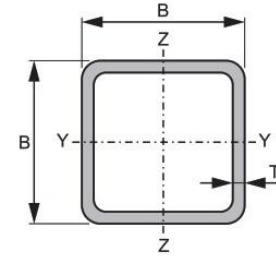


Steel structure calculation table

Square Tubes



Specified outside sizes	Specified thickness	Mass per unit length	Cross-sectional area	Second moment of inertia	Radius of gyration	Elastic section modulus	Plastic section module	Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per ton
B x B	T	M	A	I	i	W_{el}	W_{pl}	I_t	C_t	A_s	
mm	mm	kg/m	cm²	cm⁴	cm	cm³	cm³	cm⁴	cm³	m²/m	m/t
120 x 120	4.0	14.2	18.1	396	4.67	66	79	636	107	0.466	70.6
120 x 120	5.0	17.4	22.4	474	4.60	79	96	777	132	0.463	57.3
120 x 120	6.0	20.6	26.4	543	4.53	90	112	910	155	0.459	48.5
120 x 120	8.0	26.2	33.6	610	4.26	102	141	1156	197	0.446	38.1
120 x 120	10.0	31.6	40.6	663	4.04	111	169	1363	235	0.437	31.6
140 x 140	4.0	16.7	21.3	644	5.49	92	108	1022	148	0.546	60.1
140 x 140	5.0	20.6	26.4	777	5.43	111	133	1254	182	0.543	48.6
140 x 140	6.0	24.4	31.2	897	5.36	128	156	1475	215	0.539	41.0
140 x 140	8.0	31.2	40.0	1043	5.10	149	198	1892	275	0.526	32.0
140 x 140	10.0	37.9	48.6	1166	4.90	167	237	2258	331	0.517	26.4
160 x 160	4.0	19.1	24.5	979	6.31	122	143	1540	194	0.626	52.2
160 x 160	5.0	23.7	30.4	1186	6.25	148	176	1894	240	0.623	42.2
160 x 160	6.0	28.1	36.0	1378	6.18	172	207	2235	284	0.619	35.6
160 x 160	8.0	36.2	46.4	1641	5.94	205	264	2887	366	0.606	27.6
160 x 160	10.0	44.1	56.6	1869	5.75	234	318	3471	443	0.597	22.7
180 x 180	5.0	26.8	34.4	1718	7.07	191	224	2721	306	0.703	37.3
180 x 180	6.0	31.8	40.8	2005	7.01	223	265	3218	362	0.699	31.4
180 x 180	8.0	41.2	52.8	2429	6.78	270	339	4177	470	0.686	24.3
180 x 180	10.0	50.4	64.6	2805	6.59	312	410	5052	571	0.677	19.9
180 x 180	12.0	58.1	74.5	2851	6.19	317	472	5830	659	0.658	17.2
200 x 200	5.0	29.9	38.4	2389	7.89	239	279	3760	380	0.783	33.4
200 x 200	6.0	35.6	45.6	2797	7.83	280	330	4453	451	0.779	28.1
200 x 200	8.0	46.2	59.2	3433	7.61	343	424	5803	586	0.766	21.6
200 x 200	10.0	56.6	72.6	4007	7.43	401	515	7048	715	0.757	17.7
200 x 200	12.0	65.6	84.1	4172	7.04	417	594	8190	830	0.738	15.3
220 x 220	5.0	33.0	42.4	3215	8.71	292	340	5034	462	0.863	30.3
220 x 220	6.0	39.3	50.4	3774	8.65	343	403	5970	549	0.859	25.4
220 x 220	8.0	51.2	65.6	4678	8.44	425	519	7801	716	0.846	19.5
220 x 220	10.0	62.8	80.6	5506	8.27	501	631	9506	875	0.837	15.9
220 x 220	12.0	73.1	93.7	5841	7.90	531	730	11104	1020	0.818	13.7
250 x 250	6.0	45.0	57.6	5627	9.88	450	525	8836	714	0.979	22.2
250 x 250	8.0	58.7	75.2	7054	9.68	564	679	11582	934	0.966	17.0
250 x 250	10.0	72.2	92.6	8381	9.52	670	829	14166	1145	0.957	13.9
250 x 250	12.0	84.3	108.1	9082	9.17	727	962	16639	1341	0.938	11.9
250 x 250	14.0	96.5	123.7	9868	8.93	789	1095	18918	1530	0.928	10.4
250 x 250	16.0	108.2	138.8	10456	8.68	836	1223	21028	1708	0.918	9.2
280 x 280	6.0	50.6	64.8	8002	11.11	572	664	12496	900	1.099	19.8
280 x 280	8.0	66.2	84.8	10117	10.92	723	861	16418	1180	1.086	15.1
280 x 280	10.0	81.6	104.6	12105	10.76	865	1053	20138	1451	1.077	12.3
280 x 280	12.0	95.5	122.5	13324	10.43	952	1226	23745	1705	1.058	10.5
280 x 280	14.0	109.6	140.5	14630	10.20	1045	1399	27103	1952	1.048	9.1
280 x 280	16.0	123.2	158.0	15678	9.96	1120	1565	30258	2186	1.038	8.1
300 x 300	6.0	54.3	69.6	9908	11.93	661	765	15425	1036	1.179	18.4
300 x 300	8.0	71.2	91.2	12584	11.74	839	994	20292	1361	1.166	14.1
300 x 300	10.0	87.8	112.6	15112	11.59	1007	1218	24928	1675	1.157	11.4
300 x 300	12.0	103.0	132.1	16771	11.27	1118	1420	29451	1972	1.138	9.7
300 x 300	14.0	118.4	151.7	18520	11.05	1235	1622	33684	2261	1.128	8.4
300 x 300	16.0	133.2	170.8	19966	10.81	1331	1817	37691	2537	1.118	7.5
320 x 320	6.0	58.1	74.4	12095	12.75	756	874	18780	1182	1.259	17.2
320 x 320	8.0	76.2	97.6	15419	12.57	964	1137	24732	1554	1.246	13.1
320 x 320	10.0	94.0	120.6	18576	12.41	1161	1394	30421	1915	1.237	10.6
320 x 320	12.0	110.5	141.7	20759	12.11	1297	1628	35998	2258	1.218	9.1
320 x 320	14.0	127.1	162.9	23033	11.89	1440	1862	41242	2592	1.208	7.9
320 x 320	16.0	143.2	183.6	24959	11.66	1560	2088	46236	2913	1.198	7.0