



H-BEAMS
Dimensions and Properties



TIS 1227-2537
Grade : SM400, SM490, SM520, SS400, SS490 or SS540



Nominal Size (mm.)	Weight (kg/m.)	Sectional Dimensions (mm.)					Sectional Area (cm ²)	Moment of Inertia (cm ⁴)		Radius of Gyration (cm.)		Modulus of Section (cm ³)	
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy
100X100	17.2	100	100	6.0	8	10	21.90	383	134	4.2	2.47	77	27
125X125	23.8	125	125	6.5	9	10	30.31	847	293	5.3	3.11	136	47
150X75	14.0	150	75	5.0	7	8	17.85	666	50	6.1	1.66	89	13
150X100	21.1	148	100	6.0	9	11	26.84	1,020	151	6.2	2.37	138	30
150X150	31.5	150	150	7.0	10	12	40.14	1,640	563	6.4	3.75	219	75
175X175	40.2	175	175	7.5	11	11	51.21	2,880	984	7.5	4.38	330	112
200X100	18.2	198	99	4.5	7	11	23.18	1,580	114	8.3	2.21	160	23
	21.3	200	100	5.5	8	11	27.16	1,840	134	8.2	2.22	184	27
200X150	30.6	194	150	6.0	9	13	39.01	2,690	507	8.3	3.61	277	68
200X200	49.9	150	200	8.0	12	13	63.53	4,720	1,600	8.6	5.02	472	160
	56.2	200	204	12.0	12	13	71.53	4,980	1,700	8.4	4.88	498	167
	65.7	200	202	10.0	16	13	83.69	6,530	2,200	8.8	5.13	628	218
250X125	25.7	208	124	5.0	8	12	32.68	3,540	255	10.4	2.79	285	41
	29.6	248	125	6.0	9	12	37.66	4,050	294	10.4	2.79	324	47
250X175	44.1	250	175	7.0	11	16	56.24	6,120	984	10.4	4.18	502	113
250X250	64.4	244	252	11.0	11	16	82.06	8,790	2,940	10.3	5.98	720	233
	66.5	248	249	8.0	13	16	84.70	9,930	3,350	10.8	6.29	801	269
	65.4	298	201	9.0	14	18	83.36	13,300	1,900	12.6	4.77	893	189
300x150	32.0	298	149	5.5	8	13	40.80	6,320	442	12.4	3.29	424	59
	36.7	300	150	6.5	9	13	46.78	7,210	508	12.4	3.29	481	68
300x200	56.8	294	200	8.0	12	18	72.38	11,300	1,600	12.5	4.71	771	160
	65.4	298	201	9.2	14	18	83.36	13,300	1,900	12.6	4.77	893	189
300X300	84.5	294	302	12.0	12	18	107.70	16,900	5,520	12.5	7.16	1,150	365
	87.0	298	299	9.0	14	18	110.80	18,800	6,240	13.0	7.51	1,270	417
	94.0	300	300	10.0	15	18	119.80	20,400	6,750	13.1	7.51	1,360	450
	106.0	300	305	15.0	15	18	134.80	21,500	7,100	12.6	7.26	1,440	466
	106.0	304	301	11.0	17	18	134.80	23,400	7,730	13.2	7.57	1,540	514
350X175	41.4	346	174	6.0	9	14	52.68	11,100	792	14.5	3.99	641	91
	49.6	350	175	7.0	11	14	63.14	13,600	984	14.7	3.95	775	112
	57.8	354	176	8.0	13	14	73.68	16,100	1,180	14.8	4.01	909	134
350X250	69.2	336	249	8.0	12	20	88.15	18,500	3,090	14.5	5.92	1,100	248
	79.7	340	250	9.0	14	20	101.50	21,700	3,650	14.6	6.00	1,280	292
350X350	106.0	338	351	13.0	13	20	135.30	28,200	9,380	14.4	8.33	1,670	534
	115.0	344	348	10.0	16	20	146.00	33,300	11,200	15.1	8.78	1,940	646
	131.0	344	354	16.0	16	20	166.60	35,300	11,800	14.6	8.43	2,050	669
	137.0	350	350	12.0	19	20	173.90	40,300	13,600	15.2	8.84	2,300	776
	156.0	350	357	19.0	19	20	198.40	42,800	14,400	14.7	8.53	2,450	809
400X200	56.6	396	199	7.0	11	16	72.16	20,000	1,450	16.7	4.48	1,010	145
	147.0	394	398	11.0	18	22	186.80	56,100	18,900	17.3	10.10	2,850	951
	172.0	400	400	13.0	21	22	218.47	66,600	22,400	17.5	10.10	3,330	1,120
	197.0	400	408	21.0	21	22	250.70	70,900	23,800	16.8	9.75	3,540	1,170
	232.0	414	405	18.0	28	22	295.40	92,800	31,000	17.7	10.20	4,480	1,530
400x300	94.3	386	299	9.0	14	22	120.10	33,700	6,240	16.7	7.21	1,740	418
	107.0	390	300	10.0	16	22	136.00	38,700	7,210	16.9	7.28	1,980	481
400x400	140.0	388	402	15.0	15	22	178.50	49,000	16,300	16.6	9.54	2,520	809
	147.0	394	398	11.0	18	22	186.80	56,100	18,900	17.3	10.10	2,850	951
	172.0	400	400	13.0	21	22	218.70	66,600	22,400	17.5	10.10	3,330	1,120
	197.0	400	408	21.0	21	22	250.70	70,900	23,800	16.8	9.75	3,540	1,170
	232.0	414	405	18.0	28	22	295.40	92,800	31,000	17.7	10.20	4,480	1,530
450X200	66.2	446	199	8.0	12	18	84.30	28,700	1,580	18.5	4.33	1,290	159
	76.0	450	200	9.0	14	18	98.76	33,500	1,870	18.6	4.40	1,490	187
	88.9	456	201	10.0	17	18	113.30	40,400	2,310	18.9	4.51	1,770	230
450X300	106.0	434	299	10.0	15	24	135.00	46,800	6,690	18.6	7.04	2,160	448
	124.0	440	300	11.0	18	24	157.40	56,100	8,110	18.9	7.18	2,550	541
	145.0	446	302	13.0	21	24	184.30	66,400	9,660	19.0	7.24	2,980	639
500X200	79.5	496	199	9.0	14	20	101.30	41,900	1,840	20.3	4.27	1,690	185
	89.6	500	200	10.0	16	20	114.20	47,800	2,140	20.5	4.33	1,910	214
	103.0	506	201	11.0	19	20	131.30	56,500	2,580	20.7	4.43	2,230	257
500X300	114.0	482	300	11.0	15	26	145.50	60,400	6,760	20.4	6.82	2,500	451
	128.0	488	300	11.0	18	26	163.50	71,000	8,110	20.8	7.04	2,910	541
	150.0	494	302	13.0	21	26	191.40	83,800	9,660	20.9	7.10	3,390	640
600X200	94.6	596	199	10.0	15	22	120.50	68,700	1,980	23.9	4.05	2,310	199
	175.0	594	302	14.0	23	28	222.40	137,000	10,600	24.9	6.90	4,620	701
600x300	137.0	582	300	12.0	17	28	174.50	103,000	7,670	24.3	6.63	3,530	511
	151.0	588	300	12.0	20	28	192.50	118,000	9,020	24.8	6.85	4,020	601
	175.0	594	302	14.0	23	28	222.40	137,000	10,600	24.9	6.90	4,620	701
700X300	166.0	692	300	13.0	20	28	211.50	172,000	9,020	28.6	6.53	4,980	602
	185.0	700	300	13.0	24	28	235.50	201,000	10,800	29.3	6.78	5,760	722
800X300	191.0	792	300	14.0	22	28	243.40	254,000	9,930	32.3	6.39	6,410	662
	210.0	800	300	14.0	26	28	267.40	292,000	11,700	33.0	6.62	7,290	782