



# RECTANGULAR HOLLOW SECTION STEEL PIPE

เหล็กงานโครงสร้าง  
 **ASTM A500**

MATERIAL OF GRADE	CHEMICAL COMPOSITION (%)						MECHANICAL PROPERTIES					
	C Max	Si Max	Mn Max	P Max	S Max	Cu Max	Yield Strength		Tensile Strength		Elongation, min	
							Round MPa	Sharped MPa	Round MPa	Sharped MPa	Round 2in (50.8 mm)	Shaped 2in (50.8 mm)
Grade A	0.300	-	1.400	0.045	0.045	0.18	230	270	310	310	25	25
Grade B	0.300	-	1.400	0.045	0.045	0.18	290	315	400	400	23	23
Grade C	0.270	-	1.400	0.045	0.045	0.18	315	345	425	425	21	21
Grade D	0.300	-	1.400	0.045	0.045	0.18	250	250	400	400	23	23

Nominal Size		Thickness	Weight (plain end)	Cross-sectional area	Geometrical moment of inertia		Modulus of section		Radius of gyration of area	
mm	in	mm	kg/m	(cm <sup>2</sup> )	(cm <sup>4</sup> )		(cm <sup>3</sup> )		(cm)	
				A	I <sub>x</sub>	I <sub>y</sub>	Z <sub>x</sub>	Z <sub>y</sub>	i <sub>x</sub>	i <sub>y</sub>
76.2 x 50.8	3" x 2"	3.58	6.43	8.25	63.01	33.42	16.54	13.16	2.76	2.01
		4.78	8.32	10.64	77.48	40.78	20.33	16.05	2.70	1.96
		6.35	10.56	13.13	86.86	45.72	22.80	18.00	2.57	1.87
101.6 x 50.8	4" x 2"	3.96	8.60	11.04	140.10	47.00	27.58	18.50	3.56	2.06
		4.78	10.21	13.07	161.40	53.68	31.77	21.13	3.51	2.03
		6.35	13.09	16.36	186.41	61.76	36.69	24.31	3.38	1.94
101.6 x 76.2	4" x 3"	3.96	10.24	13.05	188.08	120.47	37.02	31.62	3.80	3.04
		4.78	12.11	15.50	218.35	139.50	42.98	36.61	3.75	3.00
		6.35	16.62	19.59	259.68	165.77	51.12	43.51	3.64	2.91
127.0 x 76.2	5" x 3"	4.78	13.85	17.92	378.20	170.51	59.56	44.75	4.59	3.08
		6.35	17.89	22.81	456.23	205.22	71.85	53.86	4.47	3.00
		7.92	21.61	27.53	525.97	235.17	82.83	61.72	4.37	2.92
		9.52	25.06	31.96	581.13	258.44	91.52	67.83	4.26	2.84
152.4 x 76.2	6" x 3"	4.78	15.74	20.35	595.87	201.52	78.20	52.89	5.41	3.15
		6.35	20.42	26.04	726.36	244.68	95.32	64.22	5.28	3.07
		7.92	24.78	31.55	845.18	282.28	110.92	74.09	5.18	2.99
		9.52	28.85	36.79	943.43	312.56	123.81	82.04	5.06	2.91
152.4 x 101.6	6" x 4"	4.78	17.65	22.78	728.21	389.21	95.57	76.62	5.65	4.13
		6.35	22.94	29.26	898.49	479.51	117.91	94.39	5.54	4.05
		7.92	27.93	35.57	1055.35	561.00	138.50	110.43	5.54	3.97
		9.52	32.65	41.63	1190.62	630.55	156.25	124.12	5.35	3.89
203.2 x 101.6	8" x 4"	4.78	21.44	27.64	1475.06	503.11	145.18	99.04	7.31	4.27
		6.35	28.00	35.71	1841.61	626.05	181.26	123.24	7.18	4.19
		7.92	34.25	43.62	2185.69	737.97	215.13	145.27	7.08	4.11
		9.52	40.28	51.30	2493.58	836.30	245.43	164.63	6.97	4.04
203.2 x 152.4	8" x 6"	4.78	25.07	32.49	1953.15	1257.55	192.24	165.03	7.75	6.22
		6.35	32.80	42.17	2466.83	1587.01	242.80	208.27	7.65	6.13
		7.92	39.16	51.67	2953.25	1896.05	290.67	248.83	7.56	6.06
		9.52	47.21	60.97	3401.38	2179.36	334.78	286.01	7.47	5.98
		12.70	60.34	76.96	4006.04	2568.06	394.30	337.02	7.21	5.78
254.0 x 152.4	10" x 6"	6.35	37.85	48.62	4234.97	1931.27	333.46	253.45	9.33	6.30
		7.92	46.49	59.71	5097.46	2316.40	401.38	303.99	9.24	6.23
		9.52	54.80	70.65	5904.52	2673.74	464.92	350.88	9.14	6.15
		12.70	70.46	89.86	7068.32	3199.35	556.56	419.86	8.87	5.97

Dimension Tolerances Length of side: ≤ 63.5 mm : ±0.51 mm  
 > 63.5 mm - 88.9 mm : ±0.64 mm  
 > 88.9 mm-139.7 mm : ±0.76 mm  
 > 139.7 mm : ±1%  
 Thickness : ±10%