.64	165	165
150 x 150	3.0	13.70	17.41	623	623	83	83	5.98	5.98	95.5	95.5
	4.0	18.00	22.95	808	808	108	108	5.93	5.93	125	125
	4.5	20.20	25.67	896	896	120	120	5.91	5.91	139	139
	6.0	26.40	33.63	1146	1146	153	153	5.84	5.84	180	180
	9.0	38.20	48.00	1540	1540	205	205	5.66	5.66	248	248
200 x 200	6.0	35.82	45.63	2832.9	2832.9	283.3	283.3	7.88	7.88	329.7	329.7
	9.0	52.34	66.68	3988.8	3988.8	398.9	398.9	7.73	7.73	472.4	472.4
	12.0	67.93	86.54	4983.9	4983.9	498.4	498.4	7.59	7.59	600.9	600.9
250 x 250	6.0	45.24	57.63	5672.2	5672.2	453.8	453.8	9.92	9.92	524.5	524.5
	9.0	66.47	84.68	8093.6	8093.6	647.5	647.5	9.78	9.78	758.8	758.8
	12.0	86.77	110.54	10254.8	10254.8	820.4	820.4	9.63	9.63	975.0	975.0
	16.0	112.39	143.18	12752.3	12752.3	1020.2	1020.2	9.44	9.44	1235.9	1235.9
300 x 300	9.0	80.60	102.68	14314.3	14314.3	956.1	956.1	11.82	11.82	1112.7	1112.7
	12.00	105.61	134.54	18335.4	18335.4	1222.4	1222.4	11.67	11.67	1439.1	1439.1
	16.0	137.51	175.18	23089.4	23089.4	1539.3	1539.3	11.48	11.48	1841.0	1841.0

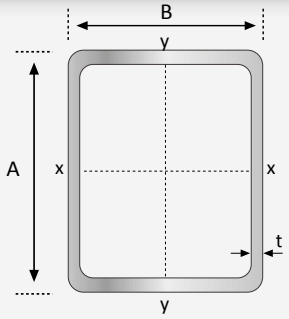
Grades:
ASTM A500 Grade A / B
EN 10219 S275J0H, S275J2H
EN10025 S275JR

COLD FORMED HOLLOW SECTIONS - RECTANGULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Section Modulus		Radius Of Gyration		Plastic Modulus	
			A	I_x	I_y	Z_x	Z_y	i_x	i_y	S_x	S_y
A x B	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm^3	cm^3	cm	cm	cm^3	cm^3
38 x 19	1.6	1.33	1.700	3.060	1.010	1.610	1.060	1.340	0.771	2.080	1.260
	3	2.22	--	--	--	--	--	--	--	--	--
50 x 25	1.6	1.79	2.28	7.29	2.44	2.91	1.95	1.79	1.03	3.69	2.25
	2.3	2.51	3.19	9.86	3.23	3.94	2.59	1.76	1.01	5.11	3.09
	3.0	3.19	4.06	12.10	3.89	4.84	3.11	1.73	0.98	6.43	3.84
65 x 38	1.6	2.49	3.17	18.30	7.94	5.63	4.18	2.40	1.58	6.91	4.75
	2.3	3.52	4.48	25.20	10.80	7.74	5.69	2.37	1.55	9.68	6.62
	3.0	4.39	5.29	29.80	12.80	9.18	6.75	2.31	1.51	12.30	8.36
75 x 38	1.6	2.71	3.45	25.30	8.85	6.76	4.66	2.71	1.60	8.59	5.34
	2.3	3.81	4.85	34.60	12.00	9.23	6.30	2.67	1.57	12.10	7.44
	3.0	4.86	6.19	42.80	14.70	11.40	7.72	2.63	1.54	15.30	9.41
75 x 50	1.9	3.54	4.51	35.50	19.10	9.48	7.62	2.81	2.05	11.80	8.88
	2.3	4.24	5.40	41.90	22.40	11.20	8.96	2.79	2.04	14.10	10.60
	3.0	5.42	6.91	52.20	27.80	13.90	11.10	2.75	2.00	17.90	13.50
	4.5	7.79	9.92	70.60	37.20	18.80	14.90	2.67	1.94	25.70	19.10
	6.0	9.92	12.63	84.40	44.10	22.50	17.60	2.58	1.87	32.60	24.10
100 x 50	2.3	5.14	6.55	84.8	29.0	17.0	11.6	3.60	2.10	21.7	13.3
	3.0	6.60	8.41	106.0	36.1	21.3	14.4	3.56	2.07	27.8	17.0
	4.5	9.55	12.17	147.0	48.9	29.3	19.5	3.47	2.00	40.1	24.3
	6.0	12.30	15.63	179.0	58.7	35.7	23.5	3.38	1.94	51.4	30.7
100 x 75	3.0	7.78	9.91	142.0	91.1	28.4	24.3	3.78	3.03	35.1	28.7
	4.5	11.30	14.42	198.0	127.0	39.6	33.7	3.71	2.96	50.9	41.5
	6.0	14.60	18.63	245.0	156.0	49.0	41.6	3.63	2.89	65.5	53.3
125 x 50	3.0	7.78	9.91	187.0	44.4	29.9	17.7	4.34	2.12	39.5	20.5
	4.5	11.30	14.42	261.0	60.6	41.7	24.2	4.25	2.05	57.4	29.4
	6.0	14.60	18.63	322.0	73.3	51.5	29.3	4.16	1.98	74.0	37.3
125 x 75	2.3	6.95	8.85	191.5	87.5	30.6	23.3	4.65	3.14	37.0	26.1
	3.0	8.96	11.41	243.0	111.0	38.9	29.5	4.61	3.12	48.7	34.1
	4.5	13.10	16.67	342.0	155.0	54.8	41.2	4.53	3.04	70.9	49.5
	6.0	17.00	21.63	428.0	192.0	68.5	51.1	4.45	2.98	91.9	63.7
150 x 50	3.0	8.96	11.41	299.0	52.6	39.8	21.1	5.12	2.15	53.2	24.1
	4.5	13.10	16.67	420.0	72.2	56.0	28.9	5.02	2.08	77.5	34.5
	6.0	17.00	21.63	523.0	87.9	69.8	35.2	4.92	2.02	100.0	43.9
150 x 75	3.0	10.10	12.91	380.0	130.0	50.6	34.7	5.42	3.17	64.2	39.5
	4.5	14.90	18.92	539.0	183.0	71.9	48.7	5.34	3.11	93.8	57.4
	6.0	19.30	24.63	679.0	228.0	90.5	60.7	5.25	3.04	122.0	74.0
	9.0	27.60	35.17	905.0	297.0	121.0	79.2	5.07	2.91	172.0	105.0
150 x 100	3.0	11.31	14.41	460.7	247.6	61.4	49.5	5.65	4.15	73.5	55.8
	4.5	16.60	21.17	658.0	352.0	87.7	70.4	5.58	4.08	110.0	83.1
	5.0	18.30	23.36	719.0	384.0	95.9	76.8	5.55	4.05	122.0	91.5
	6.0	21.70	27.63	835.0	444.0	111.1	88.8	5.50	4.01	144.0	108.0
	9.0	31.10	39.67	1129.0	595.0	120.0	119.0	5.33	3.87	190.0	143.0

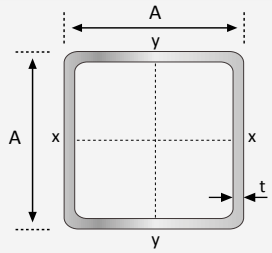
COLD FORMED HOLLOW SECTIONS - RECTANGULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Section Modulus		Radius Of Gyration		Plastic Modulus	
			A	I_x	I_y	Z_x	Z_y	i_x	i_y	S_x	S_y
A x B	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm^3	cm^3	cm	cm	cm^3	cm^3
200 x 100	4.5	20.20	25.67	1331.0	455.0	133.0	90.9	7.20	4.21	170.0	105.0
	6.0	26.40	33.63	1703.0	577.0	170.0	115.0	7.12	4.14	222.0	136.0
	9.0	38.20	48.00	2280.0	764.0	228.0	153.0	6.89	3.99	293.0	180.0
200 x 150	4.5	23.70	30.17	1761.6	1134.6	176.2	151.3	7.64	6.13	208.9	171.8
	6.0	31.10	39.63	2268.1	1457.2	226.8	194.3	7.56	6.06	271.5	223.1
	9.0	45.30	57.68	3167.3	2024.9	316.7	270.0	7.41	5.93	386.4	316.9
	12.0	58.50	74.54	3167.3	2024.9	316.7	270.0	7.41	5.93	386.4	316.9
250 x 150	6.0	35.80	45.63	1768.4	3885.7	310.9	235.8	9.23	6.23	378.1	266.3
	9.0	52.30	66.68	2472.8	5478.7	438.3	329.7	9.06	6.09	541.9	380.4
	12.0	67.90	86.54	3068.3	6853.3	548.3	409.1	8.90	5.95	689.4	482.3
300 x 200	6.0	45.24	57.63	7370.5	3962.3	491.4	396.2	11.31	8.29	587.8	446.1
	9.0	66.47	84.68	10529.5	5631.6	702.0	563.2	11.15	8.16	850.8	644.3
	10.0	73.34	93.43	11507.9	6144.5	767.2	614.5	11.10	8.11	933.9	706.8
	12.0	86.77	110.54	13355.8	7107.4	890.4	710.7	10.99	8.02	1093.5	826.5
	16.0	112.39	143.18	16630.1	8792.2	1108.7	879.2	10.78	7.84	1386.6	1045.1

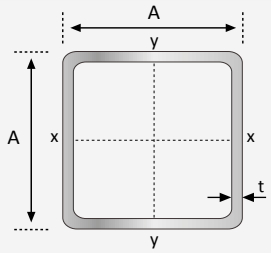
Grades:
ASTM A500 Grade A / B
EN 10219 S275J0H, S275J2H
EN10025 S275JR

HOT FINISHED HOLLOW SECTIONS - SQUARE



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants		Surface Area Per Metre
			A	I	r	Z	S	J	C	
A x A	Thickness t (mm)	Kg/m	cm^2	cm^4	cm	cm^3	cm^3	cm^4	cm^3	m^2/m
50 x 50	3.2	4.66	5.88	21.2	1.9	8.49	10.2	33.8	12.4	0.192
	4	5.72	7.19	25	1.86	9.99	12.3	40.4	14.5	0.19
	5	6.97	8.73	28.9	1.82	11.6	14.5	47.6	16.7	0.187
	6	8.15	10.2	32	1.77	12.8	16.5	53.6	18.4	0.185
	6.3	8.49	10.6	32.8	1.76	13.1	17	55.2	18.8	0.184
60 x 60	3	5.39	6.74	36.2	2.32	12.1	14.3	56.9	17.7	0.232
	3.2	5.67	7.16	38.2	2.31	12.7	15.2	60.2	18.6	0.232
	4	6.97	8.79	45.4	2.27	15.1	18.3	72.5	22	0.23
	5	8.54	10.7	53.3	2.23	17.8	21.9	86.4	25.7	0.227
	6	10	12.6	59.9	2.18	20	25.1	98.6	28.8	0.225
	6.3	10.5	13.1	61.6	2.17	20.5	26	102	29.6	0.224
75 x 75	3.2	7.25	9.08	77.5	2.92	20.7	24.3	121	30.3	0.292
	4	8.93	11.2	93.2	2.89	24.8	29.6	147	36.3	0.29
	5	11	13.7	111	2.84	29.6	35.8	177	43	0.287
	6	12.9	16.2	126	2.8	33.7	41.4	204	48.9	0.285
	6.3	13.5	16.9	131	2.78	34.9	43	212	50.5	0.284
	8	16.6	20.8	152	2.71	40.5	51.3	252	58.4	0.279
	10	19.6	24.9	170	2.61	45.4	59.4	289	65.1	0.274
80 x 80	3	7.18	9.14	89.8	3.13	22.5	26.3	140	33	0.312
	3.2	7.15	9.56	92.7	3.11	23.2	27.3	148	34.9	0.309
	5	11.7	14.7	137	3.05	34.2	41.1	217	49.8	0.307
	6	13.8	17.4	156	3	39.1	47.8	252	56.8	0.305
	6.3	14.4	18.1	162	2.99	40.5	49.7	262	58.7	0.304
	8	17.8	22.4	189	2.91	47.3	59.5	312	68.3	0.299
	10	21.1	26.9	214	2.82	53.5	69.3	360	76.8	0.294
90 x 90	3.6	9.72	12.3	152	3.52	33.8	39.7	237	49.7	0.351
	5	13.3	16.7	200	3.45	44.4	53	316	64.8	0.347
	6	15.7	19.8	230	3.41	51.1	61.8	367	74.3	0.345
	6.3	16.4	20.7	238	3.4	53	64.3	382	77	0.344
	8	20.4	25.6	281	3.32	62.6	77.6	459	90.5	0.339
	10	24.3	30.9	322	3.23	71.6	91.3	536	103	0.334
100 x 100	4	12	15.2	232	3.91	46.4	54.4	361	68.2	0.39
	5	14.8	18.7	279	3.86	55.9	66.4	439	81.8	0.387
	6	17.6	22.2	323	3.82	64.6	77.6	513	94.3	0.385
	6.3	18.4	23.2	336	3.8	67.1	80.9	534	97.8	0.384
	8	22.9	28.8	400	3.73	79.9	98.2	646	116	0.379
	10	27.9	34.9	462	3.64	92.4	116	761	133	0.374
	12	31.9	40.7	512	3.55	102	132	858	147	0.369
120 x 120	5	18	22.7	498	4.68	83	97.6	777	122	0.467
	6	21.3	27	579	4.63	96.6	115	911	141	0.465
	6.3	22.3	28.2	603	4.62	100	120	950	147	0.464
	8	27.9	35.2	726	4.55	121	146	1160	176	0.459
	10	34.2	42.9	852	4.46	142	175	1382	206	0.454
	12.5	41.6	52.1	982	4.34	164	207	1623	236	0.448

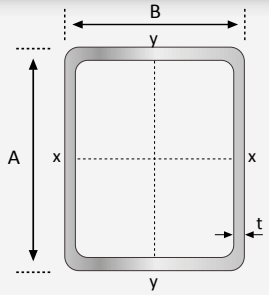
HOT FINISHED HOLLOW SECTIONS - SQUARE



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants		Surface Area Per Metre
			A	I	r	Z	S	J	C	
A x A	Thickness t (mm)	Kg/m	cm^2	cm^4	cm	cm^3	cm^3	cm^4	cm^3	m^2/m
150 x 150	5	22.7	28.7	1002	5.9	134	156	1550	197	0.587
	6	27.00	34.2	1174	5.86	156	184	1828	230	0.585
	6.3	28.3	35.8	1223	5.85	163	192	1909	240	0.584
	8	35.4	44.8	1491	5.77	199	237	2351	291	0.579
	10	43.6	54.9	1773	5.68	236	286	2832	344	0.574
	12.5	52.4	67.1	2080	5.57	277	342	3375	402	0.568
	16	66.4	83	2430	5.41	324	411	4026	467	0.559
200 x 200	5	30.5	38.7	2445	7.95	245	283	3756	362	0.787
	6	36.4	46.2	2883	7.9	288	335	4449	426	0.785
	6.3	38.2	48.4	3011	7.89	301	350	4653	444	0.784
	8	48	60.8	3709	7.81	371	436	5778	545	0.779
	10	59.3	74.9	4471	7.72	447	531	7031	655	0.774
	12.5	73	92.1	5336	7.61	534	643	8491	778	0.768
	16	91.5	115	6394	7.46	639	785	10340	927	0.759
250 x 250	6	45.8	58.2	5752	9.94	460	531	8825	681	0.985
	6.3	48.1	61	6014	9.93	481	556	9238	712	0.984
	8	60.5	76.8	7455	9.86	596	694	11530	880	0.979
	10	75	94.9	9055	9.77	724	851	14110	1065	0.974
	12.5	92.6	117	10920	9.66	873	1037	17160	1279	0.968
	16	117	147	13270	9.5	1061	1280	21140	1546	0.959
300 x 300	6	55.1	70	10080	12	672	772	15407	997	1.18
	6.3	57.95	73.6	10550	12	703	809	16140	1043	1.18
	8	73.1	92.8	13130	11.9	875	1013	20190	1294	1.18
	9	81.93	104	14600	11.9	973	1130	22520	1437	1.18
	10	90.7	115	16030	11.8	1068	1246	24810	1575	1.17
	12	107.97	137	18780	11.7	1252	1470	29250	1840	1.17
	12.5	112	142	19440	11.7	1296	1525	30330	1904	1.17
	16	142	179	23850	11.5	1590	1895	37620	2325	1.16
350 x 350	6	64.5	82.2	16170	14	924	1058	24650	1373	1.38
	8	85.7	109	21130	13.9	1207	1392	32380	1789	1.38
	10	106	135	25880	13.9	1479	1715	39890	2185	1.37
	12	127	161	30440	13.8	1739	2030	47150	2563	1.37
	12.5	132	167	31540	13.7	1802	2107	48930	2654	1.37
	16	167	211	38940	13.6	2225	2630	60990	3264	1.36

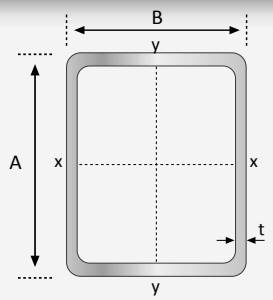
Grades:
EN 10210 S355J2H

HOT FINISHED HOLLOW SECTIONS - RECTANGULAR



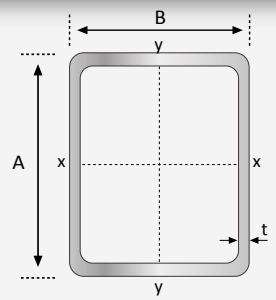
Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Radius Of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants		Surface Area Per Metre
				Axis	Axis	Axis	Axis	Axis	Axis	Axis	Axis			
			A	x-x	y-y	x-x	y-y	x-x	y-y	x-x	y-y	J	C	
A x B	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm	cm	cm^3	cm^3	cm^3	cm^3	cm^4	cm^3	m^2/m
60 x 40	3	4.39	5.54	26.5	13.9	2.18	1.58	8.82	6.95	10.9	8.19	29.2	11.2	0.192
	3.2	4.66	5.88	27.8	14.6	2.18	1.57	9.27	7.29	11.5	8.64	30.8	11.7	0.192
	4	5.72	7.19	32.8	17	2.14	1.54	10.9	8.52	13.8	10.3	36.7	13.7	0.190
	5	6.97	8.73	38.1	19.5	2.09	1.50	12.7	9.77	16.4	12.2	43	15.7	0.187
	6	8.15	10.2	42.3	21.4	2.04	1.45	14.1	10.7	18.6	13.7	48.2	17.3	0.185
	6.3	8.49	10.6	43.4	21.9	2.02	1.44	14.5	11	19.2	14.2	49.5	17.6	0.184
	8	10.00	12.8	47.9	23.7	1.94	1.36	16	11.9	22.1	16.1	55.4	19.2	0.179
80 x 40	3	5.34	6.74	54.2	18	2.84	1.63	13.6	9	17.1	10.4	43.8	15.3	0.232
	3.2	5.67	7.16	57.2	18.9	2.83	1.63	14.3	9.46	18	11	46.2	16.1	0.232
	4	6.97	8.79	68.2	22.2	2.79	1.59	17.1	11.1	21.8	13.2	55.2	18.9	0.230
	5	8.54	10.7	80.3	25.7	2.74	1.55	20.1	12.9	26.1	15.7	65.1	21.9	0.227
	6	10.00	12.6	90.5	28.5	2.68	1.50	22.6	14.2	30	17.8	73.4	24.2	0.225
	6.3	10.50	13.1	93.3	29.2	2.67	1.49	23.3	14.6	31.1	18.4	75.6	24.8	0.224
	8	12.80	16	106	32.1	2.58	1.42	26.5	16.1	36.5	21.2	85.8	27.4	0.219
100 x 50	3	6.75	8.54	110	36.8	3.58	2.08	21.9	14.7	27.3	16.8	88.4	25.0	0.292
	3.2	7.18	9.08	116	38.8	3.57	2.07	23.2	15.5	28.9	17.7	93.4	26.4	0.292
	4	8.86	11.2	140	46.2	3.53	2.03	27.9	18.5	35.2	21.5	113	31.4	0.290
	5	10.90	13.7	167	54.3	3.48	1.99	33.3	21.7	42.6	25.8	135	36.9	0.287
	6	12.90	16.2	190	61.2	3.43	1.95	38.1	24.5	49.4	29.7	154	41.6	0.285
	6.3	13.40	16.9	197	63.0	3.42	1.93	39.4	25.2	51.3	30.8	160	42.9	0.284
	8	16.60	20.8	230	71.7	3.33	1.86	46	28.7	61.4	36.3	186	48.9	0.279
	10	19.60	24.9	259	78.4	3.22	1.77	51.8	31.4	71.2	41.4	209	53.6	0.274
100 x 60	3	7.22	9.14	124	55.7	3.68	2.47	24.7	18.6	30.2	21.2	121	30.7	0.312
	3.6	8.59	10.9	145	64.8	3.65	2.44	28.9	21.6	35.6	24.9	142	35.6	0.311
	5	11.7	14.7	189	83.6	3.58	2.38	37.8	27.9	47.4	32.9	188	45.9	0.307
	6	13.8	17.4	217	95	3.53	2.34	43.4	31.7	55.1	38.1	216	52.1	0.305
	6.3	14.4	18.1	225	98.1	3.52	2.33	45	32.7	57.3	39.5	224	53.8	0.304
	8	17.8	22.4	264	113	3.44	2.25	52.8	37.8	68.7	47.1	265	62.2	0.299
120 x 60	3.6	9.72	12.3	227	76.3	4.3	2.49	37.9	25.4	47.2	28.9	183	43.3	0.351
	4	10.7	13.6	249	83.1	4.28	2.47	41.5	27.7	51.9	31.7	201	47.1	0.350
	5	13.3	16.7	299	98.8	4.23	2.43	49.9	32.9	63.1	38.4	242	56	0.347
	6	15.7	19.8	345	113	4.18	2.39	57.5	37.5	73.6	44.5	279	63.8	0.345
	6.3	16.4	20.7	358	116	4.16	2.37	59.7	38.8	76.7	46.3	290	65.9	0.344
	8	20.4	25.6	425	135	4.08	2.3	70.8	45	92.7	55.4	344	76.6	0.339
	10	24.3	30.9	488	152	3.97	2.21	81.4	50.5	109.2	64.4	396	86.1	0.334
120 x 80	5	14.8	18.7	365	193	4.42	3.21	60.9	48.2	74.6	56.1	401	77.9	0.387
	6	17.6	22.2	423	222	4.37	3.17	70.6	55.6	87.3	65.5	468	89.6	0.385
	6.3	18.4	23.2	440	230	4.36	3.15	73.3	57.6	91	68.2	487	92.9	0.384
	8	22.9	28.8	525	273	4.27	3.08	87.5	68.1	111	82.6	587	110	0.379
	10	27.9	34.9	609	313	4.18	2.99	102	78.1	131	97.3	688	126	0.374

HOT FINISHED HOLLOW SECTIONS - RECTANGULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Radius Of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants		Surface Area Per Metre
				Axis	Axis	Axis	Axis	Axis	Axis	Axis	Axis			
			A	x-x	y-y	x-x	y-y	x-x	y-y	x-x	y-y	J	C	
A x B	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm	cm	cm^3	cm^3	cm^3	cm^3	cm^4	cm^3	m^2/m
150 x 100	5	18.7	23.7	739	392	5.58	4.07	98.5	78.5	119	90.1	807	127	0.487
	6	22.3	28.2	862	456	5.53	4.02	115	91.2	141	106	946	147	0.485
	6.3	23.3	29.5	898	474	5.52	4.01	120	94.8	147	110	986	153	0.484
	8	29.1	36.8	1087	569	5.44	3.94	145	114	180	135	1203	183	0.479
	10	35.7	44.9	1282	665	5.34	3.85	171	133	216	161	1432	214	0.474
	12	41.4	52.7	1450	745	5.25	3.76	193	149	249	185	1633	240	0.469
	12.5	42.8	54.6	1488	763	5.22	3.74	198	153	256	190	1679	246	0.468
200 x 100	5	22.6	28.7	1495	505	7.21	4.19	149	101	185	114	1204	172	0.587
	6	27	34.2	1754	589	7.16	4.15	175	118	218	134	1414	200	0.585
	6.3	28.3	35.8	1829	613	7.15	4.14	183	123	228	140	1475	208	0.584
	8	35.4	44.8	2234	739	7.06	4.06	223	148	282	172	1804	251	0.579
	10	43.6	54.9	2664	869	6.96	3.98	266	174	341	206	2156	295	0.574
	12	50.8	64.7	3047	979	6.86	3.89	305	196	395	237	2469	333	0.569
	12.5	53.4	67.1	3136	1004	6.84	3.87	314	201	408	245	2541	341	0.568
	16	66.4	83.0	3678	1147	6.66	3.72	368	229	491	290	2982	391	0.559
200 x 150	6	31.7	40.2	2318	1485	7.6	6.08	232	198	277	227	2820	313	0.685
	6.3	33.22	42.1	2420	1549	7.58	6.07	242	207	289	237	2947	326	0.684
	8	41.7	52.8	2971	1894	7.5	5.99	297	253	359	294	3643	398	0.679
	9	46.6	58.9	3276	2084	7.46	5.95	328	278	398	325	4033	437	0.677
	10	51.4	64.9	3568	2264	7.41	5.91	357	302	436	356	4409	475	0.674
	12	60.9	76.7	4109	2596	7.32	5.82	411	346	508	414	5119	543	0.669
	12.5	63.2	79.6	4236	2673	7.3	5.8	424	356	525	428	5287	559	0.668
250 x 150	6	36.4	46.2	3965	1796	9.27	6.24	317	239	385	270	3877	396	0.785
	6.3	38.00	48.4	4143	1874	9.25	6.22	331	250	402	283	4054	413	0.784
	8	48	60.8	5111	2298	9.17	6.15	409	306	501	350	5021	506	0.779
	10	59.3	74.9	6174	2755	9.08	6.06	494	367	611	426	6090	605	0.774
	12.5	73	92.1	7387	3265	8.96	5.96	591	435	740	514	7326	717	0.768
	16	91.5	115	8879	3873	8.79	5.8	710	516	906	625	8868	849	0.759
300 x 100	5	30.52	38.7	4146	731	10.3	4.34	276	146	354	161	2040	262	0.787
	6	36.2	46.2	4893	854	10.3	4.3	326	171	419	190	2399	306	0.785
	6.3	38	48.4	5111	890	10.3	4.29	341	178	439	199	2504	319	0.784
	8	48.00	61.1	6386	1087	10.2	4.22	426	217	551	247	3066	387	0.780
	10	58.80	74.9	7613	1275	10.1	4.13	508	255	666	296	3676	458	0.774
	12	70.30	88.7	8818	1447	9.97	4.04	588	289	779	343	4223	520	0.769
	16	91.50	117	11240	1747	9.82	3.87	749	349	1008	431	5142	620	0.769
300 x 200	6	45.80	58.2	7486	4013	11.3	8.31	499	401	596	451	8100	651	0.985
	6.3	48.10	61	7829	4193	11.3	8.29	522	419	624	472	8476	681	0.984
	8	60.50	76.8	9717	5184	11.3	8.22	648	518	779	589	10560	840	0.979
	10	75.00	94.9	11820	6278	11.2	8.13	788	628	956	721	12910	1015	0.974
	12	89.15	113	13800	7294	11.1	8.05	920	729	1124	847	15140	1178	0.969
	12.5	92.60	117	14270	7537	11	8.02	952	754	1165	877	15680	1217	0.968
	16	117.00	147	17390	9109	10.9	7.87	1159	911	1441	1080	19250	1468	0.959

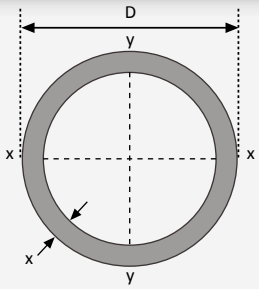
HOT FINISHED HOLLOW SECTIONS - RECTANGULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia		Radius Of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants		Surface Area Per Metre
				Axis	Axis	Axis	Axis	Axis	Axis	Axis	Axis			
			A	x-x	y-y	x-x	y-y	x-x	y-y	x-x	y-y	J	C	
A x B	Thickness t (mm)	Kg/m	cm^2	cm^4	cm^4	cm	cm	cm^3	cm^3	cm^3	cm^3	cm^4	cm^3	m^2/m
300 x 250	6.3	53.00	67.5	9239	6984	11.7	10.2	616	559	720	636	12140	862	1.082
	8	66.80	85.1	11500	8682	11.6	10.1	767	695	902	796	15170	1067	1.077
	10	82.80	106	14050	10580	11.5	10	937	847	1109	978	18600	1295	1.071
	12.5	102.00	130	17050	12810	11.4	9.91	1137	1025	1358	1196	22680	1561	1.065
	16	129.00	165	20930	15670	11.3	9.76	1395	1254	1689	1485	28020	1898	1.055
350 x 150	6.3	48.10	61	9551	2537	12.5	6.44	546	338	680	375	6383	587	0.974
	8	60.50	77	11880	3125	12.4	6.36	679	417	851	467	7917	721	0.974
	10	75.00	94.9	14320	3737	12.3	6.27	818	498	1035	566	9633	867	0.974
	12.5	92.60	117	17300	4450	12.2	6.17	988	593	1263	686	11620	1032	0.968
	16	117.00	149	21500	5386	12	6.02	1229	718	1586	850	14110	1235	0.968
350 x 250	8	73.10	93	16560	9854	13.3	10.3	946	788	1124	892	19010	1255	1.180
	10	90.70	116	20270	12020	13.2	10.2	1158	963	1385	1098	23330	1526	1.180
	12.5	112.00	143	24680	14580	13.1	10.1	1410	1166	1700	1345	28490	1843	1.180
	16	142.00	181	30440	17860	13	9.95	1739	1429	2121	1672	35280	2248	1.180

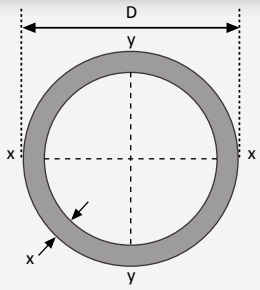
Grades:
EN 10210 S355J2H

HOT FINISHED HOLLOW SECTIONS - CIRCULAR



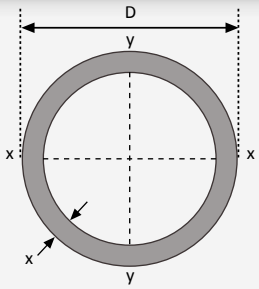
Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants		Surface Area Per Metre
			A	I	r	Z	S	J	C	
Outside Diameter (mm)	Thickness t (mm)	Kg/m	cm^2	cm^4	cm	cm^3	cm^3	cm^4	cm^3	m^2/m
88.9	2.5	5.33	6.79	63.4	3.06	14.3	18.7	127	28.5	0.279
	3.0	6.36	8.1	74.8	3.04	16.8	22.1	150	33.6	0.279
	3.2	6.76	8.62	79.2	3.03	17.8	23.5	158	35.6	0.279
	3.6	7.57	9.65	87.9	3.02	19.8	26.2	176	39.5	0.279
	4.0	8.38	10.7	96.3	3.00	21.7	28.9	193	43.3	0.279
	5.0	10.35	13.2	116	2.97	26.2	35.2	233	52.4	0.279
	6.0	12.27	15.6	135	2.94	30.4	41.3	270	60.7	0.279
	6.3	12.83	16.3	140	2.93	31.5	43.1	280	63.1	0.279
	8.0	15.96	20.3	168	2.87	37.8	52.5	336	75.6	0.279
	10.0	19.46	24.8	196	2.81	44.1	62.6	392	88.2	0.279
	12.0	22.76	29.0	220	2.75	49.4	71.5	439	98.8	0.279
	14.0	25.86	32.9	239	2.69	53.8	79.5	478	108	0.279
101.6	3.6	8.70	11.1	133	3.47	26.2	34.6	266	52.5	0.319
	5.0	11.91	15.2	177	3.42	34.9	46.7	355	69.9	0.319
	6.3	14.81	18.9	215	3.38	42.3	57.3	430	84.7	0.319
	8.0	18.47	23.5	260	3.32	51.1	70.3	519	102	0.319
	10.0	22.59	28.8	305	3.26	60.1	84.2	611	120	0.319
	12.0	26.52	33.8	345	3.20	67.9	96.9	690	136	0.319
	14.0	30.24	38.5	379	3.14	74.6	108	758	149	0.319
114.3	3.0	8.23	10.5	163	3.94	28.4	37.2	325	56.9	0.359
	3.2	8.77	11.2	172	3.93	30.2	39.5	345	60.4	0.359
	3.6	9.83	12.5	192	3.92	33.6	44.1	384	67.2	0.359
	4.0	10.88	13.9	211	3.90	36.9	48.7	422	73.9	0.359
	5.0	13.48	17.2	257	3.87	45.0	59.8	514	89.9	0.359
	6.0	16.03	20.4	300	3.83	52.5	70.4	600	105	0.359
	6.3	16.78	21.4	313	3.82	54.7	73.6	625	109	0.359
	8.0	20.97	26.7	379	3.77	66.4	90.6	759	133	0.359
	10.0	25.72	32.8	450	3.70	78.7	109	899	157	0.359
	12.0	30.27	38.6	511	3.64	89.5	126	1023	179	0.359
	14.0	34.63	44.1	566	3.58	99	142	1131	198	0.359
	16.0	38.79	49.4	613	3.52	107	156	1225	214	0.359
139.7	4.0	13.39	17.1	393	4.80	56.2	73.7	786	112	0.439
	5.0	16.61	21.2	481	4.77	68.8	90.8	961	138	0.439
	6.0	19.78	25.2	564	4.73	80.8	107	1129	162	0.439
	6.3	20.73	26.4	589	4.72	84.3	112	1177	169	0.439
	8.0	25.98	33.1	720	4.66	103	139	1441	206	0.439
	10.0	31.99	40.7	862	4.60	123	169	1724	247	0.439
	12.0	37.79	48.1	990	4.53	142	196	1980	283	0.439
	14.0	43.40	55.3	1105	4.47	158	222	2211	317	0.439

HOT FINISHED HOLLOW SECTIONS - CIRCULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants		Surface Area Per Metre
			A	I	r	Z	S	J	C	
Outside Diameter (mm)	Thickness t (mm)	Kg/m	cm^2	cm^4	cm	cm^3	cm^3	cm^4	cm^3	m^2/m
168.3	3.2	13.03	16.6	566	5.84	67.2	87.2	1131	134	0.529
	3.6	14.62	18.6	632	5.82	75.1	97.7	1264	150	0.529
	4.0	16.21	20.6	697	5.81	82.8	108	1394	166	0.529
	4.5	18.18	23.2	777	5.79	92.4	121	1554	185	0.529
	5.0	20.14	25.7	856	5.78	102	133	1712	203	0.529
	6.0	24.02	30.6	1009	5.74	120	158	2017	240	0.529
	6.3	25.17	32.1	1053	5.73	125	165	2107	250	0.529
	8.0	31.63	40.3	1297	5.67	154	206	2595	308	0.529
	10.0	39.04	49.7	1564	5.61	186	251	3128	372	0.529
	12.0	46.26	58.9	1810	5.54	215	294	3620	430	0.529
	12.5	48.03	61.2	1868	5.53	222	304	3737	444	0.529
	14.0	53.27	67.9	2036	5.48	242	334	4073	484	0.529
193.7	5.0	23.27	29.6	1320	6.67	136	178	2640	273	0.609
	6.0	27.77	35.4	1560	6.64	161	211	3119	322	0.609
	6.3	29.12	37.1	1630	6.63	168	221	3260	337	0.609
	8.0	36.64	46.7	2016	6.57	208	276	4031	416	0.609
	10.0	45.30	57.7	2442	6.5	252	338	4883	504	0.609
	12.0	53.77	68.5	2839	6.44	293	397	5678	586	0.609
	12.5	55.86	71.2	2934	6.42	303	411	5869	606	0.609
	14.0	62.04	79	3210	6.37	331	453	6419	663	0.609
	16.0	70.12	89.3	3554	6.31	367	507	7109	734	0.609
219.1	5.0	26.40	33.6	1928	7.57	176	229	386	352	0.688
	6.0	31.53	40.2	2282	7.54	208	273	4564	417	0.688
	6.3	33.06	42.1	2386	7.53	218	285	4772	436	0.688
	8.0	41.65	53.1	2960	7.47	270	357	5919	540	0.688
	10.0	51.57	65.7	3598	7.4	328	438	7197	657	0.688
	12.0	61.29	78.1	4200	7.33	383	515	8400	767	0.688
	12.5	63.69	81.1	4345	7.32	397	534	8689	793	0.688
	16.0	80.14	102	5297	7.2	483	661	10590	967	0.688
	20.0	98.20	125	6261	7.07	572	795	12520	1143	0.688
273	5.0	33.05	42.1	3781	9.48	277	359	7562	554	0.858
	6.0	39.51	50.3	4487	9.44	329	428	8974	657	0.858
	6.3	41.44	52.8	4696	9.43	344	448	9392	688	0.858
	8.0	52.28	66.6	5852	9.37	429	562	11700	857	0.858
	10.0	64.86	82.6	7154	9.31	524	692	14310	1048	0.858
	12.0	77.24	98.4	8396	9.24	615	818	16790	1230	0.858
	12.5	80.30	102	8697	9.22	637	849	17400	1274	0.858
	14.0	89.42	114	9580	9.17	702	940	19160	1404	0.858
	14.2	90.63	115	9695	9.16	710	952	19390	1421	0.858
	16.0	101.41	129	10710	9.1	784	1058	21410	1569	0.858
	20.0	124.79	159	12800	8.97	938	1283	25600	1875	0.858
	25.0	152.90	195	15130	8.81	1108	1543	30250	2216	0.858

HOT FINISHED HOLLOW SECTIONS - CIRCULAR



Standard Sectional Dimension		Unit Weight	Sectional Area	Moment of Inertia	Radius Of Gyration	Elastic Modulus	Plastic Modulus	Torsional Constants		Surface Area Per Metre
			A	I	r	Z	S	J	C	
Outside Diameter (mm)	Thickness t (mm)	Kg/m	cm^2	cm^4	cm	cm^3	cm^3	cm^4	cm^3	m^2/m
323.9	5.0	39.32	50.1	6369	11.3	393	509	12740	787	1.02
	6.0	47.04	59.9	7572	11.2	468	606	15150	935	1.02
	6.3	49.34	62.9	7929	11.2	490	636	15860	979	1.02
	8.0	62.32	79.4	9910	11.2	612	799	19820	1224	1.02
	10.0	77.41	98.6	12160	11.1	751	986	24320	1501	1.02
	12.0	92.30	118	14320	11	884	1168	28640	1768	1.02
	12.5	95.99	122	14850	11	917	1213	29690	1833	1.02
	14.0	107.00	136	16400	11	1012	1345	32790	2025	1.02
	14.2	108.45	138	16600	11	1025	1363	33200	2050	1.02
	16.0	121.49	155	18390	10.9	1136	1518	36780	2271	1.02
355.6	6.0	51.73	65.9	10070	12.4	566	733	20140	1133	1.12
	6.3	54.27	69.1	10550	12.4	593	769	21090	1186	1.12
	8.0	68.58	87.4	13200	12.3	742	967	26400	1485	1.12
	10.0	85.23	109	16220	12.2	912	1195	32450	1825	1.12
	12.0	101.68	130	19140	12.2	1076	1417	38280	2153	1.12
	12.5	105.77	135	19850	12.1	1117	1472	39700	2233	1.12
	14.0	117.94	150	21950	12.1	1235	1635	43900	2469	1.12
	16.0	134.00	171	24460	12	1387	1847	49330	2774	1.12

Grades:
EN 10210 S355J2H