TIS 107 (JIS G3444)

Carbon Steel Rectangular for General Structure Properties

JIS

TIS.107-2561

Norminal Size		OD	Thickness	Weight	Cross Sectional Area	Geometrical Moment of Inertia	Modulus of Section	Radius of Gyration
inch	mm.	mm.	mm.	kg/m	cm^2	cm^4	cm^3	cm
1/2"	15	21.7	2.00	0.972	1.238	0.607	0.56	0.700
3/4"	20	27.2	2.00	1.24	1.583	1.26	0.93	0.890
			2.30*	1.41	1.799	1.41	1.03	0.880
1"	25	34.0	2.30	1.80	2.291	2.89	1.70	1.12
1 1/4"	32	42.7	2.30	2.29	2.919	5.97	2.80	1.43
			2.50*	2.48	3.157	6.40	3.00	1.42
1 1/2"	40	48.6	2.30	2.63	3.345	8.99	3.70	1.64
			2.50*	2.84	3.621	9.65	3.97	1.63
			2.80	3.16	4.029	10.6	4.36	1.62
			3.20	3.58	4.564	11.8	4.86	1.61
2"	50	60.5	2.30	3.30	4.205	17.8	5.90	2.06
			3.20	4.52	5.760	23.7	7.84	2.03
			4.00	5.57	7.100	28.5	9.41	2.00
2 1/2"	65	76.3	2.80	5.08	6.465	43.7	11.5	2.60
			3.20	5.77	7.349	49.2	12.9	2.59
			4.00	7.13	9.085	59.5	15.6	2.58
3"	80	89.1	2.80*	5.96	7.591	70.7	15.9	3.05
			3.20	6.78	8.636	79.8	17.9	3.04
			4.00	8.39	10.690	97.0	21.8	3.01
3 1/2"	90	101.6	3.20	7.76	9.892	120	23.6	3.48
			4.00	9.63	12.260	146	28.8	3.45
			5.00	11.90	15.170	177	34.9	3.42
4"	100	114.3	3.20	8.77	11.170	172	30.2	3.93
			3.50*	9.56	12.180	187	32.7	3.92
			4.00	10.90	13.860	211	36.9	3.90
			4.50	12.20	15.520	234	41.0	3.89
			5.60	15.00	19.120	283	49.6	3.85
5"	125	139.8	3.60	12.10	15.400	357	51.1	4.82
			4.00	13.40	17.070	394	56.3	4.80
			4.50	15.00	19.130	438	62.7	4.79
			6.00	19.80	25.220	566	80.9	4.74
6"	150	165.2	4.50	17.80	22.720	734	88.9	5.68
			5.00*	19.80	25.160	808	97.8	5.67
			6.00	23.60	30.010	952	115	5.63
			7.00	27.30	34.790	1090	132	5.60
			7.10*	27.70	35.260	1100	134	5.60

Note : * Check availability of products

Dimension Tolerances

Outside Diameter	DN < 50 mm : +0.5 mm DN ≥ 50 mm : +1%
Thickness	< 4 mm : + 0.6 mm - 0.5 mm 4 mm ≤ t ≤ 12 mm : +15% -12.5% ≥ 12 mm :+15% -1.5 mm
Weight	TIS ± 10% , JIS N/A