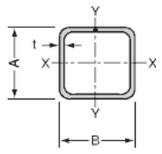
Section properties Square : 50 mm x 50 mm to 120 mm x 120 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
50 x 50	1.6	2.38	3.032	11.7	11.7	1.96	1.96	4.68	4.68	5.46	5.46	18.5	7.04	0.195	420
	2.0	2.93	3.737	14.1	14.1	1.95	1.95	5.66	5.66	6.66	6.66	22.6	8.51	0.193	341
	2.3	3.34	4.252	15.9	15.9	1.93	1.93	6.34	6.34	7.52	7.52	25.6	9.55	0.192	300
	2.5	3.60	4.589	16.9	16.9	1.92	1.92	6.78	6.78	8.07	8.07	27.5	10.2	0.191	278
	3.0	4.25	5.408	19.5	19.5	1.90	1.90	7.79	7.79	9.39	9.39	32.1	11.8	0.190	236
	3.2	4.50	5.727	20.4	20.4	1.89	1.89	8.16	8.16	9.89	9.89	33.9	12.3	0.189	222
	4.0	5.45	6.948	23.7	23.7	1.85	1.85	9.49	9.49	11.7	11.7	40.4	14.4	0.186	183
	4.5	6.02	7.669	25.5	25.5	1.82	1.82	10.2	10.2	12.8	12.8	44.1	15.6	0.185	166
	5.0	6.56	8.356	27.0	27.0	1.80	1.80	10.8	10.8	13.7	13.7	47.5	16.6	0.183	152
	6.0	7.56	9.633	29.5	29.5	1.75	1.75	11.8	11.8	15.3	15.3	53.2	18.2	0.179	132
60 x 60	1.6	2.88	3.672	20.7	20.7	2.37	2.37	6.89	6.89	7.99	7.99	32.4	10.4	0.235	347
	2.0	3.56	4.537	25.1	25.1	2.35	2.35	8.38	8.38	9.79	9.79	39.8	12.6	0.233	281
	2.3	4.06	5.172	28.3	28.3	2.34	2.34	9.44	9.44	11.1	11.1	45.2	14.2	0.232	246
	2.5	4.39	5.589	30.3	30.3	2.33	2.33	10.1	10.1	11.9	11.9	48.7	15.2	0.231	228
	3.0	5.19	6.608	35.1	35.1	2.31	2.31	11.7	11.7	14.0	14.0	57.1	17.7	0.230	193
	3.2	5.50	7.007	36.9	36.9	2.30	2.30	12.3	12.3	14.7	14.7	60.3	18.6	0.229	182
	4.0	6.71	8.548	43.6	43.6	2.26	2.26	14.5	14.5	17.6	17.6	72.6	22.0	0.226	149
	4.5	7.43	9.469	47.2	47.2	2.23	2.23	15.7	15.7	19.3	19.3	79.8	23.9	0.225	135
	5.0	8.13	10.36	50.5	50.5	2.21	2.21	16.8	16.8	20.9	20.9	86.4	25.6	0.223	123
	6.0	9.45	12.03	56.1	56.1	2.16	2.16	18.7	18.7	23.7	23.7	98.4	28.6	0.219	106
75 x 75	1.6	3.64	4.632	41.3	41.3	2.99	2.99	11.0	11.0	12.7	12.7	64.1	16.5	0.295	275
	2.0	4.50	5.737	50.5	50.5	2.97	2.97	13.5	13.5	15.6	15.6	79.0	20.2	0.293	222
	2.3	5.14	6.552	57.1	57.1	2.95	2.95	15.2	15.2	17.7	17.7	90.0	22.9	0.292	194
	2.5	5.56	7.089	61.4	61.4	2.94	2.94	16.4	16.4	19.1	19.1	97.1	24.6	0.291	180
	3.0	6.60	8.408	71.6	71.6	2.92	2.92	19.1	19.1	22.5	22.5	115	28.7	0.290	152
	3.2	7.01	8.927	75.5	75.5	2.91	2.91	20.1	20.1	23.8	23.8	121	30.3	0.289	143
	4.0	8.59	10.95	90.2	90.2	2.87	2.87	24.1	24.1	28.8	28.8	147	36.3	0.286	116
	4.5	9.55	12.17	98.6	98.6	2.85	2.85	26.3	26.3	31.7	31.7	163	39.7	0.285	105
	5.0	10.5	13.36	106	106	2.82	2.82	28.4	28.4	34.5	34.5	177	42.9	0.283	95.4
	6.0	12.3	15.63	120	120	2.77	2.77	32.0	32.0	39.6	39.6	205	48.7	0.279	81.5
	6.3	12.5	15.95	119	119	2.73	2.73	31.8	31.8	39.7	39.7	211	49.7	0.273	79.9
	8.0	15.1	19.24	134	134	2.64	2.64	35.7	35.7	46.1	46.1	247	56.7	0.266	66.2
80 x 80	2.3	5.50	7.012	69.9	69.9	3.16	3.16	17.5	17.5	20.3	20.3	110	26.2	0.312	182
	2.5	5.96	7.589	75.1	75.1	3.15	3.15	18.8	18.8	21.9	21.9	119	28.2	0.311	168
	3.0	7.07	9.008	87.8	87.8	3.12	3.12	22.0	22.0	25.8	25.8	140	33.0	0.310	141
	3.2	7.51	9.567	92.7	92.7	3.11	3.11	23.2	23.2	27.3	27.3	148	34.9	0.309	133
	4.0	9.22	11.75	111	111	3.07	3.07	27.8	27.8	33.1	33.1	180	41.8	0.306	108
	4.5	10.3	13.07	122	122	3.05	3.05	30.4	30.4	36.5	36.5	200	45.9	0.305	97.5
	5.0	11.3	14.36	131	131	3.03	3.03	32.9	32.9	39.7	39.7	218	49.7	0.303	88.7
	6.0	13.2	16.83	149	149	2.98	2.98	37.3	37.3	45.8	45.8	252	56.6	0.299	75.7
	6.3	13.5	17.21	149	149	2.94	2.94	37.1	37.1	46.1	46.1	261	57.9	0.293	74.0
	8.0	16.4	20.84	168	168	2.84	2.84	42.1	42.1	53.9	53.9	307	66.6	0.286	61.1
90 x 90	2.3	6.23	7.932	101	101	3.56	3.56	22.4	22.4	25.9	25.9	158	33.6	0.352	161
	2.5	6.74	8.589	109	109	3.56	3.56	24.1	24.1	28.0	28.0	170	36.2	0.351	148
	3.0	8.01	10.21	127	127	3.53	3.53	28.3	28.3	33.0	33.0	201	42.5	0.350	125
	3.2	8.51	10.85	135	135	3.52	3.52	29.9	29.9	35.0	35.0	214	44.9	0.349	117
	4.0	10.5	13.35	162	162	3.48	3.48	36.0	36.0	42.6	42.6	261	54.2	0.346	95.4
	4.5	11.7	14.87	178	178	3.46	3.46	39.5	39.5	47.1	47.1	289	59.6	0.345	85.7
	5.0	12.8	16.36	193	193	3.43	3.43	42.9	42.9	51.4	51.4	316	64.7	0.343	77.9
	6.0	15.1	19.23	220	220	3.39	3.39	49.0	49.0	59.5	59.5	368	74.2	0.339	66.2
	6.3	15.5	19.73	221	221	3.35	3.35	49.1	49.1	60.3	60.3	382	76.2	0.333	64.6
100 x 100	1.6	4.89	6.232	100	100	4.01	4.01	20.0	20.0	22.9	22.9	154	30.0	0.395	204
	2.0	6.07	7.737	123	123	3.99	3.99	24.6	24.6	28.3	28.3	191	36.9	0.393	165
	2.3	6.95	8.852	140	140	3.97	3.97	27.9	27.9	32.3	32.3	217	42.0	0.392	144
	2.5	7.53	9.589	151	151	3.96	3.96	30.1	30.1	34.9	34.9	235	45.2	0.391	133
	3.0	8.96	11.41	177	177	3.94	3.94	35.4	35.4	41.2	41.2	279	53.2	0.390	112
	3.2	9.52	12.13	187	187	3.93	3.93	37.5	37.5	43.7	43.7	296	56.3	0.389	105
	4.0	11.7	14.95	226	226	3.89	3.89	45.3	45.3	53.3	53.3	362	68.1	0.386	85.2
	4.5	13.1	16.67	249	249	3.87	3.87	49.9	49.9	59.0	59.0	402	75.1	0.385	76.4
	5.0	14.4	18.36	271	271	3.84	3.84	54.2	54.2	64.6	64.6	441	81.7	0.383	69.4
	6.0	17.0	21.63	311	311	3.79	3.79	62.3	62.3	75.1	75.1	514	94.1	0.379	58.9
	6.3	17.5	22.25	314	314	3.76	3.76	62.8	62.8	76.4	76.4	536	97.0	0.373	57.3
	8.0	21.4	27.24	366	366	3.67	3.67	73.2	73.2	91.1	91.1	645	114	0.366	46.8
	9.0	23.5	29.98	391	391	3.61	3.61	78.1	78.1	98.6	98.6	700	123	0.361	42.5
	10.0	25.6	32.57	411	411	3.55	3.55	82.2	82.2	105	105	750	130	0.357	39.1
	12.0	28.3	36.06	408	408	3.36	3.36	81.6	81.6	110	110	794	136	0.338	35.3
120 x 120	6.0	20.7	26.43	562	562	4.61	4.61	93.7	93.7	112	112	913	141	0.459	48.2
	6.3	21.4	27.29	572	572	4.58	4.58	95.3	95.3	114	114	955	146	0.453	46.7
	8.0	26.4	33.64	677	677	4.49	4.49	113	113	138	138	1,160	175	0.446	37.9
	9.0	29.2	37.18	730	730	4.43	4.43	122	122	150	150	1,270	189	0.441	34.3
	10.0	31.8	40.57	777	777	4.38	4.38	129	129	162	162	1,380	203	0.437	31.4
	12.0	35.8	45.66	806	806	4.20	4.20	134	134	174	174	1,520	219	0.418	27.9

NOTE
The calculation of section properties are based on the following corner geometry, as standard.

Thickness(T)	Inside corner profile	Outside corner profile
6mm and less	1.0T	2.0T
more than 6mm and less than or equal to 10mm	1.5T	2.5T
more than 10mm	2.0T	3.0T



Section properties Square : 125 mm x 125 mm to 350 mm x 350 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
125 x 125	2.3	8.75	11.15	278	278	4.99	4.99	44.5	44.5	51.1	51.1	430	66.8	0.492	114
	2.5	9.49	12.09	300	300	4.98	4.98	48.1	48.1	55.3	55.3	465	72.1	0.491	105
	3.0	11.3	14.41	355	355	4.96	4.96	56.7	56.7	65.6	65.6	553	85.1	0.490	88.4
	3.2	12.0	15.33	376	376	4.95	4.95	60.1	60.1	69.6	69.6	587	90.2	0.489	83.1
	4.0	14.9	18.95	457	457	4.91	4.91	73.2	73.2	85.3	85.3	722	110	0.486	67.2
	4.5	16.6	21.17	506	506	4.89	4.89	80.9	80.9	94.8	94.8	804	122	0.485	60.2
	5.0	18.3	23.36	553	553	4.86	4.86	88.4	88.4	104	104	884	133	0.483	54.5
	6.0	21.7	27.63	641	641	4.82	4.82	103	103	122	122	1,040	154	0.479	46.1
	6.3	22.4	28.55	653	653	4.78	4.78	104	104	125	125	1,090	160	0.473	44.6
	8.0	27.7	35.24	775	775	4.69	4.69	124	124	151	151	1,330	192	0.466	36.1
	9.0	30.6	38.98	838	838	4.64	4.64	134	134	165	165	1,450	208	0.461	32.7
	10.0	33.4	42.57	893	893	4.58	4.58	143	143	178	178	1,570	223	0.457	29.9
	12.0	37.7	48.06	934	934	4.41	4.41	149	149	192	192	1,750	243	0.438	26.5
	12.5	38.9	49.54	949	949	4.38	4.38	152	152	197	197	1,790	248	0.436	25.7
150 x 150	3.2	14.5	18.53	661	661	5.97	5.97	88.1	88.1	101	101	1,030	132	0.589	68.8
	4.0	18.0	22.95	808	808	5.93	5.93	108	108	125	125	1,260	162	0.586	55.5
	4.5	20.1	25.67	896	896	5.91	5.91	120	120	139	139	1,410	180	0.585	49.6
	5.0	22.3	28.36	982	982	5.89	5.89	131	131	153	153	1,550	197	0.583	44.9
	6.0	26.4	33.63	1,150	1,150	5.84	5.84	153	153	180	180	1,830	230	0.579	37.9
	6.3	27.4	34.85	1,170	1,170	5.80	5.80	156	156	185	185	1,920	239	0.573	36.6
	8.0	33.9	43.24	1,410	1,410	5.71	5.71	188	188	226	226	2,360	289	0.566	29.5
	9.0	37.7	47.98	1,540	1,540	5.66	5.66	205	205	248	248	2,610	316	0.561	26.6
	10.0	41.3	52.57	1,650	1,650	5.61	5.61	220	220	269	269	2,840	341	0.557	24.2
	12.0	47.1	60.06	1,780	1,780	5.44	5.44	237	237	298	298	3,230	380	0.538	21.2
	12.5	48.7	62.04	1,820	1,820	5.41	5.41	242	242	306	306	3,320	389	0.536	20.5
175 x 175	4.5	23.7	30.17	1,450	1,450	6.93	6.93	166	166	192	192	2,260	249	0.685	42.2
	5.0	26.2	33.36	1,590	1,590	6.91	6.91	182	182	211	211	2,500	273	0.683	38.2
	6.0	31.1	39.63	1,860	1,860	6.86	6.86	213	213	249	249	2,950	320	0.679	32.1
	6.3	32.3	41.15	1,920	1,920	6.83	6.83	219	219	257	257	3,100	333	0.673	31.0
	8.0	40.2	51.24	2,330	2,330	6.74	6.74	266	266	316	316	3,840	406	0.666	24.9
	9.0	44.7	56.98	2,550	2,550	6.68	6.68	291	291	348	348	4,250	446	0.661	22.4
	10.0	49.1	62.57	2,750	2,750	6.63	6.63	314	314	379	379	4,640	484	0.657	20.4
	12.0	56.6	72.06	3,020	3,020	6.47	6.47	345	345	425	425	5,350	547	0.638	17.7
	12.5	58.5	74.54	3,090	3,090	6.44	6.44	354	354	438	438	5,520	562	0.636	17.1
200 x 200	4.5	27.2	34.67	2,190	2,190	7.95	7.95	219	219	253	253	3,410	329	0.785	36.7
	5.0	30.1	38.36	2,410	2,410	7.93	7.93	241	241	279	279	3,760	362	0.783	33.2
	6.0	35.8	45.63	2,830	2,830	7.88	7.88	283	283	330	330	4,460	426	0.779	27.9
	6.3	37.2	47.45	2,920	2,920	7.85	7.85	292	292	341	341	4,680	444	0.773	26.8
	8.0	46.5	59.24	3,570	3,570	7.76	7.76	357	357	421	421	5,820	544	0.766	21.5
	9.0	51.8	65.98	3,920	3,920	7.71	7.71	392	392	465	465	6,450	599	0.761	19.3
	10.0	57.0	72.57	4,250	4,250	7.65	7.65	425	425	508	508	7,070	652	0.757	17.6
	12.0	66.0	84.06	4,730	4,730	7.50	7.50	473	473	576	576	8,230	743	0.738	15.2
	12.5	68.3	87.04	4,860	4,860	7.47	7.47	486	486	594	594	8,500	766	0.736	14.6
	16.0	83.8	106.8	5,620	5,620	7.26	7.26	562	562	706	706	10,200	901	0.718	11.9
250 x 250	6.0	45.2	57.63	5,670	5,670	9.92	9.92	454	454	524	524	8,840	681	0.979	22.1
	6.3	47.1	60.05	5,870	5,870	9.89	9.89	470	470	544	544	9,290	711	0.973	21.2
	8.0	59.1	75.24	7,230	7,230	9.80	9.80	578	578	676	676	11,600	878	0.966	16.9
	9.0	65.9	83.98	7,980	7,980	9.75	9.75	639	639	750	750	12,900	972	0.961	15.2
	10.0	72.7	92.57	8,710	8,710	9.70	9.70	697	697	822	822	14,200	1,060	0.957	13.8
	12.0	84.8	108.1	9,860	9,860	9.55	9.55	789	789	944	944	16,700	1,230	0.938	11.8
	12.5	88.0	112.0	10,200	10,200	9.52	9.52	813	813	975	975	17,300	1,270	0.936	11.4
	16.0	109	138.8	12,000	12,000	9.32	9.32	964	964	1,180	1,180	21,100	1,520	0.918	9.18
	19.0	126	160.1	13,400	13,400	9.13	9.13	1,070	1,070	1,330	1,330	24,000	1,710	0.902	7.96
300 x 300	6.0	54.7	69.63	9,960	9,960	12.0	12.0	664	664	764	764	15,400	997	1.18	18.3
	6.3	57.0	72.65	10,300	10,300	11.9	11.9	689	689	795	795	16,200	1,040	1.17	17.5
	8.0	71.6	91.24	12,800	12,800	11.8	11.8	853	853	991	991	20,300	1,290	1.17	14.0
	9.0	80.1	102.0	14,200	14,200	11.8	11.8	946	946	1,100	1,100	22,700	1,430	1.16	12.5
	10.0	88.4	112.6	15,500	15,500	11.7	11.7	1,030	1,030	1,210	1,210	25,000	1,570	1.16	11.3
	12.0	104	132.1	17,800	17,800	11.6	11.6	1,180	1,180	1,400	1,400	29,500	1,830	1.14	9.65
	12.5	108	137.0	18,300	18,300	11.6	11.6	1,220	1,220	1,450	1,450	30,600	1,890	1.14	9.30
	16.0	134	170.8	22,100	22,100	11.4	11.4	1,470	1,470	1,770	1,770	37,800	2,300	1.12	7.46
	19.0	155	198.1	24,800	24,800	11.2	11.2	1,650	1,650	2,020	2,020	43,500	2,610	1.10	6.43
350 x 350	9.0	94.2	120.0	23,000	23,000	13.8	13.8	1,310	1,310	1,520	1,520	36,400	1,990	1.36	10.6
	10.0	104	132.6	25,200	25,200	13.8	13.8	1,440	1,440	1,670	1,670	40,100	2,180	1.36	9.61
	12.0	123	156.1	29,100	29,100	13.6	13.6	1,660	1,660	1,950	1,950	47,600	2,550	1.34	8.16
	12.5	127	162.0	30,000	30,000	13.6	13.6	1,720	1,720	2,020	2,020	49,400	2,640	1.34	7.86
	16.0	159	202.8	36,500	36,500	13.4	13.4	2,090	2,090	2,490	2,490	61,500	3,240	1.32	6.28
	19.0	185	236.1	41,400	41,400	13.2	13.2	2,370	2,370	2,860	2,860	71,100	3,700	1.30	5.40
	20.0	194	246.8	42,900	42,900	13.2	13.2	2,450	2,450	2,970	2,970	74,200	3,850	1.30	5.16
	22.0	210	267.9	45,700	45,700	13.1	13.1	2,610	2,610	3,190	3,190	80,100	4,120	1.29	4.76

Section properties Square : 400 mm x 400 mm to 550 mm x 550 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
400 x 400	9.0	108	138.0	34,800	34,800	15.9	15.9	1,740	1,740	2,010	2,010	54,700	2,630	1.56	9.23
	10.0	120	152.6	38,200	38,200	15.8	15.8	1,910	1,910	2,210	2,210	60,400	2,890	1.56	8.35
	12.0	141	180.1	44,300	44,300	15.7	15.7	2,220	2,220	2,590	2,590	71,800	3,400	1.54	7.07
	12.5	147	187.0	45,900	45,900	15.7	15.7	2,290	2,290	2,680	2,680	74,600	3,520	1.54	6.81
	16.0	184	234.8	56,200	56,200	15.5	15.5	2,810	2,810	3,320	3,320	93,300	4,340	1.52	5.43
	19.0	215	274.1	64,100	64,100	15.3	15.3	3,210	3,210	3,830	3,830	108,000	4,980	1.50	4.65
	20.0	225	286.8	66,600	66,600	15.2	15.2	3,330	3,330	3,990	3,990	113,000	5,190	1.50	4.44
	22.0	245	311.9	71,300	71,300	15.1	15.1	3,570	3,570	4,310	4,310	123,000	5,580	1.49	4.08
450 x 450	9.0	122	156.0	50,100	50,100	17.9	17.9	2,230	2,230	2,560	2,560	78,400	3,360	1.76	8.17
	10.0	136	172.6	55,100	55,100	17.9	17.9	2,450	2,450	2,830	2,830	86,600	3,700	1.76	7.38
	12.0	160	204.1	64,200	64,200	17.7	17.7	2,850	2,850	3,320	3,320	103,000	4,360	1.74	6.24
	12.5	167	212.0	66,500	66,500	17.7	17.7	2,950	2,950	3,440	3,440	107,000	4,520	1.74	6.01
	16.0	209	266.8	81,800	81,800	17.5	17.5	3,640	3,640	4,280	4,280	134,000	5,600	1.72	4.78
	19.0	245	312.1	93,900	93,900	17.3	17.3	4,170	4,170	4,950	4,950	157,000	6,450	1.70	4.08
	20.0	257	326.8	97,700	97,700	17.3	17.3	4,340	4,340	5,170	5,170	164,000	6,730	1.70	3.90
	22.0	279	355.9	105,000	105,000	17.2	17.2	4,660	4,660	5,590	5,590	178,000	7,260	1.70	3.58
500 x 500	9.0	137	174.0	69,300	69,300	20.0	20.0	2,770	2,770	3,190	3,190	108,000	4,190	1.96	7.32
	10.0	151	192.6	76,300	76,300	19.9	19.9	3,050	3,050	3,520	3,520	119,000	4,610	1.96	6.62
	12.0	179	228.1	89,200	89,200	19.8	19.8	3,570	3,570	4,130	4,130	142,000	5,440	1.94	5.59
	12.5	186	237.0	92,400	92,400	19.7	19.7	3,700	3,700	4,290	4,290	148,000	5,640	1.94	5.37
	16.0	235	298.8	114,000	114,000	19.6	19.6	4,570	4,570	5,350	5,350	186,000	7,010	1.92	4.26
	19.0	275	350.1	132,000	132,000	19.4	19.4	5,260	5,260	6,210	6,210	218,000	8,120	1.90	3.64
	20.0	288	366.8	137,000	137,000	19.3	19.3	5,480	5,480	6,490	6,490	228,000	8,470	1.90	3.47
	22.0	314	399.9	148,000	148,000	19.2	19.2	5,910	5,910	7,030	7,030	248,000	9,150	1.89	3.19
550 x 550	12.0	198	252.1	120,000	120,000	21.8	21.8	4,360	4,360	5,040	5,040	191,000	6,640	2.14	5.05
	12.5	206	262.0	124,000	124,000	21.8	21.8	4,520	4,520	5,230	5,230	198,000	6,890	2.14	4.86
	16.0	260	330.8	154,000	154,000	21.6	21.6	5,610	5,610	6,540	6,540	250,000	8,590	2.12	3.85
	19.0	305	388.1	178,000	178,000	21.4	21.4	6,480	6,480	7,610	7,610	292,000	9,970	2.10	3.28
	20.0	319	406.8	186,000	186,000	21.4	21.4	6,760	6,760	7,960	7,960	306,000	10,400	2.10	3.13
	22.0	348	443.9	201,000	201,000	21.3	21.3	7,300	7,300	8,640	8,640	333,000	11,300	2.09	2.87

Section properties Rectangular : 60 mm x 30 mm to 75 mm x 50 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
60 x 30	1.6	2.13	2.712	12.5	4.25	2.15	1.25	4.16	2.83	5.19	3.20	10.3	4.90	0.175	470
	2.0	2.62	3.337	15.1	5.08	2.12	1.23	5.02	3.39	6.31	3.89	12.6	5.88	0.173	382
	2.3	2.98	3.792	16.8	5.65	2.11	1.22	5.61	3.76	7.11	4.37	14.1	6.56	0.172	336
	2.5	3.21	4.089	17.9	6.00	2.09	1.21	5.98	4.00	7.62	4.67	15.1	6.98	0.171	312
	3.0	3.77	4.808	20.5	6.80	2.07	1.19	6.84	4.53	8.82	5.39	17.5	7.95	0.170	265
	3.2	3.99	5.087	21.5	7.08	2.05	1.18	7.15	4.72	9.27	5.66	18.4	8.30	0.169	250
	4.0	4.83	6.148	24.7	8.06	2.01	1.14	8.25	5.37	10.9	6.62	21.5	9.52	0.166	207
	4.5	5.31	6.769	26.4	8.53	1.98	1.12	8.80	5.69	11.8	7.14	23.1	10.1	0.165	188
60 x 40	1.6	2.38	3.032	15.2	8.16	2.24	1.64	5.07	4.08	6.12	4.64	16.9	6.72	0.195	420
	2.0	2.93	3.737	18.4	9.83	2.22	1.62	6.14	4.92	7.47	5.65	20.7	8.12	0.193	341
	2.3	3.34	4.252	20.7	11.0	2.20	1.61	6.88	5.50	8.44	6.38	23.4	9.10	0.192	300
	2.5	3.60	4.589	22.1	11.7	2.19	1.60	7.36	5.87	9.06	6.84	25.1	9.72	0.191	278
	3.0	4.25	5.408	25.4	13.4	2.17	1.58	8.46	6.72	10.5	7.94	29.3	11.2	0.190	236
	3.2	4.50	5.727	26.6	14.1	2.16	1.57	8.87	7.03	11.1	8.36	30.9	11.7	0.189	222
	4.0	5.45	6.948	31.0	16.3	2.11	1.53	10.3	8.14	13.2	9.89	36.7	13.7	0.186	183
	4.5	6.02	7.669	33.3	17.4	2.09	1.51	11.1	8.72	14.3	10.7	39.9	14.7	0.185	166
70 x 40	1.6	2.63	3.352	22.1	9.34	2.57	1.67	6.32	4.67	7.72	5.25	21.0	7.90	0.215	380
	2.0	3.25	4.137	26.9	11.3	2.55	1.65	7.67	5.64	9.44	6.41	25.7	9.56	0.213	308
	2.3	3.70	4.712	30.2	12.6	2.53	1.64	8.63	6.32	10.7	7.24	29.1	10.7	0.212	270
	2.5	3.99	5.089	32.3	13.5	2.52	1.63	9.24	6.75	11.5	7.78	31.3	11.5	0.211	250
	3.0	4.72	6.008	37.3	15.5	2.49	1.61	10.7	7.75	13.4	9.05	36.5	13.2	0.210	212
	3.2	5.00	6.367	39.2	16.2	2.48	1.60	11.2	8.12	14.1	9.54	38.5	13.9	0.209	200
	4.0	6.08	7.748	46.0	18.9	2.44	1.56	13.1	9.44	16.8	11.3	45.8	16.2	0.206	164
	4.5	6.73	8.569	49.7	20.3	2.41	1.54	14.2	10.1	18.4	12.3	50.0	17.5	0.205	149
75 x 45	1.6	2.88	3.672	28.4	12.9	2.78	1.88	7.56	5.75	9.16	6.46	28.2	9.63	0.235	347
	2.0	3.56	4.537	34.5	15.7	2.76	1.86	9.20	6.96	11.2	7.90	34.6	11.7	0.233	281
	2.3	4.06	5.172	38.9	17.6	2.74	1.84	10.4	7.82	12.7	8.94	39.3	13.2	0.232	246
	2.5	4.39	5.589	41.7	18.8	2.73	1.84	11.1	8.37	13.7	9.61	42.3	14.1	0.231	228
	3.0	5.19	6.608	48.3	21.7	2.70	1.81	12.9	9.66	16.0	11.2	49.4	16.3	0.230	193
	3.2	5.50	7.007	50.8	22.8	2.69	1.80	13.5	10.1	16.9	11.8	52.2	17.2	0.229	182
	4.0	6.71	8.548	59.9	26.7	2.65	1.77	16.0	11.9	20.2	14.1	62.6	20.2	0.226	149
	4.5	7.43	9.469	65.0	28.9	2.62	1.75	17.3	12.8	22.2	15.5	68.5	21.9	0.225	135
	5.0	8.13	10.36	69.6	30.8	2.59	1.72	18.6	13.7	24.0	16.7	74.0	23.4	0.223	123
	6.0	9.45	12.03	77.3	33.9	2.53	1.68	20.6	15.1	27.2	18.8	83.7	26.0	0.219	106
75 x 50	2.3	4.24	5.402	41.9	22.4	2.79	2.04	11.2	8.96	13.6	10.3	46.9	14.8	0.242	236
	2.5	4.58	5.839	45.0	24.0	2.77	2.03	12.0	9.60	14.6	11.0	50.5	15.9	0.241	218
	3.0	5.42	6.908	52.2	27.8	2.75	2.00	13.9	11.1	17.1	12.9	59.3	18.4	0.240	184
	3.2	5.75	7.327	54.9	29.2	2.74	2.00	14.6	11.7	18.0	13.6	62.6	19.3	0.239	174
	4.0	7.02	8.948	65.0	34.3	2.69	1.96	17.3	13.7	21.7	16.3	75.3	22.9	0.236	142
	4.5	7.79	9.919	70.6	37.2	2.67	1.94	18.8	14.9	23.8	17.9	82.7	24.9	0.235	128
	5.0	8.52	10.86	75.7	39.7	2.64	1.91	20.2	15.9	25.7	19.3	89.5	26.7	0.233	117
	6.0	9.92	12.63	84.5	44.1	2.59	1.87	22.5	17.6	29.2	21.9	102	29.8	0.229	101

Section properties Rectangular : 100 mm x 40 mm to 150 mm x 80 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
100 x 40	1.6	3.39	4,312	53.6	12.9	3.52	1.73	10.7	6.44	13.5	7.10	33.9	11.4	0.28	295
	2.0	4.19	5,337	65.4	15.6	3.50	1.71	13.1	7.81	16.5	8.69	41.5	13.9	0.27	239
	2.3	4.78	6.092	73.9	17.5	3.48	1.70	14.8	8.77	18.8	9.85	47.0	15.6	0.272	209
	2.5	5.17	6.589	79.3	18.8	3.47	1.69	15.9	9.39	20.2	10.6	50.5	16.8	0.271	193
	3.0	6.13	7.808	92.4	21.7	3.44	1.67	18.5	10.8	23.7	12.4	59.0	19.4	0.270	163
	3.2	6.51	8.287	97.3	22.8	3.43	1.66	19.5	11.4	25.1	13.1	62.3	20.4	0.269	154
100 x 50	1.6	3.64	4.632	61.3	21.1	3.64	2.13	12.3	8.43	15.0	9.33	50.1	14.5	0.295	275
	2.0	4.50	5.737	75.0	25.7	3.62	2.12	15.0	10.3	18.5	11.5	61.6	17.7	0.293	222
	2.3	5.14	6.552	84.8	29.0	3.60	2.10	17.0	11.6	21.0	13.0	69.9	20.0	0.292	194
	2.5	5.56	7.089	91.2	31.1	3.59	2.09	18.2	12.4	22.7	14.0	75.4	21.5	0.291	180
	3.0	6.60	8.408	106	36.1	3.56	2.07	21.3	14.4	26.7	16.4	88.6	25.0	0.290	152
	3.2	7.01	8.927	112	38.0	3.55	2.06	22.5	15.2	28.2	17.4	93.7	26.4	0.289	143
	4.0	8.59	10.95	134	44.9	3.50	2.03	26.8	18.0	34.1	20.9	113	31.4	0.286	116
	4.5	9.55	12.17	147	48.9	3.47	2.00	29.3	19.5	37.6	23.0	124	34.2	0.285	105
	5.0	10.5	13.36	158	52.5	3.44	1.98	31.7	21.0	40.8	25.0	135	36.8	0.283	95.4
	6.0	12.3	15.63	179	58.7	3.38	1.94	35.8	23.5	46.9	28.5	154	41.4	0.279	81.5
125 x 40	1.6	4.01	5.112	94.4	15.8	4.30	1.76	15.1	7.91	19.4	8.63	44.9	14.4	0.325	249
	2.0	4.97	6.337	116	19.2	4.27	1.74	18.5	9.61	23.8	10.6	55.1	17.5	0.323	201
	2.3	5.69	7.242	131	21.6	4.25	1.73	20.9	10.8	27.1	12.0	62.4	19.7	0.322	176
	2.5	6.15	7.839	141	23.2	4.24	1.72	22.5	11.6	29.3	12.9	67.1	21.2	0.321	163
	3.0	7.31	9.308	165	26.8	4.21	1.70	26.4	13.4	34.4	15.2	78.5	24.5	0.320	137
	3.2	7.76	9.887	174	28.2	4.19	1.69	27.8	14.1	36.5	16.0	82.8	25.8	0.319	129
	4.0	9.54	12.15	208	33.2	4.14	1.65	33.3	16.6	44.2	19.3	99.2	30.5	0.316	105
	4.5	10.6	13.52	228	36.0	4.11	1.63	36.5	18.0	48.8	21.1	109	33.2	0.315	94.2
125 x 50	2.3	6.05	7.702	148	35.5	4.39	2.15	23.7	14.2	29.9	15.7	93.9	25.3	0.342	165
	2.5	6.55	8.339	160	38.1	4.38	2.14	25.5	15.2	32.3	17.0	101	27.1	0.341	153
	3.0	7.78	9.908	187	44.4	4.34	2.12	29.9	17.7	38.1	20.0	119	31.6	0.340	129
	3.2	8.26	10.53	198	46.7	4.33	2.11	31.6	18.7	40.4	21.1	126	33.4	0.339	121
	4.0	10.2	12.95	238	55.6	4.28	2.07	38.0	22.2	49.0	25.5	152	39.8	0.336	98.4
	4.5	11.3	14.42	261	60.6	4.25	2.05	41.7	24.2	54.2	28.1	167	43.5	0.335	88.4
	5.0	12.4	15.86	283	65.2	4.22	2.03	45.2	26.1	59.1	30.6	182	47.0	0.333	80.3
	6.0	14.6	18.63	322	73.3	4.16	1.98	51.6	29.3	68.3	35.1	209	53.1	0.329	68.4
125 x 75	1.6	4.89	6.232	137	62.8	4.69	3.18	21.9	16.8	26.3	18.6	135	28.0	0.395	204
	2.0	6.07	7.737	169	77.1	4.67	3.16	27.0	20.6	32.5	22.9	167	34.4	0.393	165
	2.3	6.95	8.852	192	87.5	4.65	3.14	30.6	23.3	37.0	26.1	190	39.1	0.392	144
	2.5	7.53	9.589	207	94.2	4.64	3.14	33.0	25.1	40.0	28.2	205	42.1	0.391	133
	3.0	8.96	11.41	243	111	4.61	3.11	38.9	29.5	47.3	33.3	243	49.5	0.390	112
	3.2	9.52	12.13	257	117	4.60	3.10	41.1	31.1	50.1	35.3	258	52.3	0.389	105
	4.0	11.7	14.95	311	141	4.56	3.07	49.7	37.5	61.1	43.0	315	63.1	0.386	85.2
	4.5	13.1	16.67	342	155	4.53	3.04	54.8	41.2	67.7	47.5	349	69.5	0.385	76.4
	5.0	14.4	18.36	373	168	4.51	3.02	59.6	44.7	74.1	52.0	382	75.6	0.383	69.4
	6.0	17.0	21.63	428	192	4.45	2.98	68.6	51.1	86.2	60.3	444	86.8	0.379	58.9
	6.3	17.5	22.25	431	194	4.40	2.95	68.9	51.6	87.5	61.4	462	89.3	0.373	57.3
	8.0	21.4	27.24	502	224	4.29	2.87	80.2	59.7	104	72.9	551	105	0.366	46.8
	9.0	23.5	29.98	535	238	4.22	2.82	85.6	63.5	113	78.7	596	112	0.361	42.5
150 x 50	2.3	6.95	8.852	236	42.0	5.16	2.18	31.4	16.8	40.3	18.5	118	30.5	0.392	144
	2.5	7.53	9.589	254	45.2	5.15	2.17	33.9	18.1	43.5	19.9	128	32.8	0.391	133
	3.0	8.96	11.41	299	52.6	5.12	2.15	39.8	21.1	51.4	23.5	150	38.3	0.390	112
	3.2	9.52	12.13	316	55.5	5.10	2.14	42.1	22.2	54.5	24.9	159	40.4	0.389	105
	4.0	11.7	14.95	381	66.2	5.05	2.10	50.9	26.5	66.5	30.1	192	48.3	0.386	85.2
	4.5	13.1	16.67	420	72.2	5.02	2.08	56.0	28.9	73.6	33.2	212	52.9	0.385	76.4
	5.0	14.4	18.36	456	77.9	4.99	2.06	60.9	31.1	80.5	36.2	230	57.1	0.383	69.4
	6.0	17.0	21.63	524	87.9	4.92	2.02	69.8	35.2	93.5	41.7	264	64.8	0.379	58.9
150 x 75	3.0	10.1	12.91	380	130	5.42	3.17	50.6	34.7	62.5	38.7	312	59.8	0.440	98.7
	3.2	10.8	13.73	402	137	5.41	3.16	53.6	36.6	66.3	41.0	331	63.3	0.439	92.8
	4.0	13.3	16.95	488	166	5.37	3.13	65.1	44.2	81.1	50.1	404	76.6	0.436	75.2
	4.5	14.9	18.92	539	183	5.34	3.11	71.9	48.7	90.0	55.5	448	84.4	0.435	67.3
	5.0	16.4	20.86	588	198	5.31	3.08	78.4	52.9	98.6	60.7	491	91.9	0.433	61.1
	6.0	19.3	24.63	679	228	5.25	3.04	90.6	60.7	115	70.6	572	106	0.429	51.7
	6.3	19.9	25.40	686	231	5.20	3.01	91.4	61.6	117	72.2	596	109	0.423	50.2
	8.0	24.5	31.24	807	269	5.08	2.93	108	71.7	141	86.3	714	129	0.416	40.8
	9.0	27.1	34.48	866	287	5.01	2.89	116	76.6	153	93.6	775	138	0.411	36.9
150 x 80	3.0	10.4	13.21	396	150	5.47	3.37	52.8	37.5	64.7	41.9	349	64.1	0.450	96.4
	3.2	11.0	14.05	419	159	5.46	3.36	55.9	39.7	68.6	44.5	370	67.9	0.449	90.7
	4.0	13.6	17.35	509	192	5.42	3.33	67.9	48.0	84.0	54.4	453	82.3	0.446	73.4
	4.5	15.2	19.37	563	211	5.39	3.30	75.0	52.9	93.2	60.3	502	90.7	0.445	65.8
	5.0	16.8	21.36	614	230	5.36	3.28	81.9	57.5	102	66.0	551	98.9	0.443	59.6
	6.0	19.8	25.23	710	264	5.31	3.24	94.7	66.1	119	76.9	643	114	0.439	50.5

Section properties Rectangular : 150 mm x 100 mm to 300 mm x 100 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
150 x 100	2.3	8.75	11.15	361	195	5.69	4.18	48.2	38.9	57.3	43.5	395	63.9	0.492	114
	2.5	9.49	12.09	390	210	5.68	4.17	52.0	42.0	62.0	47.0	427	69.0	0.491	105
	3.0	11.3	14.41	461	248	5.65	4.15	61.4	49.5	73.5	55.8	507	81.4	0.490	88.4
	3.2	12.0	15.33	488	262	5.64	4.14	65.1	52.5	78.0	59.2	539	86.3	0.489	83.1
	4.0	14.9	18.95	595	319	5.60	4.10	79.3	63.7	95.7	72.5	662	105	0.486	67.2
	4.5	16.6	21.17	658	352	5.58	4.08	87.8	70.4	106	80.5	736	116	0.485	60.2
	5.0	18.3	23.36	719	384	5.55	4.05	95.9	76.8	117	88.3	809	127	0.483	54.5
	6.0	21.7	27.63	835	444	5.50	4.01	111	88.8	137	103	948	147	0.479	46.1
	6.3	22.4	28.55	848	453	5.45	3.98	113	90.5	140	106	992	152	0.473	44.6
	8.0	27.7	35.24	1,010	536	5.35	3.90	134	107	169	128	1,210	182	0.466	36.1
	9.0	30.6	38.98	1,090	577	5.29	3.85	145	115	185	140	1,320	197	0.461	32.7
	10.0	33.4	42.57	1,160	614	5.23	3.80	155	123	199	150	1,430	211	0.457	29.9
	12.0	37.7	48.06	1,210	642	5.01	3.65	161	128	215	163	1,570	229	0.438	26.5
175 x 125	4.5	20.1	25.67	1,120	669	6.61	5.11	128	107	153	122	1,330	174	0.585	49.6
	5.0	22.3	28.36	1,230	733	6.59	5.08	141	117	169	134	1,460	191	0.583	44.9
	6.0	26.4	33.63	1,440	853	6.53	5.04	164	137	198	158	1,720	222	0.579	37.9
	6.3	27.4	34.85	1,470	875	6.49	5.01	168	140	204	162	1,810	231	0.573	36.6
	8.0	33.9	43.24	1,770	1,050	6.39	4.93	202	168	249	198	2,220	279	0.566	29.5
	9.0	37.7	47.98	1,930	1,140	6.34	4.88	220	183	274	217	2,450	305	0.561	26.6
	10.0	41.3	52.57	2,070	1,220	6.28	4.83	237	196	297	235	2,660	329	0.557	24.2
	12.0	47.1	60.06	2,220	1,320	6.08	4.69	254	211	328	260	3,020	365	0.538	21.2
200 x 100	3.2	14.5	18.53	981	337	7.28	4.27	98.1	67.5	120	74.7	801	116	0.589	68.8
	4.0	18.0	22.95	1,200	411	7.23	4.23	120	82.2	148	91.7	985	142	0.586	55.5
	4.5	20.1	25.67	1,330	455	7.20	4.21	133	90.9	165	102	1,100	157	0.585	49.6
	5.0	22.3	28.36	1,460	497	7.17	4.19	146	99.4	181	112	1,210	172	0.583	44.9
	6.0	26.4	33.63	1,700	577	7.12	4.14	170	115	213	132	1,420	200	0.579	37.9
	6.3	27.4	34.85	1,740	591	7.07	4.12	174	118	219	135	1,480	208	0.573	36.6
	8.0	33.9	43.24	2,090	705	6.95	4.04	209	141	267	165	1,810	250	0.566	29.5
	9.0	37.7	47.98	2,280	764	6.89	3.99	228	153	293	180	1,990	272	0.561	26.6
	10.0	41.3	52.57	2,450	818	6.82	3.94	245	164	318	195	2,150	292	0.557	24.2
	12.0	47.1	60.06	2,610	876	6.59	3.82	261	175	350	215	2,410	322	0.538	21.2
	12.5	48.7	62.04	2,660	892	6.55	3.79	266	178	359	221	2,470	329	0.536	20.5
200 x 150	4.5	23.7	30.17	1,760	1,130	7.64	6.13	176	151	209	172	2,170	243	0.685	42.2
	5.0	26.2	33.36	1,930	1,250	7.62	6.11	193	166	230	189	2,390	267	0.683	38.2
	6.0	31.1	39.63	2,270	1,460	7.57	6.06	227	194	271	223	2,830	313	0.679	32.1
	6.3	32.3	41.15	2,330	1,500	7.53	6.04	233	200	280	230	2,970	326	0.673	31.0
	8.0	40.2	51.24	2,830	1,820	7.43	5.95	283	242	344	283	3,660	396	0.666	24.9
	9.0	44.7	56.98	3,100	1,990	7.37	5.90	310	265	379	312	4,050	435	0.661	22.4
	10.0	49.1	62.57	3,350	2,140	7.32	5.85	335	286	413	339	4,430	471	0.657	20.4
	12.0	56.6	72.06	3,670	2,350	7.14	5.71	367	314	463	380	5,100	532	0.638	17.7
	12.5	58.5	74.54	3,760	2,410	7.10	5.69	376	321	476	392	5,260	547	0.636	17.1
250 x 100	4.5	23.7	30.17	2,330	557	8.78	4.30	186	111	235	124	1,470	198	0.685	42.2
	5.0	26.2	33.36	2,550	610	8.75	4.28	204	122	259	136	1,620	217	0.683	38.2
	6.0	31.1	39.63	2,990	710	8.69	4.23	239	142	305	160	1,900	253	0.679	32.1
	6.3	32.3	41.15	3,070	730	8.63	4.21	245	146	314	165	1,990	263	0.673	31.0
	8.0	40.2	51.24	3,720	875	8.52	4.13	297	175	385	201	2,440	317	0.666	24.9
	9.0	44.7	56.98	4,060	951	8.44	4.09	325	190	425	221	2,680	346	0.661	22.4
	10.0	49.1	62.57	4,390	1,020	8.37	4.04	351	204	462	240	2,910	373	0.657	20.4
	12.0	56.6	72.06	4,760	1,110	8.13	3.92	381	222	515	268	3,290	415	0.638	17.7
225 x 175	4.5	27.2	34.67	2,610	1,780	8.67	7.16	232	203	273	230	3,300	323	0.785	36.7
	5.0	30.1	38.36	2,870	1,950	8.64	7.13	255	223	301	254	3,640	356	0.783	33.2
	6.0	35.8	45.63	3,370	2,290	8.59	7.09	300	262	356	300	4,310	418	0.779	27.9
250 x 150	4.5	27.2	34.67	3,000	1,370	9.31	6.29	240	183	290	205	2,980	307	0.785	36.7
	5.0	30.1	38.36	3,300	1,510	9.28	6.27	264	201	320	225	3,280	337	0.783	33.2
	6.0	35.8	45.63	3,890	1,770	9.23	6.23	311	236	378	266	3,890	396	0.779	27.9
	6.3	37.2	47.45	4,000	1,820	9.18	6.20	320	243	391	276	4,080	412	0.773	26.8
	8.0	46.5	59.24	4,890	2,220	9.08	6.12	391	296	482	340	5,050	504	0.766	21.5
	9.0	51.8	65.98	5,370	2,430	9.02	6.07	430	324	533	375	5,600	554	0.761	19.3
	10.0	57.0	72.57	5,830	2,630	8.96	6.02	466	351	582	409	6,120	602	0.757	17.6
	12.0	66.0	84.06	6,460	2,930	8.77	5.90	517	390	658	463	7,090	684	0.738	15.2
	12.5	68.3	87.04	6,640	3,000	8.73	5.87	531	400	678	477	7,310	704	0.736	14.6
300 x 100	4.5	27.2	34.67	3,700	660	10.3	4.36	246	132	316	145	1,860	239	0.785	36.7
	5.0	30.1	38.36	4,070	723	10.3	4.34	271	145	348	160	2,040	262	0.783	33.2
	6.0	35.8	45.63	4,780	842	10.2	4.30	319	168	411	188	2,400	306	0.779	27.9
	6.3	37.2	47.45	4,910	868	10.2	4.28	327	174	425	194	2,520	318	0.773	26.8
	8.0	46.5	59.24	5,980	1,040	10.0	4.20	399	209	523	238	3,080	385	0.766	21.5
	9.0	51.8	65.98	6,560	1,140	9.97	4.15	437	228	578	262	3,390	421	0.761	19.3

Section properties Rectangular : 250 mm x 200 mm to 600 mm x 300 mm

Dimensions		Mass	Area	Second moment of area		Radius of gyration		Elastic section modulus		Plastic section modulus		Torsional inertia constant	Torsional modulus constant	Superficial area per meter length	Nominal length per tonne
Nominal size	Thickness														
A x B mm	t mm	M kg/m	A cm^2	Ix cm^4	Iy cm^4	ix cm	iy cm	Zx cm^3	Zy cm^3	Zpx cm^3	Zpy cm^3	cm^4	cm^3	m^2/m	m
250 x 200	6.0	40.5	51.63	4,780	3,400	9.62	8.11	382	340	451	388	6,240	538	0.879	24.7
	6.3	42.2	53.75	4,940	3,510	9.58	8.08	395	351	468	402	6,550	562	0.873	23.7
	8.0	52.8	67.24	6,060	4,300	9.49	8.00	485	430	579	498	8,160	691	0.866	18.9
	9.0	58.9	74.98	6,680	4,740	9.44	7.95	534	474	642	551	9,070	763	0.861	17.0
	10.0	64.8	82.57	7,270	5,150	9.38	7.90	581	515	702	603	9,950	832	0.857	15.4
	12.0	75.4	96.06	8,160	5,790	9.22	7.77	653	579	801	688	11,600	955	0.838	13.3
	12.5	78.1	99.54	8,400	5,960	9.19	7.74	672	596	827	711	12,000	985	0.836	12.8
300 x 150	6.0	40.5	51.63	6,070	2,080	10.8	6.35	405	277	500	309	4,990	479	0.879	24.7
	6.3	42.2	53.75	6,270	2,150	10.8	6.32	418	287	517	321	5,230	499	0.873	23.7
	8.0	52.8	67.24	7,680	2,620	10.7	6.25	512	350	640	396	6,490	612	0.866	18.9
	9.0	58.9	74.98	8,470	2,880	10.6	6.20	564	384	709	439	7,200	674	0.861	17.0
	10.0	64.8	82.57	9,210	3,130	10.6	6.15	614	417	776	479	7,880	733	0.857	15.4
	12.0	75.4	96.06	10,300	3,500	10.4	6.03	687	466	883	546	9,150	837	0.838	13.3
	12.5	78.1	99.54	10,600	3,590	10.3	6.01	707	479	912	563	9,450	862	0.836	12.8
300 x 200	6.0	45.2	57.63	7,370	3,960	11.3	8.29	491	396	588	446	8,120	651	0.979	22.1
	6.3	47.1	60.05	7,620	4,100	11.3	8.27	508	410	610	463	8,520	680	0.973	21.2
	8.0	59.1	75.24	9,390	5,040	11.2	8.19	626	504	757	574	10,600	838	0.966	16.9
	9.0	65.9	83.98	10,400	5,560	11.1	8.14	692	556	840	637	11,800	927	0.961	15.2
	10.0	72.7	92.57	11,300	6,060	11.1	8.09	754	606	921	698	13,000	1,010	0.957	13.8
	12.0	84.8	108.1	12,800	6,850	10.9	7.96	853	685	1,060	801	15,200	1,170	0.938	11.8
	12.5	88.0	112.0	13,200	7,060	10.8	7.94	879	706	1,090	828	15,800	1,200	0.936	11.4
	16.0	109	138.8	15,600	8,340	10.6	7.75	1,040	834	1,320	1,000	19,200	1,440	0.918	9.18
350 x 150	6.0	45.2	57.63	8,910	2,390	12.4	6.44	509	319	636	353	6,120	562	0.979	22.1
	6.3	47.1	60.05	9,200	2,480	12.4	6.42	526	330	660	366	6,420	586	0.973	21.2
	8.0	59.1	75.24	11,300	3,030	12.3	6.34	647	404	818	453	7,970	719	0.966	16.9
	9.0	65.9	83.98	12,500	3,330	12.2	6.30	714	444	908	502	8,840	793	0.961	15.2
	10.0	72.7	92.57	13,600	3,620	12.1	6.25	779	482	995	549	9,680	864	0.957	13.8
	12.0	84.8	108.1	15,300	4,070	11.9	6.14	877	543	1,140	629	11,300	990	0.938	11.8
	12.5	88.0	112.0	15,800	4,190	11.9	6.11	903	558	1,180	649	11,600	1,020	0.936	11.4
350 x 250	6.0	54.7	69.63	12,500	7,460	13.4	10.3	712	597	843	671	14,600	967	1.18	18.3
	6.3	57.0	72.65	12,900	7,740	13.3	10.3	738	620	876	698	15,300	1,010	1.17	17.5
	8.0	71.6	91.24	16,000	9,570	13.2	10.2	914	766	1,090	869	19,100	1,250	1.17	14.0
	9.0	80.1	102.0	17,700	10,600	13.2	10.2	1,010	848	1,210	967	21,300	1,390	1.16	12.5
	10.0	88.4	112.6	19,400	11,600	13.1	10.1	1,110	927	1,330	1,060	23,500	1,520	1.16	11.3
	12.0	104	132.1	22,200	13,300	13.0	10.0	1,270	1,060	1,540	1,230	27,700	1,770	1.14	9.65
	12.5	108	137.0	22,900	13,700	12.9	9.99	1,310	1,100	1,600	1,270	28,800	1,830	1.14	9.30
	16.0	134	170.8	27,600	16,400	12.7	9.81	1,580	1,310	1,950	1,550	35,500	2,220	1.12	7.46
400 x 200	6.0	54.7	69.63	14,800	5,090	14.6	8.55	740	509	906	562	12,100	877	1.18	18.3
	6.3	57.0	72.65	15,300	5,290	14.5	8.53	767	529	942	585	12,700	916	1.17	17.5
	8.0	71.6	91.24	19,000	6,520	14.4	8.45	949	652	1,170	728	15,800	1,130	1.17	14.0
	9.0	80.1	102.0	21,000	7,200	14.4	8.40	1,050	720	1,310	809	17,600	1,260	1.16	12.5
	10.0	88.4	112.6	23,000	7,860	14.3	8.36	1,150	786	1,430	888	19,400	1,370	1.16	11.3
	12.0	104	132.1	26,300	8,980	14.1	8.24	1,310	898	1,660	1,030	22,800	1,590	1.14	9.65
	12.5	108	137.0	27,100	9,260	14.1	8.22	1,360	926	1,710	1,060	23,600	1,640	1.14	9.30
400 x 300	9.0	94.2	120.0	27,900	18,000	15.3	12.2	1,400	1,200	1,660	1,360	34,800	1,940	1.36	10.6
	10.0	104	132.6	30,600	19,700	15.2	12.2	1,530	1,320	1,820	1,500	38,400	2,130	1.36	9.61
	12.0	123	156.1	35,300	22,700	15.0	12.1	1,760	1,520	2,120	1,750	45,500	2,490	1.34	8.16
	12.5	127	162.0	36,500	23,500	15.0	12.0	1,820	1,570	2,200	1,810	47,200	2,580	1.34	7.86
	14.0	141	179.8	40,000	25,700	14.9	12.0	2,000	1,720	2,420	1,990	52,300	2,840	1.33	7.09
	16.0	159	202.8	44,400	28,500	14.8	11.9	2,220	1,900	2,710	2,230	58,700	3,160	1.32	6.28
500 x 300	12.0	141	180.1	60,600	27,700	18.3	12.4	2,420	1,850	2,960	2,090	62,600	3,160	1.54	7.07
	12.5	147	187.0	62,700	28,700	18.3	12.4	2,510	1,910	3,070	2,170	65,000	3,270	1.54	6.81
	16.0	184	234.8	76,800	35,000	18.1	12.2	3,070	2,330	3,800	2,680	81,000	4,020	1.52	5.43
	19.0	215	274.1	87,600	39,800	17.9	12.1	3,510	2,660	4,380	3,090	93,800	4,610	1.50	4.65
600 x 300	12.0	160	204.1	94,900	32,700	21.6	12.7	3,160	2,180	3,920	2,440	80,300	3,820	1.74	6.24
	12.5	167	212.0	98,300	33,900	21.5	12.6	3,280	2,260	4,070	2,530	83,400	3,960	1.74	6.01
	16.0	209	266.8	121,000	41,500	21.3	12.5	4,030	2,760	5,060	3,140	104,000	4,880	1.72	4.78
	19.0	245	312.1	139,000	47,400	21.1	12.3	4,620	3,160	5,850	3,620	121,000	5,610	1.70	4.08