

Engineering Information

Rolled Steel Beams and Channels and Properties Table

Engineering Information

ROLLED STEEL DIMENSIONS						
Designation	Weight Per metre W kg.	Sectional Area a cm ²	Depth of Section h mm	Width of Flange		Thickness of Web tw mm
				b mm	tf mm	
ISJC 100	5.8	7.41	100	45	5.1	3.0
ISJC 125	7.9	10.07	125	50	6.6	3.0
ISJC 150	9.9	12.65	150	55	6.9	3.6
ISJC 175	11.2	14.24	175	60	6.9	3.6
ISJC 200	13.9	17.77	200	70	7.1	4.1
ISLC 75	5.7	7.26	75	40	6.0	3.7
ISLC 100	7.9	10.02	100	50	6.4	4.0
ISLC 125	10.7	13.67	125	65	6.6	4.4
ISLC 150	14.4	18.36	150	75	7.8	4.8
ISLC 175	17.6	22.40	175	75	9.5	5.1
ISLC 200	20.6	26.22	200	75	10.8	5.5
ISLC 225	24.0	30.53	225	90	10.2	5.8
ISLC 250	28.0	35.65	250	100	10.7	6.1
ISLC 300	33.1	42.11	300	100	11.6	6.7
ISLC 350	38.8	49.47	350	100	12.5	7.4
ISLC 400	45.7	58.25	400	100	14.0	8.0
ISMC 75	6.8	8.67	75	40	7.3	4.4
ISMC 100	9.2	11.70	100	50	7.5	4.7
ISMC 125	12.7	16.19	125	65	8.1	5.0
ISMC 150	16.4	20.88	150	75	9.0	5.4
ISMC 175	19.1	24.38	175	75	10.2	5.7
ISMC 200	22.1	18.21	200	75	11.4	6.1
ISMC 225	25.9	33.01	225	80	12.4	6.4
ISMC 250	30.4	38.67	250	80	14.1	7.1
ISMC 300	35.8	45.64	300	90	13.6	7.6
ISMC 350	42.1	53.66	350	100	13.5	8.1
ISMC 400	49.4	62.93	400	100	15.3	8.6

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CHANNELS AND PROPERTIES						
Centre of Gravity Cyy cm	Moments of Inertia		Radii of Gyration		Module of Section	
	xx cm ⁴	yy cm ⁴	rxx cm	ryy cm	zxx cm ³	zyy cm ³
140	123.8	14.9	4.09	1.42	24.8	4.8
1.64	270.0	25.7	5.18	1.60	43.2	7.6
1.66	471.1	37.9	6.10	1.73	62.8	9.9
1.75	719.9	50.5	7.11	1.88	82.3	11.9
1.97	1161.2	84.2	8.08	2.18	116.1	16.7
1.35	66.1	11.5	3.02	1.26	17.6	4.3
1.62	164.7	24.8	4.06	1.57	32.9	7.3
2.04	356.8	57.2	5.11	2.05	57.1	12.8
2.38	697.2	103.2	6.16	2.37	93.0	20.2
2.40	1148.4	126.5	7.16	2.38	131.3	24.8
2.35	1725.5	146.9	8.11	2.37	172.6	28.5
2.64	1547.9	209.5	9.14	2.62	226.5	32.0
2.70	3687.9	298.4	10.17	2.89	295.0	40.9
2.55	6047.9	346.0	11.98	2.87	403.2	46.4
2.41	9312.6	394.6	13.72	2.82	532.1	52.0
2.36	13989.5	460.4	15.50	2.81	699.5	60.2
1.31	76.0	12.6	2.96	1.21	20.3	4.7
1.53	186.7	25.9	4.00	1.49	37.3	7.5
1.94	416.4	59.9	5.07	1.92	66.6	13.0
2.22	779.4	102.3	6.11	2.21	103.9	19.4
2.20	1223.3	121.0	7.08	2.23	139.8	22.8
2.17	1819.3	140.4	8.03	2.23	181.9	26.3
2.30	2694.6	187.2	9.03	2.38	239.5	32.8
2.30	3816.8	219.1	9.94	2.38	305.3	38.4
2.36	6362.6	310.8	11.81	2.61	424.2	46.8
2.44	10008.0	430.6	13.66	2.83	571.9	57.0
2.42	15382.8	504.8	15.48	2.83	754.1	66.6

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