



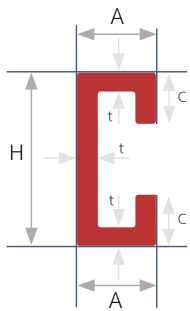
## Cold Formed Structural Steel Sections : Lip Channel Steel

เหล็กโครงสร้างรูปพรรณขึ้นรูปเย็น (เหล็กรูปตัวซี)



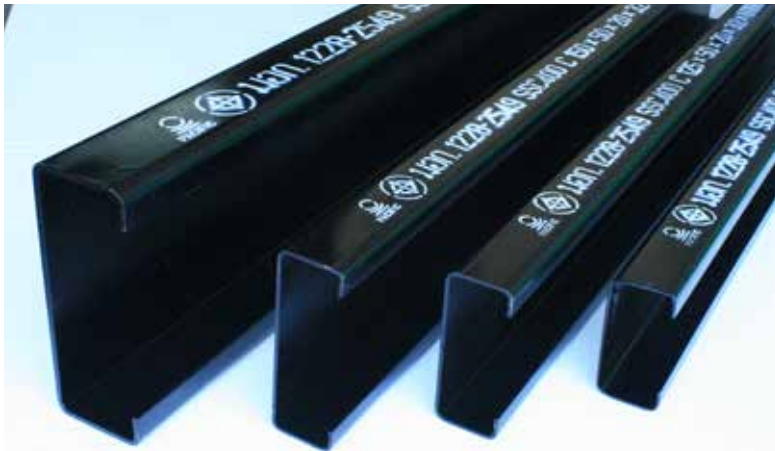
TIS 1228

Grade	% Chemical Composition (Max)			Mechanical Properties (Min)		
	C	P	S	Yield Strength	Tensile Strength	Elongation
				MPa	MPa	%
SSC 400	0.28	0.06	0.060	245	400 - 540	t ≤ 5 mm = 21 t > 5 mm = 17



Dimensional Tolerances			
Specified Item and Dimension	Dimensional Tolerances		
Length of Side	A	±1.5 mm	
	H	< 150 mm	±1.5 mm
		150 mm ≤ H < 300 mm	±2.0 mm
		≥ 300 mm	±3.0 mm
C	±2.0 mm		
Thickness	1.60 mm	±0.22 mm	
	2.00 mm and 2.30 mm	±0.25 mm	
	2.80 mm	±0.28 mm	
	3.20 mm	±0.30 mm	
	4.00 mm and 4.50 mm	±0.45 mm	
	6.00 mm	±0.60 mm	
Length	≤ 7 m	-0 mm , +40 mm	
	> 7 m	+ 40 mm , then +5 mm for each 1 m length that over 7 m	
Angle Between Adjacent Plate Portions	±1.5°		
Culvature	≤ 0.2% of the overall length		
Weight Per Meter	±10%		

## Lip Channel Steel





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Nominal Size	Thickness	Weight	Cross Sectional Area	Center of Gravity		Geometrical Moment of Inertia		Modulus of Section		Radius of Gyration		Center of Shear	
mm	mm	kg/m	cm <sup>2</sup>	cm		cm <sup>4</sup>		cm <sup>3</sup>		cm		cm	
H x A x C				Cx	Cy	Ix	Iy	Zx	Zy	ix	iy	Sx	Sy
60 x 30 x 10	1.6	1.63	2.072	0	1.06	11.60	2.56	3.88	1.32	2.37	1.11	2.50	0
	2.0	1.99	2.537	0	1.06	14.00	3.01	4.65	1.55	2.35	1.09	2.50	0
	2.3	2.25	2.872	0	1.06	15.60	3.32	5.20	1.71	2.33	1.07	2.50	0
70 x 40 x 25	1.6	2.38	3.032	0	1.80	22.00	8.00	6.29	3.64	2.69	1.62	4.40	0
75 x 35 x 15	2.3	2.89	3.677	0	1.29	31.00	6.58	8.28	2.98	2.91	1.34	3.10	0
75 x 45 x 15	1.6	2.32	2.952	0	1.72	27.10	8.71	7.24	3.13	3.03	1.72	4.10	0
	2.0	2.86	3.637	0	1.72	33.00	10.50	8.79	3.76	3.01	1.70	4.00	0
	2.3	3.25	4.137	0	1.72	37.10	11.80	9.90	4.24	3.00	1.69	4.00	0
90 x 45 x 20	1.6	2.63	3.352	0	1.73	42.60	10.50	9.46	5.80	3.56	1.77	4.20	0
	2.3	3.70	4.712	0	1.73	58.60	14.20	13.00	5.14	3.53	1.74	4.10	0
	3.2	5.00	6.367	0	1.72	76.90	18.30	17.10	6.57	3.48	1.69	4.10	0
100 x 50 x 20	1.6	2.88	3.672	0	1.87	58.40	14.00	11.70	4.47	3.99	1.95	4.50	0
	2.0	3.56	4.537	0	1.86	71.40	16.90	14.30	5.40	3.97	1.93	4.40	0
	2.3	4.06	5.172	0	1.86	80.70	19.00	16.10	6.06	3.95	1.92	4.40	0
	2.8	4.87	6.205	0	1.88	99.80	23.20	20.00	7.44	3.96	1.91	4.30	0
	3.2	5.50	7.007	0	1.86	107.00	24.50	21.30	7.81	3.90	1.87	4.40	0
	4.0	6.71	8.548	0	1.86	127.00	28.70	25.40	9.13	3.85	1.83	4.30	0
	4.5	7.43	9.469	0	1.86	139.00	30.90	27.70	9.82	3.82	1.81	4.30	0
120 x 40 x 20	3.2	5.50	7.007	0	1.32	144.00	15.30	24.00	5.71	4.53	1.48	3.40	0
120 x 60 x 20	2.3	4.78	6.092	0	2.13	140.00	31.30	23.30	8.10	4.79	2.27	5.10	0
	3.2	6.51	8.287	0	2.12	186.00	40.90	31.00	10.50	4.74	2.22	4.90	0
120 x 60 x 25	4.5	9.20	11.720	0	2.25	252.00	58.00	41.90	15.50	4.63	2.22	5.30	0
125 x 50 x 20	2.3	4.51	5.747	0	1.69	137.00	20.60	21.90	6.22	4.88	1.89	4.10	0
	3.2	6.13	7.807	0	1.68	181.00	26.60	29.00	8.02	4.82	1.85	4.00	0
	4.0	7.50	9.548	0	1.68	217.00	33.10	34.70	9.38	4.77	1.81	4.00	0
	4.5	8.32	10.590	0	1.68	238.00	33.50	38.00	10.00	4.74	1.78	4.00	0
150 x 50 x 20	2.3	4.96	6.322	0	1.55	210.00	21.90	28.00	6.33	5.77	1.86	3.80	0
	3.2	6.76	8.607	0	1.54	280.00	28.30	37.40	8.19	5.71	1.81	3.80	0
	4.5	9.20	11.720	0	1.54	368.00	35.70	49.00	10.50	5.60	1.75	3.70	0
150 x 65 x 20	2.3	5.50	7.012	0	2.12	248.00	41.10	33.00	9.37	5.94	2.42	5.20	0
	3.2	7.51	9.567	0	2.11	332.00	53.80	44.30	12.20	5.89	2.37	5.10	0
	4.0	9.22	11.750	0	2.11	401.00	63.70	53.50	14.50	5.84	2.33	5.00	0
150 x 75 x 20	3.2	8.01	10.210	0	2.51	366.00	76.40	48.90	15.30	5.99	2.74	5.10	0
	4.0	9.85	12.550	0	2.51	445.00	91.00	59.30	18.20	5.95	2.69	5.80	0
	4.5	11.00	13.970	0	2.50	489.00	99.20	65.20	19.80	5.92	2.66	6.00	0
150 x 75 x 25	3.2	8.27	10.530	0	2.66	375.00	83.60	50.00	17.30	5.97	2.82	6.40	0
	4.0	10.20	12.950	0	2.65	455.00	99.80	60.60	20.60	5.93	2.78	6.30	0
	4.5	11.30	14.420	0	2.65	501.00	109.00	66.90	22.50	5.90	2.75	6.30	0
200 x 75 x 20	3.2	9.27	11.810	0	2.19	716.00	84.10	71.60	15.80	7.79	2.67	5.40	0
	4.0	11.40	14.550	0	2.19	871.00	100.00	87.10	18.90	7.74	2.62	5.30	0
	4.5	12.70	16.220	0	2.19	963.00	109.00	96.30	20.60	7.71	2.60	5.30	0
200 x 75 x 25	3.2	9.52	12.130	0	2.33	736.00	92.30	73.60	17.80	7.70	2.76	5.70	0
	4.0	11.70	14.950	0	2.32	895.00	110.00	89.50	21.30	7.74	2.72	5.70	0
	4.5	13.10	16.670	0	2.32	990.00	121.00	99.00	23.30	7.61	2.69	5.60	0
250 x 75 x 25	4.5	14.90	18.920	0	2.07	1690.00	129.00	135.00	23.80	9.44	2.62	5.10	0