



Designation	Mass per metre	Depth of Section h	Width of Section b	Thickness Webs	Thickness Flange t	Root Radius r	Depth between Fillets d	Ratios for Local Buckling		Second Moment of Area		Radius of Gyration		Elastic Modulus		Plastic Modulus		Buckling Parameter u	Torsional Index x	Warping Constant H	Torsional Constant J	Area of Section
								Flange b/2t	Web d/s	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y					
										cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³					
914 x 419 x 388	388.0	921.0	420.5	21.4	36.0	24.1	799.6	5.74	37.4	719600	45440	38.2	9.59	15630	2161	17670	3341	0.885	26.7	88.900	1734.0	494.0
914 x 419 x 343	343.3	911.8	418.5	19.4	32.6	24.1	799.6	6.54	41.2	625800	39160	37.8	9.46	13730	1871	15480	2890	0.883	30.1	75.800	1193.0	437.0
914 x 305 x 289	289.1	926.6	307.7	19.5	32.0	19.1	824.4	4.81	42.3	504200	15600	37.0	6.51	10880	1014	12570	1601	0.867	31.9	31.200	926.0	368.0
914 x 305 x 253	253.4	918.4	305.5	17.3	27.9	19.1	824.4	5.47	47.7	436300	13300	36.8	6.42	9501	871	10940	1371	0.866	36.2	26.400	626.0	323.0
914 x 305 x 224	224.2	910.4	304.1	15.9	23.9	19.1	824.4	6.36	51.8	376400	11240	36.3	6.27	8269	739	9535	1163	0.861	41.3	22.100	422.0	286.0
914 x 305 x 201	200.9	903.0	303.3	15.1	20.2	19.1	824.4	7.51	54.6	325300	9423	35.7	6.07	7204	621	8351	982	0.854	46.8	18.400	291.0	256.0
838 x 292 x 226	226.5	850.9	293.8	16.1	26.8	17.8	761.7	5.48	47.3	339700	11360	34.3	6.27	7985	773	9155	1212	0.870	35.0	19.300	514.0	289.0
838 x 292 x 194	193.8	840.7	292.4	14.7	21.7	17.8	761.7	6.74	51.8	279200	9066	33.6	6.06	6641	620	7640	974	0.862	41.6	15.200	306.0	247.0
838 x 292 x 176	175.9	834.9	291.7	14.0	18.8	17.8	761.7	7.76	54.4	246000	7799	33.1	5.90	5893	535	6808	842	0.856	46.5	13.000	221.0	224.0
762 x 267 x 197	196.8	769.8	268.0	15.6	25.4	16.5	686.0	5.28	44.0	240000	8175	30.9	5.71	6234	610	7176	959	0.869	33.2	11.300	404.0	251.0
762 x 267 x 173	173.0	762.2	266.7	14.3	21.6	16.5	686.0	6.17	48.0	205300	6850	30.5	5.58	5387	514	6198	807	0.864	38.1	9.390	267.0	220.0
762 x 267 x 147	146.9	754.0	265.2	12.8	17.5	16.5	686.0	7.58	53.6	168500	5455	30.0	5.40	4470	411	5156	647	0.858	45.2	7.400	159.0	187.0
762 x 267 x 134	133.9	750.4	264.0	12.0	15.5	16.5	686.0	8.53	57.2	150700	4788	29.7	5.30	4018	362	4644	570	0.854	49.8	6.460	119.0	171.0
686 x 254 x 170	170.2	692.9	255.8	14.5	23.7	15.2	615.1	5.40	42.4	170300	6630	28.0	5.53	4916	518	5631	811	0.872	31.8	7.420	308.0	217.0
686 x 254 x 152	152.4	687.5	254.5	13.2	21.0	15.2	615.1	6.06	46.6	150400	5784	27.8	5.46	4374	455	5000	710	0.871	35.5	6.420	220.0	194.0
686 x 254 x 140	140.1	683.5	253.7	12.4	19.0	15.2	615.1	6.68	49.6	136300	5183	27.6	5.39	3987	409	4558	638	0.868	38.7	5.720	169.0	178.0
686 x 254 x 125	125.2	677.9	253.0	11.7	16.2	15.2	615.1	7.81	52.6	118000	4383	27.2	5.24	3481	346	3994	542	0.862	43.9	4.800	116.0	159.0
610 x 305 x 238	238.1	635.8	311.4	18.4	31.4	16.5	540.0	4.96	29.3	209500	15840	26.3	7.23	6589	1017	7486	1574	0.886	21.3	14.500	875.0	303.0
610 x 305 x 179	179.0	620.2	307.1	14.1	23.6	16.5	540.0	6.51	38.3	153000	11410	25.9	7.07	4935	743	5547	1144	0.886	27.7	10.200	340.0	228.0
610 x 305 x 149	149.1	612.4	304.8	11.8	19.7	16.5	540.0	7.74	45.8	125900	9308	25.7	7.00	4111	611	4594	937	0.886	32.6	8.170	200.0	190.0
610 x 229 x 140	139.9	617.2	230.2	13.1	22.1	12.7	547.6	5.21	41.8	111800	4505	25.0	5.03	3622	391	4142	611	0.875	30.6	3.990	216.0	178.0
610 x 229 x 125	125.1	612.2	229.0	11.9	19.6	12.7	547.6	5.84	46.0	98610	3932	24.9	4.97	3221	343	3676	535	0.873	34.1	3.450	154.0	159.0
610 x 229 x 113	113.0	607.6	228.2	11.1	17.3	12.7	547.6	6.60	49.3	87320	3434	24.6	4.88	2874	301	3281	469	0.870	38.0	2.990	111.0	144.0
610 x 229 x 101	101.2	602.6	227.6	10.5	14.8	12.7	547.6	7.69	52.2	75780	2915	24.2	4.75	2515	256	2881	400	0.864	43.1	2.520	77.0	129.0
533 x 210 x 122	122.0	544.5	211.9	12.7	21.3	12.7	476.5	4.97	37.5	76040	3388	22.1	4.67	2793	320	3196	500	0.877	27.6	2.320	178.0	155.0
533 x 210 x 109	109.0	539.5	210.8	11.6	18.8	12.7	476.5	5.61	41.1	66820	2943	21.9	4.60	2477	279	2828	436	0.875	30.9	1.990	126.0	139.0
533 x 210 x 101	101.0	536.7	210.0	10.8	17.4	12.7	476.5	6.03	44.1	61520	2692	21.9	4.57	2292	256	2612	399	0.874	33.2	1.810	101.0	129.0
533 x 210 x 92	92.1	533.1	209.3	10.1	15.6	12.7	476.5	6.71	47.2	55230	2389	21.7	4.51	2072	228	2360	356	0.872	36.5	1.600	75.7	117.0
533 x 210 x 82	82.2	528.3	208.8	9.6	13.2	12.7	476.5	7.91	49.6	47540	2007	21.3	4.38	1800	192	2059	300	0.864	41.6	1.330	51.5	105.0
457 x 191 x 98	98.3	467.2	192.8	11.4	19.6	10.2	407.6	4.92	35.8	45730	2347	19.1	4.33	1957	243	2232	379	0.881	25.7	1.180	121.0	125.0
457 x 191 x 89	89.3	463.4	191.9	10.5	17.7	10.2	407.6	5.42	38.8	41020	2089	19.0	4.29	1770	218	2014	338	0.880	28.3	1.040	90.7	114.0
457 x 191 x 82	82.0	460.0	191.3	9.9	16.0	10.2	407.6	5.98	41.2	37050	1871	18.8	4.23	1611	196	1831	304	0.877	30.9	0.922	69.2	104.0
457 x 191 x 74	74.3	457.0	190.4	9.0	14.5	10.2	407.6	6.57	45.3	33320	1671	18.8	4.20	1458	176	1653	272	0.877	33.9	0.818	51.8	94.6
457 x 191 x 67	67.1	453.4	189.9	8.5	12.7	10.2	407.6	7.48	48.0	29380	1452	18.5	4.12	1296	153	1471	237	0.872	37.9	0.705	37.1	85.5