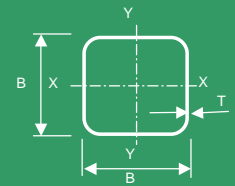


Celsius 355

EN 10210:2006 S355J2H Square Sections



Celsius EN10210: 2006: S355J2H Hot Finished SHS Properties

Size	Thickness	Mass	Sectional area	Moment of inertia	Radius of gyration	Elastic modulus	Plastic modulus	Torsional constants	Superficial area /m	Approx. length /tonne	
B x B mm	T mm	M kg/m	A cm ²	I cm ⁴	i cm	W _{el} cm ³	W _{pl} cm ³	I _t cm ⁴	C _t cm ³	A _s m ² /m	m/t
150 x 150	5.0	22.6	28.7	1002	5.90	134	156	1550	197	0.587	44.3
	6.3	28.1	35.8	1223	5.85	163	192	1909	240	0.584	35.6
	8.0	35.1	44.8	1491	5.77	199	237	2351	291	0.579	28.5
	10.0	43.1	54.9	1773	5.68	236	286	2832	344	0.574	23.2
	12.5	52.7	67.1	2080	5.57	277	342	3375	402	0.568	19.0
	16.0	r	65.2	83.0	2430	5.41	324	411	4026	467	0.559
160 x 160	5.0	24.1	30.7	1225	6.31	153	178	1892	226	0.627	41.5
	6.3	30.1	38.3	1499	6.26	187	220	2333	275	0.624	33.3
	8.0	37.6	48.0	1831	6.18	229	272	2880	335	0.619	26.6
	10.0	46.3	58.9	2186	6.09	273	329	3478	398	0.614	21.6
	12.5	56.6	72.1	2576	5.98	322	395	4158	467	0.608	17.7
	16.0	70.2	89.4	3028	5.82	379	476	4988	546	0.599	14.2
180 x 180	5.0	27.3	34.7	1765	7.13	196	227	2718	290	0.707	36.7
	6.3	34.0	43.3	2168	7.07	241	281	3361	355	0.704	29.4
	8.0	42.7	54.4	2661	7.00	296	349	4162	434	0.699	23.4
	10.0	52.5	66.9	3193	6.91	355	424	5048	518	0.694	19.0
	12.5	64.4	82.1	3790	6.80	421	511	6070	613	0.688	15.5
	16.0	80.2	102	4504	6.64	500	621	7343	724	0.679	12.5
200 x 200	5.0	30.4	38.7	2445	7.95	245	283	3756	362	0.787	32.9
	6.3	38.0	48.4	3011	7.89	301	350	4653	444	0.784	26.3
	8.0	47.7	60.8	3709	7.81	371	436	5778	545	0.779	21.0
	10.0	58.8	74.9	4471	7.72	447	531	7031	655	0.774	17.0
	12.5	72.3	92.1	5336	7.61	534	643	8491	778	0.768	13.8
	16.0	90.3	115	6394	7.46	639	785	10340	927	0.759	11.1
250 x 250	6.3	47.9	61.0	6014	9.93	481	556	9238	712	0.984	20.9
	8.0	60.3	76.8	7455	9.86	596	694	11525	880	0.979	16.6
	10.0	74.5	94.9	9055	9.77	724	851	14106	1065	0.974	13.4
	12.5	91.9	117	10915	9.66	873	1037	17164	1279	0.968	10.9
	16.0	115	147	13267	9.50	1061	1280	21138	1546	0.959	8.67
300 x 300	6.3	57.8	73.6	10547	12.0	703	809	16136	1043	1.18	17.3
	8.0	72.8	92.8	13128	11.9	875	1013	20194	1294	1.18	13.7
	10.0	90.2	115	16026	11.8	1068	1246	24807	1575	1.17	11.1
	12.5	112	142	19442	11.7	1296	1525	30333	1904	1.17	8.97
	16.0	141	179	23850	11.5	1590	1895	37622	2325	1.16	7.12
350 x 350	8.0	85.4	109	21129	13.9	1207	1392	32384	1789	1.38	11.7
	10.0	106	135	25884	13.9	1479	1715	39886	2185	1.37	9.44
	12.5	131	167	31541	13.7	1802	2107	48934	2654	1.37	7.62
	16.0	166	211	38942	13.6	2225	2630	60990	3264	1.36	6.04
400 x 400	8.0	97.9	125	31857	16.0	1593	1830	48695	2363	1.58	10.2
	10.0	122	155	39128	15.9	1956	2260	60092	2895	1.57	8.22
	12.5	151	192	47839	15.8	2392	2782	73906	3530	1.57	6.63
	16.0	191	243	59344	15.6	2967	3484	92442	4362	1.56	5.24
	20.0	#1	235	300	71535	15.4	3577	4247	112489	5237	1.55



Non-regular production sizes

Special production sizes

#1 SAW Process (single longitudinal seam weld, slightly proud)

r External corner radius >2T but <=3T

