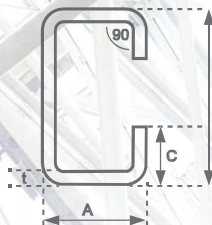




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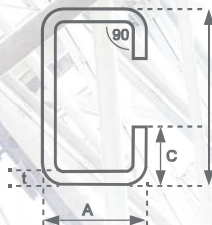
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LIGHT LIP
CHANNEL

เหล็กงานโครงสร้าง

TIS 1228

Size mm	Weight	Thick Thick	Center of Gravity		Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section		Center of Shear	
			Cx	Cy		Ix	Iy	ix	iy	Zx	Zy	Sx	Sy
HxAxC	kg/m	mm	cm	cm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm	cm
60x30x10	2.25	2.3	0	1.06	2.872	15.6	3.32	2.33	1.07	5.20	1.71	2.5	0
75x33x15	2.89	2.3	0	1.29	3.677	31.0	6.58	2.91	1.34	8.28	2.98	3.1	0
75x45x15	3.25	2.3	0	1.72	4.137	37.1	11.8	3.00	1.69	9.90	4.24	4.0	0
90x45x20	3.70	2.3	0	1.73	4.712	58.6	14.2	3.53	1.74	13.0	5.14	4.1	0
	5.00	3.2	0	1.72	6.367	76.9	18.3	3.48	1.69	17.1	6.57	4.1	0
100x50x20	4.06	2.3	0	1.86	5.172	80.7	19.0	3.95	1.92	16.1	6.05	4.4	0
	5.50	3.2	0	1.86	7.007	107	24.5	3.90	1.87	21.3	7.81	4.4	0
	6.71	4.0	0	1.86	8.548	127	28.7	3.85	1.83	23.4	9.13	4.3	0
	7.43	4.5	0	1.86	9.469	139	30.9	3.82	1.81	27.7	9.82	4.3	0
120x40x20	5.50	3.2	0	1.32	7.007	144	15.3	4.53	1.81	24.0	5.71	3.4	0
120x60x20	6.51	3.2	0	1.86	8.287	186	40.9	4.74	1.48	31.0	10.5	4.9	0
120x60x25	9.20	4.5	0	2.12	11.72	252	58	4.63	2.22	41.9	15.5	5.3	0
125x50x20	6.13	3.2	0	2.25	7.807	181	26.6	4.82	2.22	29.0	8.02	4.0	0
	7.50	4.0	0	1.68	9.548	217	33.1	4.77	1.85	34.7	9.38	4.0	0
	8.32	4.5	0	1.68	10.59	238	33.5	4.74	1.81	38.0	10.0	4.0	0
150x50x20	6.76	3.2	0	1.68	8.607	280	28.3	5.71	1.78	37.4	8.19	3.8	0
	9.20	4.5	0	1.54	11.72	368	35.7	5.60	1.81	49.0	10.5	3.7	0
150x65x20	7.51	3.2	0	1.54	9.567	332	53.8	5.89	1.75	44.3	12.2	5.1	0
	9.22	4.0	0	2.11	11.75	401	63.7	5.84	2.37	53.3	14.5	5.0	0
150x75x20	8.01	3.2	0	2.11	10.21	366	76.4	5.99	2.33	48.9	15.3	5.1	0
	9.85	4.0	0	2.51	12.55	445	91.0	5.95	2.74	59.3	18.2	5.8	0
	11.0	4.5	0	2.51	13.97	489	99.2	5.92	2.69	65.2	19.8	6.0	0



LIGHT LIP CHANNEL

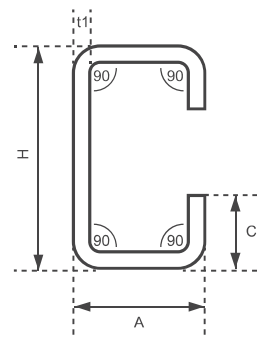
เหล็กงานโครงสร้าง

TIS 1228

Size mm	Weight	Thick	Center of Gravity		Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section		Center of Shear	
		Thick	Cx	Cy		Ix	Iy	ix	iy	Zx	Zy	cm	
HxAx C	kg/m	mm	cm	cm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	Sx	Sy
150x75x25	8.27	3.2	0	2.50	10.53	375	83.6	5.97	2.82	50.0	17.5	6.4	0
	10.20	4.0	0	2.66	12.95	455	99.8	5.93	2.78	60.6	20.6	6.3	0
	11.30	4.5	0	2.65	14.42	501	109	5.90	2.75	66.9	22.5	6.3	0
200x75x20	9.27	3.2	0	2.19	11.81	716	84.1	7.79	2.67	71.6	15.8	5.4	0
	11.40	4.0	0	2.19	14.55	871	100	7.74	2.62	87.1	18.9	5.3	0
	12.70	4.5	0	2.19	16.22	963	109	7.71	2.60	96.3	20.6	5.3	0
200x75x25	9.52	3.2	0	2.33	12.13	736	92.3	7.70	2.76	73.6	17.8	5.7	0
	11.70	4.0	0	2.32	14.395	895	110	7.74	2.72	89.5	21.3	5.7	0
	13.10	4.5	0	2.32	16.67	990	121	7.61	2.69	99.0	23.3	5.6	0
250x75x25	14.90	4.5	0	2.07	18.92	1,690	129	9.44	2.62	135	23.8	5.1	0

TOLERANCE ค่าความคลาดเคลื่อน

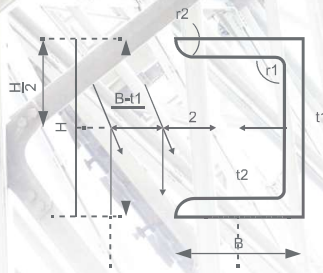
Dimension (mm)		Tolerances (mm)	
A		± 1.5	
H	H < 150	± 1.5	
	150 ≤ H < 300	± 2.0	
	≥ 300	± 3.0	
C		± 2.0	
Thickness (t)	1.6	± 0.22	
	2.0 and 2.3	± 0.25	
	2.8	± 0.28	
	3.2	± 0.30	
	4.0 and 4.5	± 0.45	
Length	≤ 7 m	+ 40.0	
	> 7 m	+40 and + 5 for each m that the length excess 7 m	
Squareness		± 1.5 degree	
Bend		Within 0.2% of whole length	
Weight		± 10%	





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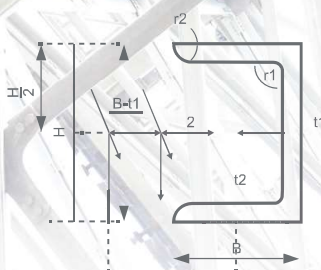


CHANNEL

เหล็กงานโครงสร้าง

TIS 1227

Standard Sectional Dimension (mm)					Sectional Area cm ²	Weight kg/m	Moment of Inertia		Radius of Gyration		Modulus of Section	
HxB	t1	t2	r1	r2			Ix (cm ⁴)	Iy (cm ⁴)	ix (cm)	iy (cm)	Zx (cm ³)	Zy (cm ³)
50x25	5.0	6.0	6	3.0	4.92	3.86	16.8	2.49	1.85	0.71	6.73	1.48
75x40	5.0	7.0	8	4.0	8.818	6.92	75.8	12.2	2.92	1.17	20.1	4.47
100x50	5.0	7.5	8	4.0	11.92	9.36	188	26.0	3.97	1.48	37.6	7.52
125x65	6.0	8.0	8	4.0	17.11	13.4	242	61.8	4.98	1.90	67.8	13.4
150x75	6.5	10.0	10	5.0	23.71	18.6	861	117	6.03	2.22	115	22.4
	9.0	12.5	15	7.5	30.56	24.0	1,050	147	5.86	2.19	140	28.3
180x75	7.0	10.5	11	5.5	27.2	21.4	1,380	131	7.12	2.19	153	24.3
200x80	7.5	11.0	12	6.0	31.33	24.6	1,950	168	7.88	2.32	195	29.1
200x90	8.0	13.5	14	7.0	39.65	30.3	1,950	277	8.02	2.68	249	44.2
250x90	9.0	13.0	14	7.0	44.07	34.6	2,490	294	9.74	2.58	334	44.5
	11.0	14.5	17	8.5	51.17	40.2	4,180	329	9.56	2.54	374	49.9
300x90	9.0	13.0	14	7.0	48.57	38.1	6,440	309	11.50	2.52	429	45.7
	10.0	15.5	19	9.5	55.74	43.8	7,410	360	11.50	2.54	494	54.1
	12.0	16.0	19	9.5	61.90	48.6	7,870	379	11.30	2.48	525	56.4
380x100	10.5	16.0	18	9.0	69.39	54.5	14,500	535	14.50	2.78	763	70.5
	*13.0	16.5	18	9.0	78.96	62.0	15,600	565	14.10	2.67	823	73.6
	13.0	20.0	24	12.0	85.71	67.3	17,600	655	14.30	2.76	926	87.8



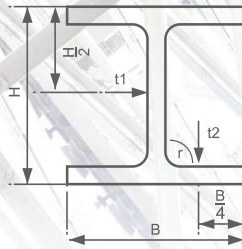
TOLERANCE ค่าความคลาดเคลื่อน

Dimension		Tolerance	Remark
Depth (H)	$H < 100$	± 1.5	
	$100 \leq H < 200$	± 2.0	
	$200 \leq H < 400$	± 3.0	
	$H \geq 400$	± 4.0	
Leg Length (H or B)	$B < 50$	± 1.5	
	$50 \leq B < 100$	± 2.0	
	$100 \leq B < 200$	± 3.0	
	$B \geq 200$	± 4.0	
Thickness (t, t1, t2)	$H < 130$	$t < 6.3$	
		$6.3 \leq t < 10$	
		$10 \leq t < 16$	
		$t \geq 16$	
Thickness (t, t1, t2)	$H \geq 130$	$t < 6.3$	
		$6.3 \leq t < 10$	
		$10 \leq t < 16$	
		$16 \leq t < 25$	
Length (L)	$L \leq 7 \text{ m.}$	$+ 40$	
		0	
	$L > 7 \text{ m.}$	$40 + (\text{no. of meter of } L - 7) \times 5$	
		0	
Squareness Out-of-square (T)	I-Beam	2.0% of width B	
	Channel, Angle		
Bend	I-Beam Channel, Angle	0.20% of L 0.30% of L	To be applied to bend such as sweep and camber
Eccentricity , Web-off-center (S)	-		
Mass (kg/m.)	$t < 10$	$\pm 5\%$	1. Thicker nominal values shall be applied. 2. To be applied to one lot of the same size (1 t or over), provided that, when the number of pieces, corresponding to 10 pieces, it shall be applied to each lot of 10 and more pieces.
	$t \geq 10$	$\pm 4\%$	



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H BEAM

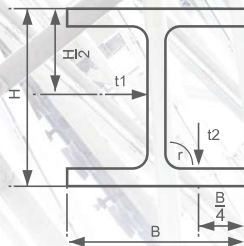
เหล็กงานโครงสร้าง

TIS 1227

Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section	
		H	B	t1	t2	r		Ix	Iy	Ix	Iy	Zx	Zy
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³
100x100	17.2	100	100	6	8	10	21.90	383	134	4.18	2.47	76.5	26.7
125x125	23.8	125	125	6.5	9	10	30.31	847	293	5.29	3.11	136	47.0
150x150	31.5	150	150	7	10	11	40.14	1,640	563	6.39	3.75	219	75.1
175x175	40.2	175	175	7.5	11	12	51.21	2,880	984	7.50	4.38	330	112
200x200	49.9	200	200	8	12	13	63.53	4,720	1,600	8.62	5.02	472	160
	*56.2	200	204	12	12	13	71.53	4,980	1,700	8.35	4.88	498	167
	*65.7	208	202	10	16	13	83.69	6,530	2,200	8.83	5.13	628	218
250x250	V 64.4	244	252	11	11	16	82.06	8,790	2,940	10.3	5.98	720	233
	*66.5	248	249	8	13	16	84.7	9,930	3,350	10.8	6.29	867	292
	72.4	250	250	9	14	16	92.18	10,800	3,650	10.8	6.29	867	292
	*82.2	250	255	14	14	16	104.7	11,500	3,880	10.5	6.09	919	304
300x300	V 84.5	294	302	12	12	18	107.7	16,900	5,520	12.5	7.16	1,150	365
	*87.0	298	299	9	14	18	110.5	18,800	6,240	13.0	7.51	1,270	417
	94.0	300	300	10	15	18	119.8	20,400	6,750	13.1	7.51	1,360	450
	*106	300	305	15	15	18	134.8	21,500	7,100	12.6	7.26	440	466
	*106	304	301	11	17	18	134.8	23,400	7,730	13.2	7.57	1,540	514
350x350	*106.0	338	351	13	13	20	135.3	28,200	9,380	14.4	8.33	1,670	534
	V 115.0	344	348	10	16	20	146	33,300	11,200	15.1	8.78	1,940	646
	*131.0	344	354	16	16	20	166.6	35,300	11,800	14.6	8.43	2,050	669
	137.0	350	350	12	19	20	173.9	40,300	13,600	15.2	8.84	2,300	776
	*156.0	350	357	19	19	20	198.4	42,800	14,400	14.7	8.53	2,450	809
400x400	*140.0	388	402	15	15	22	178.5	49,000	16,300	16.6	9.54	2,520	809
	*147.0	394	398	11	18	22	186.8	56,100	18,900	17.3	10.1	2,850	951
	172.0	400	400	18	21	22	218.7	66,600	22,400	17.5	10.1	3,330	1,120
	*197.0	400	408	21	21	22	250.7	70,900	23,800	16.5	9.75	3,540	1,170
	V 232.0	411	405	18	28	22	295.4	92,600	31,000	17.7	10.2	4,480	1,530



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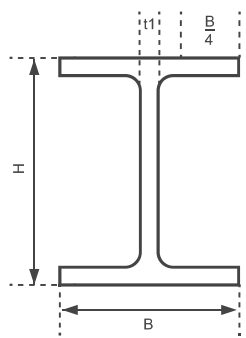
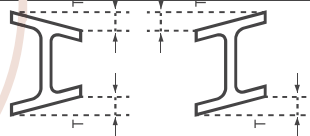
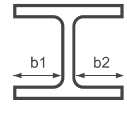
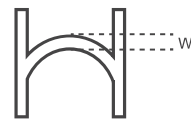
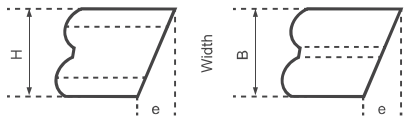


H BEAM

เหล็กงานโครงสร้าง

 TIS 1227

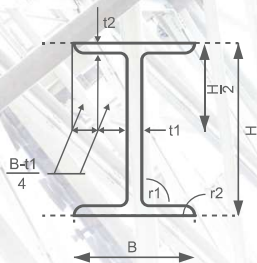
TOLERANCE ค่าความคลาดเคลื่อน

Dimension			Tolerance	Remark
Depth (H)	$H < 380$		± 2.0	
	$380 \leq H < 580$		± 3.0	
	$H \geq 580$		± 4.0	
Width (B)	$B < 95$		± 2.0	
	$95 \leq B < 190$		± 2.5	
	$B \geq 190$		± 3.0	
Thickness (t1, t2)	t1	$t1 < 16$	± 0.7	
		$16 \leq t1 < 25$	± 1.0	
		$25 \leq t1 < 40$	± 1.5	
	t2	$t2 < 16$	± 1.0	
		$16 \leq t2 < 25$	± 1.5	
		$25 \leq t2 < 40$	± 1.7	
Length (L)	$L \leq 7 \text{ m.}$		$+ 40$	
			0	
	$L > 7 \text{ m.}$		$40 + (\text{no. of meter of } L - 7) \times 5$	
Squareness (T)	$H \leq 300$	$B \leq 150$ $B > 150$	≤ 1.5 $\leq 1.0\% \text{ of } B$	
	$H > 300$	$B \leq 125$ $B > 125$	≤ 1.5 $\leq 1.2\% \text{ of } B$	
Bend	$H \leq 300$ $H > 300$		$\leq 0.15\% \text{ of } L$ $\leq 0.10\% \text{ of } L$	To be applied to bend such as sweep and camber
Eccentricity (S)	$H \leq 300, B \leq 200$ $H > 300, B > 200$		± 2.5 ± 3.5	$S = \frac{(b1-b2)}{2}$ 
Concavity of web (W)	$H < 400$ $400 \leq H < 600$ $H \geq 600$		2.0 2.5 3.0	
Squareness of cut end (e)	$H \leq 187.5$ $B \leq 187.5$ $H > 187.5$ $B > 187.5$		$\leq 3.0 \text{ mm.}$ $\leq 3.0 \text{ mm.}$ $\leq 1.6\% \text{ of } H$ $\leq 1.6\% \text{ of } B$	
Mass	$t < 10$		$\pm 5\%$	1. The maximum thickness shall be applied. 2. These tolerances shall apply in the purchase of a single set of structural steel of the same size and thickness comprising not less than 10 pieces and a mass of not less than 1,000 kg.
	$t \geq 10$		$\pm 4\%$	



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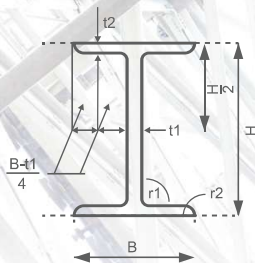


I BEAM

เหล็กงานโครงสร้าง

TIS 1227

Standard Sectional Dimension (mm)					Sectional Area	Weight	Moment of Inertia (cm ⁴)		Radius of Gyration (cm)		Modulus of Section (cm ³)	
HxB	t1	t2	r1	r2	cm ²	kg/m	Ix	Iy	ix	iy	Zx	Zy
150x75	5.5	9.5	9	4.5	21.83	17.1	819	57.5	6.12	1.62	109	15.3
200x100	7.0	10.0	10	5.0	33.06	26.0	2,170	138	8.11	2.05	217	27.7
200x150	9.0	16.0	15	7.5	64.16	50.4	4,460	753	8.34	3.43	446	100.0
250x125	7.5	12.5	12	6.0	48.79	38.3	5,180	337	10.30	2.63	414	53.9
	10.0	19.0	21	10.5	70.73	55.5	7,310	538	10.20	2.76	585	86.0
300x150	8.0	13.0	12	6.0	61.58	48.3	9,480	588	12.40	3.09	632	78.4
	10.0	18.5	19	9.5	83.47	65.5	12,700	886	12.30	3.26	849	118.0
	11.5	22.0	23	11.5	97.88	76.8	14,700	1,080	12.20	3.32	978	143.0
350x150	9.0	15.0	13	6.5	74.58	58.5	15,200	702	14.30	3.07	870	93.5
	12.0	24.0	25	12.5	111.10	87.2	22,400	1,180	14.20	3.26	1,280	158.0
400x150	10.0	18.0	17	8.5	91.73	72.0	24,100	864	16.20	3.07	1,200	115.0
	12.5	25.0	27	13.5	122.10	95.8	31,700	1,240	16.10	3.18	1,580	165.0
450x175	11.0	20.0	19	9.5	116.80	91.7	39,200	1,510	18.30	3.60	1,740	173.0
	13.0	26.0	27	13.5	146.10	115.0	48,800	2,020	18.30	3.72	2,170	231.0
600x190	13.0	25.0	25	12.5	169.40	133.0	98,400	2,460	24.10	3.81	3,280	259.0
	16.0	35.0	38	19.0	224.50	176.0	130,000	3,540	24.10	3.97	4,330	373.0



I BEAM

เหล็กงานโครงสร้าง

TIS 1227

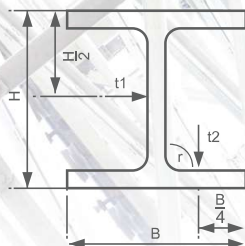
TOLERANCE ค่าความคลาดเคลื่อน

Dimension		Tolerance	Remark
Depth (H)	$H < 100$	± 1.5	
	$100 \leq H < 200$	± 2.0	
	$200 \leq H < 400$	± 3.0	
	$H \geq 400$	± 4.0	
Leg Length (H or B)	$B < 50$	± 1.5	
	$50 \leq B < 100$	± 2.0	
	$100 \leq B < 200$	± 3.0	
	$B \geq 200$	± 4.0	
Thickness (t, t1, t2)	$H < 130$	$t < 6.3$	
		$6.3 \leq t < 10$	
		$10 \leq t < 16$	
		$t \geq 16$	
	$H \geq 130$	$t < 6.3$	
		$6.3 \leq t < 10$	
Length (L)	$L \leq 7 \text{ m.}$	± 40	
		0	
	$L > 7 \text{ m.}$	$40 + (\text{no. of meter of } L - 7) \times 5$	
		0	
Squareness Out-of-square (T)	I-Beam	2.0% of width B	
	Channel, Angle		
Bend	I-Beam Channel, Angle	0.20% of L 0.30% of L	To be applied to bend such as sweep and camber
Eccentricity, Web-off-center (S)	-		
Mass (kg/m.)	$t < 10$	$\pm 5\%$	1. Thicker nominal values shall be applied. 2. To be applied to one lot of the same size (1 t or over), provided that, when the number of pieces, corresponding to 10 pieces, it shall be applied to each lot of 10 and more pieces.
	$t \geq 10$	$\pm 4\%$	



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WIDE
FLANGE

เหล็กงานโครงสร้าง

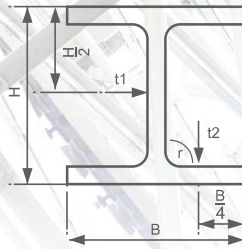


Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section	
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³
100x50	9.3	100	50	5	7	8	11.85	187	14.8	3.98	1.12	37.5	5.91
150x75	14.0	150	75	5	7	8	17.85	666	49.5	6.11	1.66	88.8	13.2
150x100	21.1	148	100	6	9	11	26.84	1,020	151	6.17	2.37	138	30.1
200x100	V 18.2	198	99	4.5	7	11	23.18	1,580	114	8.26	2.21	160	23.0
	21.3	200	100	5.5	8	11	27.16	1,840	134	8.24	2.22	184	26.8
200x150	30.6	194	150	6	9	13	39.01	2,690	507	8.30	3.61	227	67.6
250x125	V 25.7	248	124	5	8	12	32.68	3,540	255	10.4	2.79	285	41.1
	29.6	250	125	6	9	12	37.68	4,050	294	10.4	2.79	324	47.0
250x175	44.1	244	175	7	11	16	56.24	6,120	984	10.4	4.18	502	113
300x150	V 32.0	298	149	5.5	8	13	40.8	6,320	442	12.4	3.29	424	59.3
	36.7	300	150	6.5	9	13	46.78	7,210	508	12.4	3.29	481	67.7
300x200	56.8	394	200	8	12	18	72.38	11,300	1,600	12.5	4.71	771	160
	*65.4	298	201	9	14	18	83.36	13,300	1,900	12.6	4.77	893	189
350x175	V 41.4	346	174	6	9	14	52.68	11,100	792	14.5	3.88	611	91.0
	49.6	350	175	7	11	14	63.14	13,600	984	14.7	3.95	775	112
	*57.8	354	176	8	13	14	73.68	16,100	1,180	14.8	4.01	909	134
350x250	*69.2	336	249	8	12	20	88.15	18,500	3,090	14.5	5.92	1,100	248
	79.7	340	250	9	14	20	101.5	21,700	3,650	14.6	6.00	1,280	292
400x200	V 56.6	396	199	7	11	16	72.16	20,000	1,450	16.7	4.48	1,010	145
	66.0	400	200	8	13	16	84.12	23,700	1,740	16.8	4.54	1,190	174
	*75.5	404	201	9	15	16	96.16	27,500	2,030	16.9	4.60	1,360	202
400x300	*94.3	386	299	9	14	22	120.1	33,700	6,240	16.7	7.21	1,740	418
	107.0	390	300	10	18	22	136.0	38,700	7,210	16.9	7.28	1,980	481
450x200	*66.2	446	199	8	12	18	84.30	28,700	1,580	18.5	4.33	1,290	159
	76.0	450	200	9	14	18	96.76	33,500	1,870	18.6	4.40	1,490	187
	*88.9	456	201	10	17	18	113.3	40,400	2,310	18.9	4.51	1,770	230



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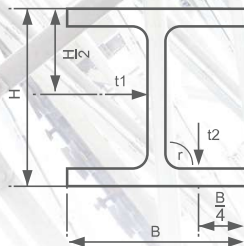


WIDE FLANGE

เหล็กงานโครงสร้าง

TIS 1227

Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section	
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³
450x300	*106.0	434	299	10	15	24	135.0	48,800	6,690	18.6	7.04	2,160	448
	124.0	440	300	11	18	24	157.0	56,100	8,110	18.9	7.18	2,550	541
	*145.0	446	302	13	21	24	184.3	66,400	9,660	19.0	7.24	2,980	629
500x200	*79.5	496	199	9	14	20	101.3	41,900	1,840	20.3	4.24	1,690	185
	89.6	500	200	10	16	20	114.2	47,800	2,140	20.5	4.33	1,910	214
	*103.0	506	201	11	19	20	131.3	56,500	2,580	20.7	4.43	2,230	257
500x300	*114.0	482	300	11	15	26	145.5	60,400	6,760	20.4	6.82	2,500	451
	128.0	488	300	11	18	26	163.5	71,000	8,110	20.8	7.04	2,910	541
	*150.0	494	302	13	21	26	191.4	83,800	9,660	20.9	7.10	3,390	640
600x200	*94.6	596	199	10	15	22	120.5	68,700	1,980	23.9	4.05	2,310	199
	106.0	600	200	11	17	22	134.4	77,600	2,280	24.0	4.12	2,590	228
	*120.0	606	201	12	20	22	125.5	90,400	2,720	24.3	4.22	2,980	271
	*134.0	612	202	13	23	22	170.7	103,000	3,180	24.6	4.31	3,380	314
600x300	*137.0	582	300	12	17	28	174.5	103,000	7,670	24.3	6.63	3,530	511
	151.0	588	300	12	20	28	192.5	118,000	9,020	24.8	6.85	4,020	601
	*175.0	594	302	14	23	28	222.4	137,000	10,600	24.9	6.90	4,620	701
700x300	*166.0	692	300	13	20	28	211.5	172,000	9,020	28.6	6.53	4,980	602
	185.0	700	300	13	24	28	235.5	201,000	10,800	29.3	6.78	5,760	722
800x300	*191.0	792	300	14	22	28	243.4	254,000	9,930	32.3	6.39	6,410	660
	210.0	800	300	14	26	28	267.4	292,000	11,700	33.0	6.62	7,290	782
900x300	213.0	890	299	15	23	28	270.9	345,000	10,300	35.7	6.16	7,760	688
	243.0	900	300	16	28	28	309.8	411,000	12,600	36.4	6.39	9,140	849
	V 286	912	302	18	34	28	364.0	498,000	15,700	37.0	6.56	10,900	1040

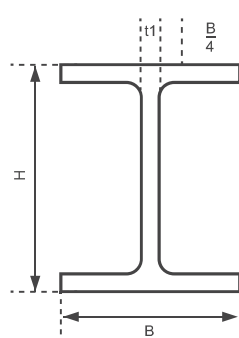


WIDE FLANGE

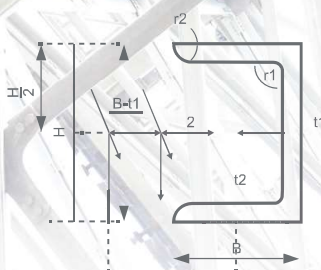
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TOLERANCE ค่าความคลาดเคลื่อน

Dimension		Tolerance	Remark
Depth (H)	$H < 380$	± 2.0	
	$380 \leq H < 580$	± 3.0	
	$H \geq 580$	± 4.0	
Width (B)	$B < 95$	± 2.0	
	$95 \leq B < 190$	± 2.5	
	$B \geq 190$	± 3.0	
Thickness (t1, t2)	t1	$t1 < 16$	± 0.7
		$16 \leq t1 < 25$	± 1.0
		$25 \leq t1 < 40$	± 1.5
	t2	$t2 < 16$	± 1.0
		$16 \leq t2 < 25$	± 1.5
		$25 \leq t2 < 40$	± 1.7
Length (L)	$L \leq 7 \text{ m.}$		+ 40
			0
	$L > 7 \text{ m.}$		40+ (no. of meter of L - 7) x 5
Squareness (T)	$H \leq 300$	$B \leq 150$	≤ 1.5
		$B > 150$	$\leq 1.0\% \text{ of } B$
	$H > 300$	$B \leq 125$	≤ 1.5
		$B > 125$	$\leq 1.2\% \text{ of } B$
Bend	$H \leq 300$		$\leq 0.15\% \text{ of } L$
	$H > 300$		$\leq 0.10\% \text{ of } L$
Eccentricity (S)	$H \leq 300, B \leq 200$ $H > 300, B > 200$		± 2.5 ± 3.5
Concavity of web (W)	$H \leq 400$		2.0
	$400 \leq H < 600$		2.5
	$H \geq 600$		3.0
Squareness of cut end (e)	$H \leq 187.5$ $B \leq 187.5$ $H > 187.5$ $B > 187.5$		$\leq 3.0 \text{ mm.}$ $\leq 3.0 \text{ mm.}$ $\leq 1.6\% \text{ of } H$ $\leq 1.6\% \text{ of } B$
Mass	$t < 10$		$\pm 5\%$
	$t \geq 10$		$\pm 4\%$

- The maximum thickness shall be applied.
- These tolerances shall apply in the purchase of a single set of structural steel of the same size and thickness comprising not less than 10 pieces and a mass of not less than 1,000 kg.



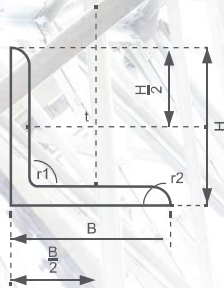
TOLERANCE ค่าความคลาดเคลื่อน

Dimension		Tolerance	Remark		
Depth (H)	H < 100	± 1.5			
	100 ≤ H < 200	± 2.0			
	200 ≤ H < 400	± 3.0			
	H ≥ 400	± 4.0			
Leg Length (H or B)	B < 50	± 1.5			
	50 ≤ B < 100	± 2.0			
	100 ≤ B < 200	± 3.0			
	B ≥ 200	± 4.0			
Thickness (t, t1, t2)	H < 130	t < 6.3	± 0.6		
		6.3 ≤ t < 10	± 0.7		
		10 ≤ t < 16	± 0.8		
		t ≥ 16	± 1.0		
	H ≥ 130	t < 6.3	± 0.7		
		6.3 ≤ t < 10	± 0.8		
Length (L)	L ≤ 7 m.		+ 40		
			0		
	L > 7 m.		40+ (no. of meter of L - 7) x 5		
			0		
	Squareness Out-of-square (T)	I-Beam	2.0% of width B		
		Channel, Angle			
Bend	I-Beam Channel, Angle	0.20% of L 0.30% of L	To be applied to bend such as sweep and camber		
Eccentricity , Web-off-center (S)	-				
Mass (kg/m.)	t < 10	± 5%	1. Thicker nominal values shall be applied. 2. To be applied to one lot of the same size (1 t or over), provided that, when the number of pieces, corresponding to 10 pieces, it shall be applied to each lot of 10 and more pieces.		
	t ≥ 10	± 4%			



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ANGLE

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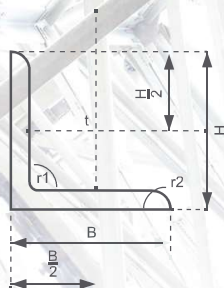
TIS 1227

Standard Sectional Dimension (mm)				Sectional Area	Weight	Moment of Inertia				Radius of Gyration				Modulus of Section		Center of gravity	
HxB	t	r1	r2			Ix	Iy	Iu	Iv	ix	iy	iu	iv	Zx	Zy	Cx	Cy
				cm ²	(kg/m)	cm ⁴	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm	cm ³	cm ³	cm	cm
25x25	3.0	4.0	2.0	1.427	1.12	0.797	0.797	1.26	0.332	0.747	0.747	0.94	0.483	0.448	0.448	0.719	0.179
	5.0	3.5	2.4	2.26	1.77	1.20	1.20	1.89	0.52	0.73	0.73	0.91	0.48	0.71	0.71	0.80	0.80
30x30	3.0	4.0	2.0	1.724	1.36	1.42	1.42	2.26	0.590	0.908	0.908	1.14	0.585	0.661	0.661	0.844	0.844
	5.0	5.0	2.4	2.78	2.18	2.16	2.16	3.41	0.92	0.88	0.88	1.11	0.57	1.04	1.04	0.92	0.92
40x40	3.0	4.5	2.0	2.336	1.83	3.53	3.53	5.6	1.46	1.23	1.23	1.55	0.790	1.21	1.21	1.09	1.09
	4.0	6.0	2.4	3.08	2.42	4.47	4.47	7.09	1.85	1.21	1.21	1.52	0.78	1.55	1.55	1.12	1.12
	5.0	4.5	2.0	3.755	2.95	5.42	5.42	8.59	2.25	1.2	1.2	1.52	0.774	1.91	1.91	1.17	1.17
	6.0	6.0	2.4	4.48	3.52	6.31	6.31	9.98	2.65	1.19	1.19	1.51	0.77	2.26	2.26	1.20	1.20
45x45	4.0	6.5	3.0	3.492	2.74	6.50	6.50	10.3	2.70	1.36	1.36	1.49	0.880	2.00	2.00	1.24	1.24
	5.0	6.5	3.0	4.302	3.38	7.91	7.91	12.5	3.29	1.36	1.36	1.72	0.874	2.46	2.46	1.28	1.28
50x50	3.0	7.0	2.4	2.96	2.33	6.86	6.86	10.8	2.38	1.52	1.52	1.71	0.99	1.86	1.86	1.31	1.31
	4.0	6.5	3.0	3.892	3.06	9.06	9.06	14.4	3.76	1.53	1.53	1.91	0.982	2.49	2.49	1.37	1.37
	5.0	6.5	3.0	4.802	3.77	11.1	11.1	17.5	4.58	1.52	1.52	1.92	0.976	3.08	3.08	1.41	1.41
	6.0	6.5	4.5	5.644	4.43	12.6	12.6	20.0	5.23	1.50	1.50	1.91	0.963	3.55	3.55	1.44	1.44
60x60	4.0	6.5	3.0	4.692	3.68	16.0	16.0	25.4	6.62	1.85	1.85	1.88	1.19	3.66	3.66	1.61	1.61
	5.0	6.5	3.0	5.802	4.55	19.6	19.6	31.2	8.09	1.84	1.84	2.33	1.18	4.52	4.52	1.66	1.66
65x65	5.0	8.5	3.0	6.367	5.00	25.3	25.3	40.1	10.5	1.99	1.99	2.32	1.28	5.35	5.35	1.77	1.77
	6.0	8.5	4.0	7.527	5.91	29.4	29.4	46.6	12.2	1.98	1.98	2.51	1.27	6.26	6.26	1.81	1.81
	8.0	8.5	6.0	9.761	7.66	36.8	36.8	58.3	15.3	1.94	1.94	2.49	1.25	7.96	7.96	1.88	1.88
70x70	6.0	8.5	4.0	8.127	6.38	37.1	37.1	58.9	15.3	2.14	2.14	2.44	1.37	7.33	7.33	1.93	1.93
75x75	6.0	8.5	4.0	8.727	6.85	46.1	46.1	73.2	19.0	2.30	2.30	2.69	1.48	8.47	8.47	2.06	2.06
	9.0	8.5	6.0	12.69	9.96	64.4	64.4	102	26.7	2.25	2.25	2.90	1.45	12.1	12.1	2.17	2.17
	12.0	8.5	6.0	16.56	13.0	81.9	81.9	129	34.5	2.22	2.22	2.84	1.44	15.7	15.7	2.29	2.29
80x80	6.0	8.5	4.0	9.327	7.32	56.4	56.4	89.6	23.2	2.46	2.46	2.79	1.58	9.70	9.70	2.18	2.18



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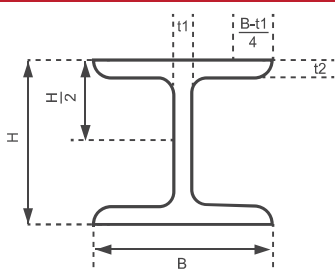
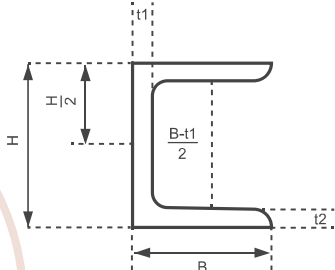
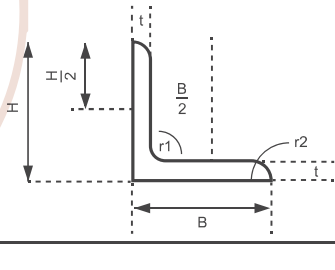
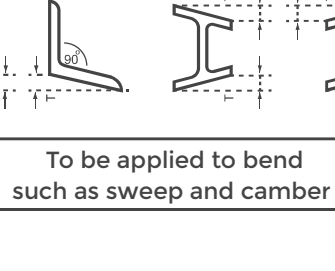
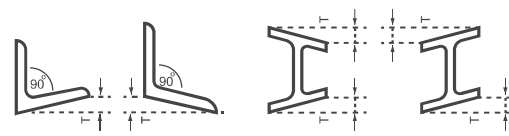
ANGLE

เหล็กงานโครงสร้าง

TIS 1227

Standard Sectional Dimension (mm)				Sectional Area	Weight	Moment of Inertia				Radius of Gyration				Modulus of Section		Center of gravity	
HxB	t	r1	r2			Ix	Iy	Iu	Iv	ix	iy	iu	iv	Zx	Zy	Cx	Cy
cm ²	(kg/m)	cm ⁴	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ³	cm ³	cm	cm
90x90	6.0	10.0	5.0	10.55	8.28	80.7	80.7	128	33.4	2.77	2.77	3.10	1.78	12.3	12.3	2.42	2.42
	7.0	10.0	5.0	12.22	9.59	93.0	93.0	148	38.8	2.76	2.76	3.48	1.77	14.2	14.2	2.46	2.46
	10.0	10.0	7.0	17.00	13.3	125	125	199	51.7	2.71	2.71	3.48	1.74	19.5	19.5	2.57	2.57
	12.0	11.0	4.8	20.3	15.9	148	148	234	61.7	2.7	2.7	3.42	1.75	23.3	23.3	2.66	2.66
	13.0	10.0	7.0	21.75	17.0	156	156	243	65.3	2.68	2.68	3.4	1.73	24.8	24.8	2.69	2.69
100x100	7.0	10.0	5.0	13.62	10.7	129	129	205	53.2	3.08	3.08	3.38	1.98	17.7	17.7	2.71	2.71
	10.0	10.0	7.0	19.00	14.9	175	175	278	72.0	3.04	3.04	3.88	1.95	24.4	24.4	2.82	2.82
	12.0	12.0	4.8	22.7	17.8	207	207	328	85.7	3.02	3.02	3.83	1.94	29.1	29.1	2.90	2.90
	13.0	10.0	7.0	24.31	19.1	220	220	348	91.1	3.00	3.00	3.8	1.94	31.1	31.1	2.94	2.94
120x120	8	12	5.0	18.76	14.7	258	258	410	106	3.71	3.71	4.67	2.38	29.5	29.5	3.24	3.24
130x130	9	12	6.0	22.74	17.9	366	366	583	150	4.01	4.01	5.06	2.57	38.7	38.7	3.53	3.53
	12	12	8.5	29.76	23.4	467	467	743	192	3.96	3.96	5.00	2.54	49.9	49.9	3.64	3.64
	15	12	8.5	36.75	28.8	568	568	902	234	3.93	3.93	4.95	2.53	61.5	61.5	3.76	3.76
150x150	12	14	7.0	34.77	27.3	740	740	1,180	304	4.61	4.61	5.82	2.960	68.1	68.1	4.41	4.41
	15	14	10.0	42.74	33.6	888	888	1,410	365	4.56	4.56	5.75	2.92	82.6	82.6	4.24	4.24
	19	14	10.0	53.38	41.9	1,090	1,090	1,370	451	4.52	4.52	5.69	2.91	103.0	103.0	4.40	4.40
175x175	12	15	11.0	40.52	31.8	1,170	1,170	1,860	480	5.38	5.38	6.78	3.44	91.8	91.8	4.73	4.73
	15	15	11.0	50.21	39.4	1,440	1,440	2,260	589	5.35	5.35	6.75	3.420	114.0	114.0	4.85	4.85
200x200	15	17	12.0	57.75	45.3	2,180	2,180	3,470	891	6.14	6.14	7.75	3.92	150.0	150.0	5.46	5.46
	20	17	12.0	76.00	59.7	2,820	2,820	4,490	1,160	6.09	6.09	7.68	3.90	197.0	197.0	5.67	5.67
	25	17	12.0	93.75	73.6	3,420	3,420	5,420	1,410	6.04	6.04	7.61	3.88	242.0	242.0	5.86	5.86
250x250	25	24	12.0	119.40	39.7	6,950	6,950	11,000	2,860	7.63	7.63	9.62	4.90	388.0	388.0	7.10	7.10
	35	24	18.0	162.60	128.0	9,110	9,110	14,400	3,790	7.49	7.49	9.42	4.83	519.0	519.0	7.45	7.45

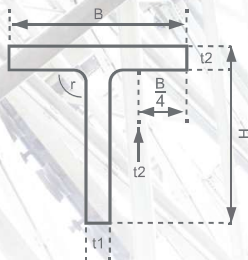
TOLERANCE ค่าความคลาดเคลื่อน

Dimension		Tolerance	Remark
Depth (H)	$H < 100$	± 1.5	
	$100 \leq H < 200$	± 2.0	
	$200 \leq H < 400$	± 3.0	
	$H \geq 400$	± 4.0	
Leg Length (H or B)	$B < 50$	± 1.5	
	$50 \leq B < 100$	± 2.0	
	$100 \leq B < 200$	± 3.0	
	$B \geq 200$	± 4.0	
Thickness (t, t1, t2)	$H < 130$	$t < 6.3$	
		$6.3 \leq t < 10$	
		$10 \leq t < 16$	
		$t \geq 16$	
Length (L)	$L \leq 7 \text{ m.}$	± 40	
		0	
	$L > 7 \text{ m.}$	$40 + (\text{no. of meter of } L - 7) \times 5$	
		0	
Squareness Out-of-square (T)	I-Beam	2.0% of width B	
	Channel, Angle		
Bend	I-Beam Channel, Angle	0.20% of L 0.30% of L	To be applied to bend such as sweep and camber
Eccentricity , Web-off-center (S)	-		
Mass (kg/m.)	$t < 10$	$\pm 5\%$	1. Thicker nominal values shall be applied. 2. To be applied to one lot of the same size (1 t or over), provided that, when the number of pieces, corresponding to 10 pieces, it shall be applied to each lot of 10 and more pieces.
	$t \geq 10$	$\pm 4\%$	



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CUT BEAM

เหล็กงานโครงสร้าง

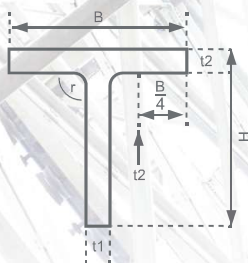
TIS 1227

Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section		Center of Gravity
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy	Cx
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm
50X50	4.65	50.0	50	5.0	7	8	5.93	11.8	7.4	1.41	1.12	3.17	3.0	1.28
50x100	8.60	50.0	100	6.0	8	10	10.95	16.1	66.9	1.21	2.47	4.03	13.4	1.00
62.5x125	11.90	62.5	125	6.5	9	10	15.16	35.0	147.0	1.52	3.11	6.91	23.5	1.19
75x75	7.00	75.0	75	5.0	7	8	8.925	42.6	24.7	2.18	1.66	7.46	6.6	1.79
75x100	10.55	74.0	100	6.0	9	11	13.42	51.7	75.3	1.96	2.37	8.84	15.1	1.55
75x150	15.75	75.0	150	7.0	10	11	20.07	66.4	282.0	1.82	3.75	10.80	37.6	1.37
87.5x175	20.10	87.5	175	7.5	11	12	25.61	115.0	492.0	2.12	4.38	15.90	56.2	1.55
100x100	V 9.10	99.0	99	4.5	7	11	11.59	93.8	56.8	2.84	2.21	12.10	11.5	2.14
	10.65	100.0	100	5.5	8	11	13.58	114.0	67.0	2.90	2.22	14.80	13.4	2.29
100x150	15.30	97.0	150	6.0	9	13	19.51	125.0	254.0	2.53	3.61	15.80	33.8	1.79
100x200	24.95	100.0	200	8.0	12	13	31.77	184.0	801.0	2.41	5.02	22.30	80.1	1.73
	*28.10	100.0	204	12.0	12	13	35.77	256.0	851.0	2.67	4.88	32.40	83.4	2.09
	*32.85	104.0	202	10.0	16	13	41.85	251.0	1,100.0	2.45	5.13	29.50	109.0	1.91
125x125	V 12.85	124.0	124	5.0	8	12	18.83	248.0	147.0	3.63	2.79	25.60	23.5	2.78
	14.80	125.0	125	6.0	9	12	18.83	248.0	147.0	3.63	2.79	25.60	23.5	2.78
125x175	22.05	122.0	175	7.0	11	16	28.12	289.0	492.0	3.20	4.18	29.10	56.3	2.27
125x250	V 32.20	122.0	252	11.0	11	16	41.03	445.0	1,470.0	3.29	5.98	45.30	117.0	2.39
	*33.25	124.0	249	8.0	13	16	42.35	364.0	1,670.0	2.93	6.29	34.90	134.0	1.98
	36.20	125.0	250	9.0	14	16	46.09	412.0	1,820.0	2.99	6.29	39.50	146.0	2.08
	*41.10	125.0	255	14.0	14	16	52.34	589.0	1,940.0	3.36	6.09	59.40	152.0	2.58
150x150	V 16.00	149.0	149	5.5	8	13	20.40	393.0	221.0	4.39	3.29	33.80	29.7	3.26
	18.35	150.0	150	6.5	9	13	23.39	464.0	254.0	4.45	3.29	40.00	33.8	3.41
150x200	28.40	147.0	200	8.0	12	18	36.19	572.0	802.0	3.97	4.71	48.20	80.2	2.83
	*32.70	149.0	201	9.0	14	18	41.68	662.0	949.0	3.99	4.77	55.20	94.4	2.91
150x300	V 42.25	147.0	302	12.0	12	18	53.83	858.0	2,760.0	3.99	7.16	72.30	183.0	3.84
	*43.50	149.0	299	9.0	14	18	55.40	715.0	3,120.0	3.59	7.51	57.00	209.0	2.36
	47.00	150.0	300	10.0	15	18	59.89	798.0	3,380.0	36.5	7.51	63.70	225.0	2.47
	*53.00	150.0	305	15.0	15	18	67.39	1,110.0	3,550.0	4.05	7.26	92.50	233.0	2.03
	*53.00	152.0	301	11.0	17	18	67.41	903.0	3,870.0	3.66	7.57	71.40	257.0	2.55



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เหล็กงานโครงสร้าง

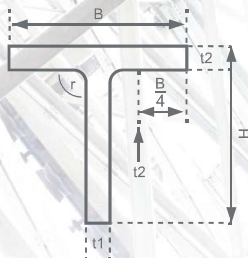
TIS 1227

Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section		Center of Gravity
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy	
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm
175x175	V 20.70	173.0	174	6.0	9	14	26.34	679.0	396.0	5.08	3.88	50.00	45.5	3.71
	24.80	175.0	175	7.0	11	14	31.57	815.0	492.0	5.08	3.95	59.30	56.2	3.75
	*28.90	177.0	176	8.0	13	14	36.84	955.0	590.0	5.09	4.01	68.80	67.0	3.82
175x250	*34.60	168.0	249	8.0	12	20	44.08	881.0	1,540.0	4.47	5.92	64.00	124.0	3.02
	39.85	170.0	250	9.0	14	20	50.76	1,020.0	1,830.0	4.48	6.00	73.10	146.0	3.09
	*53.00	169.0	351	13.0	13	20	67.63	1,420	4,690.0	4.59	8.33	104.00	267.0	3.21
175x350	V 57.50	172.0	348	10.0	16	20	73	1,230	5,620.0	4.11	8.78	84.70	323.0	2.67
	*65.50	172.0	354	16.0	16	20	83.32	1,800	5,920.0	4.65	8.43	131.00	335.0	3.40
	68.50	175.0	350	12.0	19	20	86.94	1,520	6,790.0	4.18	8.84	104.00	388.0	2.86
	*78.00	175.0	357	19.0	19	20	99.19	2,200	7,220.0	4.71	8.53	158.00	404.0	3.59
200x200	V 28.30	198.0	199	7.0	11	16	36.08	1,190	723.0	5.76	4.48	76.40	72.7	4.17
	33.00	200.0	200	8.0	13	16	42.06	1,400	868.0	5.76	4.54	88.60	86.8	4.23
	*37.75	202.0	201	9.0	15	16	48.08	1,605.0	1,015.0	5.78	4.59	101.00	101.0	4.31
200x300	*47.15	193.0	299	9.0	14	22	60.05	1,530.0	3,120.0	5.04	7.12	95.50	209.0	3.33
	53.50	195.0	300	10.0	16	22	67.98	1,730.0	3,600.0	5.05	7.28	108.00	240.0	3.41
200x400	*70.00	194.0	402	15.0	15	22	89.23	2,480.0	8,130.0	5.27	9.54	158.00	404.0	3.70
	*73.50	197.0	398	11.0	18	22	93.41	2,050.0	9,460.0	4.68	10.10	123.00	475.0	3.01
	86.00	200.0	400	13.0	21	22	109.300	2,480.0	11,200.0	4.76	10.10	147.00	560.0	3.21
	*98.50	200.0	408	21.0	21	22	125.30	3,650.0	11,900.0	5.40	9.75	229.00	584.0	4.07
	V 116.00	207.0	405	18.0	28	22	147.70	3,620.0	15,500.0	4.95	10.20	213.00	776.0	3.68
225x200	*33.10	223.0	199	8.0	12	18	42.15	1,880.0	790.0	6.67	4.33	109.00	79.4	5.10
	38.00	225.0	200	9.0	14	18	48.38	2,160.0	936.0	6.68	4.40	124.00	93.6	5.15
	*44.45	228.0	201	10.0	17	18	56.67	2,499.0	1,155.0	6.64	4.51	141.40	114.9	5.13
225x300	*53.00	217.0	299	10.0	15	24	67.52	2,350.0	3,350.0	5.89	7.04	133.00	224.0	4.04
	62.00	220.0	300	11.0	15	24	78.69	2,680.0	4,060.0	5.84	7.18	149.00	270.0	4.05
	*72.50	223.0	302	13.0	21	24	92.16	3,232.0	4,830.0	5.92	7.24	179.00	320.0	4.27
250x200	*39.75	248.0	199	9.0	14	20	50.64	2,840.0	922.0	7.49	4.27	150.00	92.6	5.90
	44.80	250.0	200	10.0	16	20	57.12	3,210.0	1,070.0	7.50	4.33	196.00	107.0	5.96
	*51.50	253.0	201	11.0	19	20	65.65	3,670.0	1,290.0	7.48	4.43	190.00	128.0	5.95



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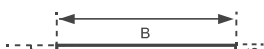
CUT BEAM

เหล็กงานโครงสร้าง

TIS 1227

Nominal Size	Weight	Sectional Dimension					Sectional Area	Moment of Inertia		Radius of Gyration		Modulus of Section		Center of Gravity
		H	B	t1	t2	r		Ix	Iy	ix	iy	Zx	Zy	Cx
mm	kg/m	mm	mm	mm	mm	mm	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm
250x300	*57.00	241.0	300	11.0	15	26	72.76	3,420.0	3,380.0	6.85	6.82	178.00	225.0	4.92
	64.00	244.0	300	11.0	18	26	81.76	3,620.0	4,060.0	6.66	7.07	184.00	270.0	4.66
	*75.00	247.0	302	13.0	21	26	95.70	4,351.0	4,830.0	6.74	7.10	219.60	320.0	4.89
300x200	*47.30	298.0	199	10.0	15	22	60.23	5,190.0	989.0	9.29	40.05	236.00	99.4	7.79
	53.00	300.0	200	11.0	17	22	67.21	5,810.0	1,140.0	9.3	4.12	262.00	114.0	7.84
	*60.00	303.0	201	12.0	20	22	76.24	6,570.0	1,360.0	9.28	4.22	292.00	135.0	7.79
	*67.00	306.0	202	13.0	23	22	85.33	7,340.0	1,590.0	9.27	4.31	322.00	157.0	7.79
300x300	*68.50	291.0	300	12.0	17	28	87.24	6,360.0	3,830.0	8.54	6.63	280.00	256.0	6.39
	75.50	294.0	300	12.0	20	28	96.24	6,710.0	4,510.0	8.35	6.85	288.00	301.0	6.08
	*87.50	297.0	302	14.0	23	28	111.20	7,920.0	5,290.0	8.44	6.90	339.00	350.0	6.33
350x300	*83.00	346.0	300	13.0	20	28	105.70	11,300.0	4,510.0	10.3	6.53	425.00	301.0	7.99
	92.50	350.0	300	13.0	24	28	117.70	12,000.0	5,410.0	10.1	6.78	438.00	361.0	7.55
400x300	*95.50	396.0	300	14.0	22	28	121.70	17,100.0	4,960.0	12.1	6.38	593.00	331.0	9.66
	105.00	400.0	300	14.0	26	28	133.7	18,800.0	5,860.0	11.9	6.62	610.00	391.0	9.18
450x300	106.50	445.0	299	15.0	23	28	135.45	26,000.0	5,143.0	13.86	6.16	790.03	344.0	11.59
	121.50	450.0	300	16.0	28	28	154.90	29,240.0	6,322.0	13.74	6.39	866.37	421.5	11.25
		456.0	302	18.0	34	28	182.00	34,251.0	7,833.0	13.72	6.56	997.41	518.7	11.25

TOLERANCE ค่าความคลาดเคลื่อน

Tolerance			Remark
Depth (H)	H ≤150	± 5.0	
	150 < H ≤250	± 6.0	
	H > 250	± 7.0	
Other Dimesional Tolerances		Same as H Sections	