

Standards and Specifications for Seamless Pipes and Tubes

Oil Country Casing, Non-Upset Tubing Line Pipe and High Test Line Pipe	:	API-5A-Grades J 55 and N 80 API-5AX-Grades P 105 and P 110 API-5L-Grades A and B API-5LX-Grades X 42, X 46 and X 52 IS-1978-Grades YST 21 and YST 25
Boiler and Superheater Tubes	:	BS-3059-Grades 33, 45, 620 and 622 ASTM-A-192 ASTM-A-209-Grades T1, T1a, T1b ASTM-A-210-Grades A-1 ASTM-A-213-Grades T 5, T 11 and T 22 IS-1914-Grades CDS & HFS IS-2416-Grades CDS & HFS IRS--R 22-61
Heat Exchanger and Condenser Tubes	:	ASTM-A-179 ASTM-A-199-Grades T 5, T 11 and T 22 ASTM-A-200-Grades T 5, T 11 and T 22
Still Tubes for Refinery Service	:	ASTM-A-161-Grades Low Carbon and T1 ASTM-A-200-Grades T 5, T 11 and T 22
Tubes for Pressure Purpose: Ordinary Duties	:	BS-806/54-Classes A and B BS-3601-Grades 22, 27 and 35
Tubes for Pressure Purposes: High Duties	:	BS-3602-Grades 23, 27 and 35 BS-3604-Grades 620, 621, 622 and 625
Tubes for Low Pressure Service	:	BS-3603-Grades 27 LT 30 and 27 LT 50 A-333-Grades 1 and 6 A-334-Grades 1 and 6
Tubes for High Temperature Service	:	ASTM-A-106-Grades A and B ASTM-A-335-Grades P1, P5, P11 and P22
Tubes for Water and Gas and Steam Services	:	BS-1387 ASTM-A-120 ASTM-A-53-Grades A and B IS-1239
Tubes for Mechanical, Structural and General Engineering Purpose	:	BS-1775-Grades 11, 13, 16, 20, 24, 28 and 35 IS-3601-Grades 21, 25, 32, 38 and 44 IS-1161-Grades YST 22, 25 and 32
Tubes for Rotary Core Drilling Accessories conforming to BS-4019 Part I, 1974	:	Made from suitable grades of steel e.g. 080A37
Automobile Tubes	:	BS-980-Grades CDS 1, 2 and 3
Tubes for Rear Axles and other Mechanical Applications	:	Made from SAE-1040 steel and other special steels
Tubes for Water Wells	:	IS-4270, Grades St-42 and St-55. Plain at Ends to Tables 1 and 2 of the Specification



**Carbon Alloys Steel Pipe Dimension with Test Pressures According to ANSI B36.10
For ASTM A 53/A 106/A 333/A 335/Specifications**

Nominal Size		Outside Diameter		Wall Thickness		Class	Sched No.	Nominal Weight			Test Pressure Min					
											Butt Welded		Grade A		Grade B	
in	mm	in	mm	in	mm			lb/ft	Kg/ft	Kg/m	psi	Kg/cm2	psi	Kg/cm2	psi	Kg/cm2
1/8	6	0.405	10.3	.068	1.7	std	40	0.24	0.11	0.36	700	49.2	700	49.2	700	49.2
				.095	2.4	xs	80	0.31	0.14	0.47	850	59.8	850	59.8	850	59.8
1/4	8	0.540	13.7	.088	2.24	std	40	0.42	0.19	0.63	700	49.2	700	49.2	700	49.2
				.119	3.02	xs	80	0.54	0.24	0.80	850	59.8	850	59.8	850	59.8
3/8	10	0.675	17.1	.091	2.31	std	40	0.57	0.26	0.84	700	49.2	700	49.2	700	49.2
				.126	3.20	xs	80	0.74	0.34	1.10	850	59.8	850	59.8	850	59.8
1/2	15	0.840	21.3	.109	2.77	std	40	0.85	0.39	1.27	700	49.2	700	49.2	700	49.2
				.147	3.73	xs	80	1.09	0.49	1.62	850	59.8	850	59.8	850	59.8
				.188	4.78	--	160	1.31	0.60	1.95	1000	70.3	1000	70.3	1000	70.3
				.294	7.47	xxs	--	1.71	0.78	2.55	1000	70.3	1000	70.3	1000	70.3
3/4	20	1.050	26.7	.113	2.87	std	40	1.13	0.51	1.69	700	49.2	700	49.2	700	49.2
				.154	3.91	xs	80	1.47	0.67	2.20	850	59.8	850	59.8	850	59.8
				.218	5.56	--	160	1.94	0.88	2.90	1000	70.3	1000	70.3	1000	70.3
				.308	7.82	xxs	--	2.44	1.11	3.63	1000	70.3	1000	70.3	1000	70.3
1	25	1.315	33.4	.133	3.38	std	40	1.68	0.76	2.50	700	49.2	700	49.2	700	49.2
				.179	4.55	xs	80	2.17	0.98	3.23	850	59.8	850	59.8	850	59.8
				.250	6.35	--	160	2.84	1.29	4.23	1000	70.3	1000	70.3	1000	70.3
				.358	9.09	xxs	--	3.66	1.66	5.45	1000	70.3	1000	70.3	1000	70.3
1 1/4	32	1.660	42.2	.140	3.56	std	40	2.27	1.03	3.38	1000	70.3	1000	70.3	1000	70.3
				.191	4.85	xs	80	3.00	1.36	4.47	1300	91.4	1500	105.5	1500	105.5
				.250	6.35	--	160	3.76	1.71	5.60	1400	98.4	1800	126.5	1800	126.5
				.382	9.70	xxs	--	5.21	2.36	7.76	1400	98.4	1800	126.5	1800	126.5
1 1/2	40	1.900	48.3	.145	3.68	std	40	2.72	1.23	4.05	1000	70.3	1000	70.3	1000	70.3
				.200	5.08	xs	80	3.63	1.65	5.41	1300	91.4	1500	105.5	1600	112.5
				.281	7.14	--	160	4.85	2.20	7.24	1400	98.4	1800	126.5	1900	133.6
				.400	10.15	xxs	--	6.41	2.91	9.55	1400	98.4	1800	126.5	1900	133.6
2	50	2.375	60.3	.154	3.91	std	40	3.65	1.66	5.44	1000	70.3	2300	161.7	2500	175.8
				.218	5.54	xs	80	5.02	2.28	7.48	1300	91.4	2500	175.8	2500	175.8
				.344	8.74	--	160	7.46	3.38	11.11	--	--	2500	175.8	2500	175.8
				.436	11.13	xxs	--	9.03	4.10	13.45	1400	98.4	2500	175.8	2500	175.8
2 1/2	65	2.875	73.0	.203	5.16	std	40	5.79	2.63	8.62	1000	70.3	2500	175.8	2500	175.8
				.276	7.01	xs	80	7.86	3.47	11.41	1300	91.4	2500	175.8	2500	175.8
				.375	9.53	--	160	10.01	4.54	14.91	1400	98.4	2500	175.8	2500	175.8
				.552	14.02	xxs	--	18.70	8.21	20.39	1400	98.4	2500	175.8	2500	175.8
3	80	3.500	88.9	.188	4.78	--	--	6.63	3.01	9.87	1000	70.3	--	--	--	--
				.216	5.49	std	40	7.58	3.44	11.29	1000	70.3	2200	154.7	2500	175.8
				.300	7.62	xs	80	10.25	4.65	15.27	1300	91.4	2500	175.8	2500	175.8
				.438	11.13	--	160	14.31	6.489	21.33	--	--	2500	175.8	2500	175.8
3 1/2	90	4.000	101.6	.600	15.24	xxs	--	18.58	8.13	27.67	--	--	2500	175.8	2500	175.8
				.188	4.78	--	--	7.63	3.46	11.35	1200	84.4	--	--	--	--
				.226	5.74	std	40	9.11	4.13	13.57	1200	84.4	2000	140.6	2400	168.7
				.318	8.08	xs	80	12.51	5.67	18.63	1700	119.5	2800	196.8	2800	196.8
4	100	4.500	114.3	.156	3.96	--	--	7.25	3.29	10.79	1000	70.3	--	--	--	--
				.188	4.78	--	--	8.64	3.92	12.86	1200	84.4	--	--	--	--
				.219	5.56	--	--	10.00	4.54	14.88	1200	84.4	--	--	--	--
				.237	6.02	std	40	10.79	4.89	16.07	1200	84.4	1900	133.6	2200	154.7
				.337	8.56	xs	80	14.98	6.79	22.31	1700	119.5	2700	189.8	2800	196.8
				.438	11.13	--	120	18.98	8.61	28.30	--	--	2800	196.8	2800	196.8
				.531	13.49	--	160	22.52	10.21	33.53	--	--	2800	196.8	2800	196.8
				.674	17.12	xxs	--	27.54	12.49	41.02	--	--	2800	196.8	2800	196.8
5	125	5.563	141.3	.258	6.55	std	40	14.62	6.63	21.78	--	--	1700	119.5	1900	133.6
				.375	9.35	xs	80	20.78	9.43	30.95	--	--	2400	168.7	2800	196.8
				.500	12.70	--	120	27.04	12.27	40.28	--	--	2800	196.8	2800	196.8
				.625	15.88	--	160	32.96	14.95	49.09	--	--	2800	196.8	2800	196.8
				.750	19.05	xxs	--	38.55	17.49	57.42	--	--	2800	196.8	2800	196.8
6	150	6.625	168.3	.280	7.11	std	40	18.97	8.60	28.26	--	--	1500	105.5	1800	126.5
				.432	10.97	xs	80	28.57	12.96	42.56	--	--	2300	161.7	2700	189.8
				.562	14.27	--	120	35.42	16.52	54.20	--	--	2800	196.8	2800	196.8
				.719	18.26	--	160	45.34	20.57	67.55	--	--	2800	196.8	2800	196.8
				.864	21.95	xxs	--	53.16	24.11	79.18	--	--	2800	196.8	2800	196.8
				.250	6.35	--	20	22.36	10.14	33.31	--	--	1000	70.3	1200	84.4
8	200	8.625	219.1	.277	7.04	--	30	24.70	11.70	36.79	--	--	1200	84.4	1300	91.4
				.322	8.18	std	40	28.55	12.95	42.53	--	--	1300	91.4	1600	112.5
				.406	10.31	--	60	35.66	16.18	53.09	--	--	1700	119.5	2000	140.6
				.500	12.70	xs	80	43.39	19.68	64.63	--	--	2100	147.6	2400	168.7
				.594	15.09	--	100	50.93	23.10	75.89	--	--	2500	175.8	2800	196.8
				.719	18.26	--	120	60.69	27.53	90.43	--	--	2800	196.8	2800	196.8
				.812	20.62	--	140	67.79	30.75	100.93	--	--	2800	196.8	2800	196.8
				.875	22.23	xxs	--	72.42	32.85	107.87	--	--	2800	196.8	2800	196.8
				.906	23.01	--	160	74.71	33.89	111.25	--	--	2800	196.8	2800	196.8
				1.102	28.00	--	--	88.65	59.98	131.95	--	--	2500	196.8	2800	196.8
				1.260	32.00	--	--	95.16	64.38	141.64	--	--	2500	196.8	2800	196.8
				1.417	36.00	--	--	109.21	73.89	162.55	--	--	2500	196.8	2800	196.8
				1.574	40.00	--	--	118.69	80.30	176.60	--	--	2500	196.8	2800	196.8



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Nominal Size		Outside Diameter		Wall Thickness		Class	Sched No.	Nominal Weight			Test Pressure Min					
											Butt Welded		Grade A		Grade B	
in	mm	in	mm	in	mm			lb/ft	Kg/ft	Kg/m	psi	Kg/cm2	psi	Kg/cm2	psi	Kg/cm2
10	250	10.750	273.1	.250	6.35	--	20	28.04	12.72	41.77	--	--	850	59.8	1000	70.3
				.279	7.11	--	--	31.20	14.15	46.64	--	--	950	66.8	1100	77.3
				.307	7.80	--	30	34.24	15.53	51.00	--	--	1000	70.3	1200	84.4
				.365	9.27	std	40	40.48	18.36	60.29	--	--	1200	84.4	1400	98.4
				.500	12.70	xs	60	54.74	24.83	81.54	--	--	1700	119.5	2000	140.6
				.594	15.09	--	80	64.40	29.21	95.97	--	--	2000	140.6	2300	161.7
				.719	18.26	--	100	77.00	34.93	114.70	--	--	2400	168.7	2800	196.8
				.844	21.44	--	120	89.27	40.49	133.00	--	--	2800	196.8	2800	196.8
				1.00	25.40	xxs	140	104.13	47.23	155.10	--	--	2800	196.8	2800	196.8
				1.125	28.58	--	160	115.65	52.46	172.25	--	--	2800	196.8	2800	196.8
--	32.00	--	--	127.75	86.45	190.26	--	--	2800	196.8	2800	196.8				
--	40.00	--	--	154.38	104.47	229.93	--	--	2800	196.8	2800	196.8				
12	300	12.750	323.8	.250	6.35	--	20	33.28	15.14	49.72	--	--	700	49.2	800	56.2
				.330	8.38	--	30	43.77	19.85	65.20	--	--	950	66.8	1100	77.3
				.375	9.53	std	--	49.56	22.48	73.82	--	--	1100	77.3	1200	84.4
				.406	10.31	--	40	53.56	24.29	79.72	--	--	1300	91.4	1300	91.4
				.500	12.70	xs	--	65.42	29.67	97.44	--	--	1400	98.4	1600	112.5
				.562	14.27	--	60	73.22	33.21	108.96	--	--	1600	112.5	1900	133.6
				.668	17.48	--	80	88.57	40.17	132.01	--	--	1900	133.6	2300	161.7
				.844	21.44	--	100	107.29	48.67	159.85	--	--	2400	168.7	2800	196.8
				1.000	25.40	xxs	120	125.49	56.92	186.92	--	--	2800	196.8	2800	196.8
				1.125	28.58	--	140	139.68	63.36	208.04	--	--	2800	196.8	2800	196.8
1.312	33.32	--	160	160.33	72.72	238.72	--	--	2800	196.8	2800	196.8				
--	40.00	--	--	188.04	125.25	279.94	--	--	2800	196.8	2800	196.8				
14	350	14.000	355.6	.250	6.35	--	10	36.71	16.65	54.68	--	--	650	45.7	750	52.7
				.312	7.92	--	20	45.66	20.72	67.94	--	--	900	56.2	950	66.8
				.375	9.53	std	30	54.57	24.75	81.28	--	--	950	66.8	1100	77.3
				.438	11.13	--	40	63.37	28.74	94.49	--	--	1100	77.3	1300	91.4
				.500	12.70	xs	--	72.09	32.70	107.38	--	--	1300	91.4	1300	91.4
				.594	15.09	--	60	85.01	38.56	126.68	--	--	1500	105.5	1500	105.5
				.750	19.05	--	80	106.13	48.14	158.08	--	--	1900	133.6	2800	196.8
				.938	23.82	--	100	130.79	59.33	194.90	--	--	2400	168.7	2800	196.8
				1.094	27.79	--	120	150.76	68.38	224.60	--	--	2800	196.8	2800	196.8
				1.250	31.75	--	140	170.22	77.21	253.53	--	--	2800	196.8	2800	196.8
1.406	35.71	--	160	189.15	85.80	281.68	--	--	2800	196.8	2800	196.8				
--	40.00	--	--	209.11	141.50	331.31	--	--	2800	196.8	2800	196.8				
16	400	16.000	406.4	.250	6.35	--	10	42.05	19.07	62.83	--	--	550	38.7	650	45.7
				.312	7.92	--	20	52.36	23.75	77.86	--	--	700	49.2	800	56.2
				.375	9.53	std	30	62.58	28.39	93.21	--	--	850	59.8	1000	70.3
				.500	12.70	xs	40	82.77	37.54	123.29	--	--	1100	77.3	1300	91.4
				.656	16.66	--	60	107.54	48.78	160.12	--	--	1500	105.5	1700	119.5
				.844	21.44	--	80	136.53	61.95	203.48	--	--	1900	133.6	2200	154.7
				1.031	26.19	--	100	164.86	74.48	245.50	--	--	2300	161.7	2700	189.8
				1.219	30.96	--	120	192.40	87.27	286.62	--	--	2700	189.8	2800	196.8
				1.438	36.53	--	140	223.57	101.41	333.11	--	--	2800	196.8	2800	196.8
				1.594	40.49	--	160	245.22	111.23	365.39	--	--	2800	196.8	2800	196.8
18	450	18.000	457.20	.250	6.35	--	10	47.39	21.49	70.59	--	--	550	38.7	650	45.7
				.312	7.92	--	20	59.03	26.76	87.79	--	--	650	45.7	800	56.2
				.375	9.53	std	30	70.59	32.00	105.14	--	--	750	52.7	850	59.8
				.437	11.13	--	40	82.06	37.00	122.36	--	--	850	59.8	1000	70.3
				.500	12.70	xs	--	92.45	42.37	139.19	--	--	1000	70.3	1200	84.4
				.562	14.20	--	60	104.75	47.55	155.91	--	--	1100	77.3	1300	91.4
				.750	19.05	--	80	138.17	62.79	205.80	--	--	1500	105.5	1800	126.6
				.937	23.83	--	100	170.75	77.42	254.59	--	--	1800	126.5	2300	161.7
				1.156	29.36	--	120	207.96	94.48	309.76	--	--	2300	161.7	2800	196.8
				1.375	34.93	--	140	244.14	110.7	363.65	--	--	2700	189.8	2800	196.8
1.562	39.67	--	160	274.73	124.4	408.45	--	--	2800	196.8	2800	196.8				
1.781	45.24	--	--	308.51	139.9	459.51	--	--	2700	189.8	2800	196.8				
20	500	20.000	508.00	.250	6.35	--	10	52.73	23.93	78.54	--	--	450	31.6	600	42.2
				.375	9.53	std	20	78.60	35.66	117.07	--	--	650	45.7	800	56.2
				.500	12.70	xs	30	104.13	47.24	155.10	--	--	900	63.3	1000	70.3
				.593	15.09	--	40	122.91	55.78	183.37	--	--	1050	73.8	1200	84.4
				.812	20.62	--	60	166.40	75.59	247.85	--	--	1400	98.4	1700	119.5
				1.031	26.2	--	80	208.87	94.79	311.29	--	--	1800	126.5	2000	140.6
				1.281	32.5	--	100	256.10	116.2	381.09	--	--	2300	161.7	2800	196.8
				1.500	38.0	--	120	296.37	134.4	440.43	--	--	2700	189.8	2800	196.8
				1.750	44.4	--	140	341.10	154.8	507.60	--	--	2800	196.8	2800	196.8
				1.968	50.0	--	160	379.01	171.9	564.71	--	--	2800	196.8	2800	196.8
22	550	22.000	558.80	.250	6.35	--	10	57.93	26.33	86.50	--	--	400	28.1	500	35.2
				.375	9.53	std	20	86.50	39.32	129.01	--	--	600	42.2	700	49.2
				.500	12.70	xs	30	114.86	52.12	171.01	--	--	800	56.2	900	63.3
				.875	22.2	--	60	197.14	89.61	294.00	--	--	1400	98.4	1500	105.5
				1.126	28.6	--	80	250.14	113.7	373.00	--	--	1800	126.5	2000	140.6
				1.374	34.9	--	100	302.50	137.5	451.00	--	--	2200	154.7	2600	182.8
				1.626	41.3	--	120	352.66	160.3	526.00	--	--	2600	182.8	2800	196.8
				1.874	47.6	--	140	402.38	182.9	600.00	--	--	2800	196.8	2800	196.8
				2.126	54.0	--	160	449.90	204.5	671.00	--	--	2800	196.8	2800	196.8
24	600	24.000	609.60	.250	6.35	--	10	63.41	28.77	94.45	--	--	350	24.6	500	35.2
				.375	9.53	std	20	94.62	42.98	140.94	--	--	550	38.7	700	49.2
				.500	12.70	xs	--	125.49	57.00	186.92	--	--	700	49.2	800	56.2
				.552	14.27	--	30	140.80	64.00	209.54	--	--	800	56.2	1000	70.3
				.674	17.48	--	40	171.17	77.72	255.14	--	--	1000	70.3	1200	84.4
				.968	24.61	--	60	238.17	108.29	355.02	--	--	1400	98.4	1600	112.5
				1.218	31.00	--	80	296.36	134.4	441.0	--	--	1800	126.5	2000	140.6
				1.531	38.90	--	100	367.40	166.7	547.0	--	--	2200	154.7	2600	182.8
				1.812	46.00	--	120	429.39	194.88	639.0	--	--	2600	182.8	2800	196.8
2.342	59.50	--	160	541.94	246.0	807.0	--	--	2800	196.8	2800	196.8				



JAIN STEEL TUBE CO.

POPULAR STANDARDS AND SPECIFICATIONS

QUALITY		CHEMICAL ANALYSIS									MECHANICAL PROPERTIES			SPECIFIC REQUIREMNT
SMLS	WELED	SPECIFICATION	WT	C %	Mn %	P % MAX	S % MAX	Si %	Cr %	Mo %	TENSILE STRENGTH Mpa	YIELD STRESS Mpa	ELONGATION IN50 mm Min Longitudinal	
Carbon Steel Pipes / Tubes Conform To Various Specifications As Listed Below														
*	*	ASTM A53/A	AW	0.25 Max	0.95 Max	0.050	0.080	--	--	--	331 Min	207 Min	36	----
*	*	ASTM A53/B	AW	0.30 Max	1.20 Max	0.050	0.060	--	--	--	413 Min	240 Min	29.5	----
*	--	ASTM A106/A	AW	0.25 Max	0.27-0.93	0.025	0.025	0.10 Min	0.40 Max	0.15 Max	330 Min	205 Min	35/28	CR MO CU NI VA
*	--	ASTM A106/B	AW	0.30 Max	0.29-1.06	0.025	0.025	0.10 Min	0.40 Max	0.15 Max	415 Min	240 Min	30/22	.40 .15 .40 .40 .08
*	--	ASTM A106/C	AW	0.35 Max	0.29-1.06	0.025	0.025	0.10 Min	0.40 Max	0.15 Max	485 Min	275 Min	30/22	Five Elements Not To Exceed 1%
*	--	ASTM A179	MW	0.06-0.18	0.27-0.63	0.048	0.048	--	--	--	325 Min	180 Min	35.0	Hardness 72HRB Max
--	*	ASTM A214	MW	0.18 Max	0.27-0.63	0.050	0.050	--	--	--	385 Min	180 Min	35.0	Hardness 72HRB Max
*	--	ASTM A192	MW	0.06-0.18	0.27-0.63	0.048	0.048	0.25 Max	--	--	325 Min	180 Min	35.0	Hardness 77HRB Max
*	*	ASTM A333/1	AW	0.30 Max	0.40-1.06	0.025	0.025	--	--	--	380 Min	205 Min	25/20	Impact Test -50 F 40 x 10 J14
*	*	ASTM A333/6	AW	0.30 Max	0.29-1.06	0.025	0.025	0.10 Min	--	--	415 Min	240 Min	30/18	Impact Test -50 F 40 x 10 J14
*	*	ASTM A334/1	MW	0.30 Max	0.40-1.06	0.025	0.025	--	--	--	380 Min	205 Min	35/28	-50 F 40 x 10 J14 85 HRB Max
*	*	ASTM A334/6	MW	0.30 Max	0.29-1.06	0.025	0.025	0.10 Min	--	--	415 Min	240 Min	30/22	-50 F 40 x 10 J14 85 HRB Max
*	*	BS 3659/96/Part1/326		0.16 Max	0.30-0.70	0.040	0.040	--	--	--	320-480	186 Min	25	--
*	*	BS 3659/96/Part1/360		0.17 Max	0.40-0.80	0.035	0.035	0.10-0.35	--	--	360-500	235 Min	21	--
*	--	BS 3659/96/Part1/440		0.12-0.18	0.90-1.20	0.035	0.035	0.10-0.35	--	--	480-560	245 Min	22	--
*	--	ASTM A210/A-1	MW	0.27 Max	0.93 Max	0.048	0.058	0.10 Min	--	--	415 Min	255 Min	30/22	Hardness 79HRB Max
*	--	ASTM A210/C	MW	0.35 Max	0.29-1.06	0.048	0.058	0.10 Min	--	--	485 Min	275 Min	30/22	Hardness 89HRB Max
*	--	DIN 17175/ST35.8		0.17 Max	0.40-0.80	0.040	0.040	0.35 Max	--	--	340-480	235 Min	25	--
*	--	DIN 17175/ST45.8		0.22 Max	0.40-1.20	0.040	0.040	0.10-0.35	--	--	410-540	255 Min	21	--
*	--	DIN 2391 ST 35	AW	0.17 Max	0.40 Min	0.025	0.025	--	--	--	340-470	235 Min	25	--
*	--	DIN 2391 ST 45	AW	0.21 Max	0.40 Min	0.025	0.025	--	--	--	440-570	255 Min	21	--
*	--	DIN 2391 ST 52	AW	0.22 Max	1.60 Max	0.025	0.025	--	--	--	490-630	355 Min	22	--
--	*	ASTM A178/A	MW	0.06-0.18	0.27-0.63	0.050	0.050	0.50-1.00	--	--	325 Min	172 Min	30/22	--
--	*	ASTM A178/C	MW	0.35 Max	0.80 Max	0.035	0.035	--	--	--	415 Min	255 Min	35	--
--	*	ASTM A178/D	MW	0.27 Max	1.00-1.50	0.050	0.050	0.10 Min	--	--	485 Min	180 Min	30	--
--	*	BS 6323 Part V/1	AW	0.13 Max	0.60 Max	0.050	0.050	--	--	--	300 Min	200 Min	10 / 20	--
--	*	BS 6323 Part V/2	AW	0.16 Max	0.70 Max	0.050	0.050	--	--	--	340 Min	250 Min	8 / 15	--
--	*	BS 6323 Part V/3	AW	0.20 Max	0.90 Max	0.050	0.050	0.35 Max	--	--	400 Min	300 Min	7 / 12	--
PSL - 1	--	API 5L GR. A - 25	AW	0.21 Max	0.60 Max	0.030	0.030	--	--	--	310 Min	172 Min		SMLS C% .21 Max
PSL - 1	PSL - 1	API 5L GR. A	AW	0.22 Max	0.90 Max	0.030	0.030	--	--	--	331 Min	207 Min		SMLS C% .22 Max
PSL - 1	PSL - 1	API 5L GR. B	AW	0.26 Max	1.20 Max	0.030	0.030	--	--	--	414 Min	241 Min		SMLS C% .28 Max
PSL - 1	PSL - 1	API 5L GR. X - 42	AW	0.26 Max	1.30 Max	0.030	0.030	--	--	--	414 Min	290 Min		SMLS C% .28 Max
PSL - 1	PSL - 1	API 5L GR. X - 46	AW	0.26 Max	1.40 Max	0.030	0.030	--	--	--	434 Min	317 Min		SMLS C% .28 Max
PSL - 1	PSL - 1	API 5L GR. X - 52	AW	0.26 Max	1.40 Max	0.030	0.030	--	--	--	455 Min	359 Min		SMLS C% .28 Max
PSL - 1	PSL - 1	API 5L GR. X - 56	AW	0.26 Max	1.40 Max	0.030	0.030	--	--	--	490 Min	386 Min		SMLS C% .28 Max
PSL - 1	PSL - 1	API 5L GR. X - 60	AW	0.26 Max	1.40 Max	0.030	0.030	--	--	--	517 Min	414 Min		SMLS C% .28 Max
--	PSL - 1	API 5L GR. X - 65	AW	0.26 Max	1.45 Max	0.030	0.030	--	--	--	531 Min	448 Min		SMLS C% .28 Max
--	PSL - 1	API 5L GR. X - 70	AW	0.26 Max	1.65 Max	0.030	0.030	--	--	--	565 Min	483 Min		SMLS C% .28 Max
PSL - 2	PSL - 2	API 5L GR. B	AW	0.22 Max	1.20 Max	0.025	0.015	--	--	--	414-758	241-448		CE
PSL - 2	PSL - 2	API 5L GR. X - 42	AW	0.22 Max	1.30 Max	0.025	0.015	--	--	--	414-758	280-496		0.25 0.43 T/L 27/41 T/L 20/30
PSL - 2	PSL - 2	API 5L GR. X - 46	AW	0.22 Max	1.40 Max	0.025	0.015	--	--	--	434-758	317-524		0.25 0.43 T/L 27/41 T/L 20/30
PSL - 2	PSL - 2	API 5L GR. X - 52	AW	0.22 Max	1.40 Max	0.025	0.015	--	--	--	455-758	359-531		0.25 0.43 T/L 27/41 T/L 20/30
PSL - 2	PSL - 2	API 5L GR. X - 56	AW	0.22 Max	1.40 Max	0.025	0.015	--	--	--	490-758	386-544		0.25 0.43 T/L 27/41 T/L 20/30
PSL - 2	PSL - 2	API 5L GR. X - 60	AW	0.22 Max	1.40 Max	0.025	0.015	--	--	--	517-758	414-565		0.25 0.43 T/L 27/41 T/L 20/30
--	PSL - 2	API 5L GR. X - 65	AW	0.22 Max	1.45 Max	0.025	0.015	--	--	--	531-758	448-565		0.25 0.43 T/L 27/41 T/L 20/30
--	PSL - 2	API 5L GR. X - 70	AW	0.22 Max	1.65 Max	0.025	0.015	--	--	--	565-758	483-565		0.25 0.43 T/L 27/41 T/L 20/30
*	*	IS 1978 / YST 210	AW	0.22 Max	0.90 Max	0.040	0.050	--	--	--	330 Min	210 Min		
*	*	IS 1978 / YST 240	AW	0.27 Max	1.15 Max	0.040	0.050	--	--	--	410 Min	240 Min		
*	*	IS 1979 / YST 290	AW	0.28 Max	1.25 Max	0.040	0.050	--	--	--	410 Min	290 Min		
*	*	IS 1979 / YST 320	AW	0.30 Max	1.35 Max	0.040	0.050	--	--	--	430 Min	320 Min		
*	*	IS 1979 / YST 360	AW	0.30 Max	1.35 Max	0.040	0.050	--	--	--	450-550	360 Min		
*	*	IS 1978 / YST 390	AW	0.26 Max	1.35 Max	0.040	0.050	--	--	--	480-520	390 Min		
*	*	IS 1979 / YST 410	AW	0.26 Max	1.35 Max	0.040	0.050	--	--	--	520-540	410 Min		
*	*	IS 1979 / YST 450	AW	0.26 Max	1.40 Max	0.040	0.050	--	--	--	530-550	450 Min		
*	*	IS 1979 / YST 480	AW	0.23 Max	1.60 Max	0.040	0.050	--	--	--	565 Min	480 Min		
--	*	IS 3589 Gr. 330	AW	0.16 Max	1.20 Max	0.040	0.040	--	--	--	330 Min	195 Min	20 GL=5.65	
--	*	IS 3589 Gr. 410	AW	0.20 Max	1.30 Max	0.040	0.040	--	--	--	410 Min	235 Min	18 GL=5.65	
--	*	IS 3589 Gr. 450	AW	0.25 Max	1.20 Max	0.040	0.040	--	--	--	450 Min	275 Min	15 GL=5.65	
--	*	IS 1161 / YST 210	AW	0.12 Max	0.60 Max	0.050	0.050	--	--	--	330 Min	210 Min	20 GL=5.65	
--	*	IS 1161 / YST 240	AW	0.16 Max	1.20 Max	0.050	0.050	--	--	--	410 Min	240 Min	17 GL=5.65	
--	*	IS 1161 / YST 310	AW	0.25 Max	1.30 Max	0.050	0.050	--	--	--	450 Min	310 Min	14 GL=5.65	
*	--	ASTM A335/P1	AW	0.10-0.20	0.30-0.80	0.025	0.025	0.10-0.50	--	0.44-0.65	380 Min	205 Min	30	----
*	--	ASTM A335/P2	AW	0.10-0.20	0.30-0.61	0.025	0.025	0.10-0.30	0.50-0.81	0.44-0.65	380 Min	205 Min	30	----
*	--	ASTM A335/P5	AW	0.15 Max	0.30-0.60	0.025	0.025	0.50 Max	4.00-6.00	0.44-0.65	415 Min	205 Min	30	----
*	--	ASTM A335/P9	AW	0.15 Max	0.30-0.60	0.030	0.030	0.25-1.00	8.00-10.00	0.90-1.10	415 Min	172 Min	30/22	----
*	--	ASTM A335/P11	AW	0.15 Max	0.30-0.60	0.025	0.025	0.50-1.00	1.00-1.50	0.44-0.65	415 Min	205 Min	30	----
*	--	ASTM A335/P12	AW	0.15 Max	0.30-0.61	0.025	0.025	0.50 Max	0.80-1.25	0.44-0.65	415 Min	205 Min	30	----
*	--	ASTM A335/P22	AW	0.15 Max	0.30-0.61	0.025	0.025	0.50 Max	1.90-2.60	0.87-1.13	415 Min	205 Min	30	----
*	--	ASTM A213/T2	MW	0.10-0.20	0.30-0.61	0.045	0.045	0.10-0.30	0.50-0.81	0.44-0.65	415 Min	205 Min	30/22	Hardness 85HRB Max
--	*	ASTM A213/T5	MW	0.15 Max	0.30-0.60	0.030	0.030	0.50 Max	4.00-6.00	0.44-0.65	415 Min	205 Min	30/22	Hardness 85HRB Max
--	*	ASTM A213/T9	MW	0.15 Max	0.30-0.60	0.030	0.030	0.25-1.00	8.00-10.00	0.90-1.10	415 Min	170 Min	30/22	Hardness 89HRB Max
--	*	ASTM A213/T11	MW	0.15 Max	0.30-0.60	0.030	0.030	0.50-1.00	1.00-1.50	0.44-0.65	415 Min	205 Min	30/22	Hardness 85HRB Max
--	*	ASTM A213/T12	MW	0.15 Max	0.30-0.61	0.045	0.045	0.50 Max	0.80-1.25	0.44-0.65	415 Min	205 Min	30/22	Hardness 85HRB Max
--	*	ASTM 213/T-22	MW	0.15 Max	0.30-0.60	0.030	0.030	0.50 Max	1.90-2.60	0.87-1.13	415 Min	205 Min	30/22	Hardness 85HRB Max



JAIN STEEL TUBE CO.

QUALITY		CHEMICAL ANALYSIS										MECHANICAL PROPERTIES			SPECIFIC REQUIREMENT
SMLS	ERW	SPECIFICATION	WT	C %	Mn %	P % MAX	S % MAX	Si %	Cr %	MO %	Ni %	TENSILE STRENGTH Mpa	YIELD STRESS Mpa	ELONGATIO N IN 50 mm Min Longitudinal	
Alloy Steel Pipes / Tubes Conform To Various Specifications As Listed Below															
*	--	BS/3058/90/Part1/620		0.10-0.15	0.40-0.70	0.040	0.040	0.10-0.35	0.70-1.10	0.45-0.65		441-618	235 Min	22	AL max 0.020 AL max 0.020 ----- -----
*	--	BS/3058/90/Part1/622		0.08-0.15	0.40-0.70	0.040	0.040	0.50 Max	2.00-2.50	0.90-1.20		440-590	175 Min	20	
*	--	DIN/17175/13CrMo944		0.10-0.18	0.40-0.70	0.040	0.040	0.10-0.35	0.70-1.00	0.40-0.50		441-570	294 Min	22	
*	--	DIN/17175/10CRM910		0.15 Max	0.40-0.60	0.040	0.040	0.15-0.50	2.0-2.5	0.90-1.10		441-570	294 Min	22	
*	--	DIN/17175/15M03		0.12-0.20	0.50-0.80	0.040	0.040	0.10-0.35	--	0.25-0.35		441-540	284 Min	21	
*	--	ASTM A209/T1	MW	0.10-0.20	0.30-0.80	0.045	0.045	0.15-0.50	--	0.44-0.65		380 Min	205 Min	30/22	Hardness 80HRB Max
*	--	ASTM A209/Ta	MW	0.15-0.25	0.30-0.80	0.045	0.045	0.15-0.50	--	0.44-0.65		365 Min	195 Min	30/22	Hardness 81HRB Max
*	--	ASTM A209/T1B	MW	0.14 Max	0.30-0.80	0.045	0.045	0.15-0.50	--	0.44-0.65		415 Min	220 Min	30/22	Hardness 77HRB Max

Low Temperature Service Fitting Conform To ASTM/420														Imp. Test At (-)°			
*	*	WPL 6		.30 Max	.39 - 1.06	0.030	0.030	.1 Min	---	---	---	415 - 585	240 Min	22-30	-50°F10x10J17.6		
*	*	WPL 9		.20 Max	.40 - 1.06	0.030	0.030	---	---	1.6 - 2.24	435 - 610	315 Min	22-28	-100°F10x10J17.6			
*	*	WPL 3		.20 Max	.31 - .64	0.050	0.050	.13 - .37	---	3.1 - 3.82	450 - 620	240 Min	22-30	-150°F10x10J17.6			
*	*	WPL 8		.13 Max	.90 Max	0.030	0.030	.13 - .37	---	8.4 - 9.6	690 - 865	515 Min	16-20	-320°F10x10J33.9			
High Temperature Service Fitting Conform To ASTM/234														Class	Tensile	Yield	
*	---	WPB		0.30 Max	0.29-1.06	0.050	0.050	.10 Min	-----	-----	-----	415 Min	240 Min	22-38	C12*	485 Min	275 Min
*	---	WPC		0.35 Max	0.29-1.06	0.050	0.050	.10 Min	-----	-----	-----	485 Min	275 Min	22-30			
*	---	WPB 1		0.28 Max	0.30-0.90	0.045	0.045	.10 - .50	-----	44-0.65	-----	380 Min	205 Min	22-30			
*	---	WP12CL11/C12*		0.20 Max	0.30-0.80	0.045	0.045	.60 Max	.80-1.25	44-0.65	-----	415 Min	205 Min	22-30			
*	---	WP11CL12/C13*		0.20 Max	0.30-0.80	0.040	0.040	.50-1.00	1.0-1.5	44-0.65	-----	485 Min	275 Min	22-30	C13*	515 Min	310 Min
*	---	WP 11b		0.15 Max	0.30-0.60	0.030	0.030	.50-1.00	1.0-1.5	44-0.65	-----	415 Min	205 Min	22-30			
*	---	WP 22 CL1/CL3*		0.15 Max	0.30-0.60	0.040	0.040	.50 Max	1.9-2.6	87-1.13	-----	415 Min	205 Min	22-30			
*	---	WP 5		0.15 Max	0.30-0.60	0.040	0.030	.50 Max	4.0-6.0	44-0.65	-----	415 Min	205 Min	22-30			
*	---	WP 9		0.15 Max	0.30-0.60	0.030	0.030	.25-1.00	8.0-10	.90-1.11	-----	415 Min	205 Min	22-30			

Mild Steel Pipes Conform to IS 1239 – Part I 1990

Nominal bore		Outside diameter		Light		Medium		Heavy	
in	inch	in	MM	Thickness	Weight	Thickness	Weight	Thickness	Weight
				in	MM	in	MM	in	MM
1/8"	6 mm	0.406	10.32	.072	1.80	.080	2.00	.104	2.65
1/4"	8 mm	0.532	13.48	.072	1.80	.090	2.35	.116	2.90
3/8"	10 mm	0.872	17.10	.072	1.80	.092	2.35	.116	2.90
1/2"	15 mm	0.844	21.43	.080	2.00	.104	2.65	.128	3.25
3/4"	20 mm	1.094	27.20	.092	2.35	.104	2.65	.128	3.25
1"	25 mm	1.312	33.80	.104	2.65	.128	3.25	.160	4.05
1 1/4"	32 mm	1.656	42.90	.104	2.65	.128	3.25	.160	4.05
1 1/2"	40 mm	1.908	48.40	.116	2.90	.128	3.25	.160	4.05
2"	50 mm	2.375	60.30	.116	2.90	.144	3.65	.176	4.47
2 1/2"	65 mm	3.004	76.20	.126	3.25	.144	3.65	.176	4.47
3"	80 mm	3.500	88.90	.126	3.25	.160	4.05	.192	4.85
4"	100 mm	4.500	114.30	.144	3.65	.176	4.50	.212	5.42
5"	125 mm	5.500	139.70	--	--	.192	4.85	.212	5.42
6"	150 mm	6.500	165.10	--	--	.192	4.85	.212	5.40

ERW Pipes Conform to IS 3589-1991 Grade 330/410 Weight in Kg/mtr

AVAILABLE EX- STOCK BIG DIAMETER ERW PIPES CONFIRM TO IS 3589-1991 Grade 330/ 410 Weight in Kg/mtr										
Wall Thickness in mm	7"NB 193.7 mm OD	8"NB 219.1 mm OD	10"NB 273 mm OD	12"NB 323.7 mm OD	14"NB 355.6 mm OD	16"NB 406.4 mm OD	18"NB 457 mm OD	20"NB 508 mm OD	24"NB 610 mm OD	
4.85	22.50	25.61	32.07	38.13	---	---	---	---	---	---
5.20	24.08	27.42	34.34	40.84	---	---	---	---	---	---
5.60	25.88	29.47	36.93	43.93	48.33	55.35	---	---	---	---
6.00	27.67	31.52	39.51	47.01	51.73	59.24	66.76	74.28	89.37	---
6.35	29.23	33.30	41.75	49.69	54.69	62.64	70.60	78.55	94.53	---
7.01	32.15	36.65	45.98	54.75	60.26	69.04	77.82	86.60	104.24	---
7.94	---	41.33	51.90	61.83	68.07	78.02	87.97	97.91	117.88	---
8.18	---	42.53	53.42	63.65	70.06	80.33	90.58	100.82	121.40	---
9.53	---	49.23	61.92	73.83	81.33	93.27	105.21	117.15	141.12	---
12.7	---	---	---	---	---	---	139.21	155.12	187.06	---

Stainless Steel Welded / Seamless Pipes Dimensions and Weights

NOMINAL BORE SIZE		OUTSIDE DIAMETER	SCHEDULE 5 S		SCHEDULE 10 S		SCHEDULE 40 S		SCHEDULE 80 S	
MM	INCHES	MM	WALL MM	KG/MTR	WALL MM	KG/MTR	WALL MM	KG/MTR	WALL MM	KG/MTR
6	1/4	13.72	--	--	1.65	0.498	2.24	0.644	3.02	0.809
10	3/8	17.15	--	--	1.65	0.640	2.31	0.858	3.20	1.117
15	1/2	21.34	1.65	0.813	2.11	1.016	2.77	1.288	3.73	1.644
20	3/4	26.67	1.65	1.033	2.11	1.297	2.87	1.710	3.91	2.227
25	1	33.40	1.65	1.311	2.77	2.124	3.38	2.540	4.55	3.286
32	1.1/4	42.16	1.65	1.673	2.77	2.731	3.56	3.440	4.85	4.529
40	1.1/2	48.26	1.65	1.925	2.77	3.154	3.68	4.106	5.08	5.490
50	2	60.33	1.65	2.423	2.77	3.991	3.91	5.522	5.54	7.598
65	2.1/2	73.03	2.11	3.746	3.05	5.342	5.16	8.766	7.01	11.584
80	3	88.90	2.11	4.584	3.05	6.554	5.49	11.462	7.62	15.502
100	4	114.30	2.11	5.925	3.05	8.493	6.02	16.316	8.56	22.656
125	5	141.30	2.77	9.605	3.40	11.736	6.55	22.092	9.52	31.401
150	6	168.28	2.77	11.475	3.40	14.032	7.11	28.682	10.97	43.194
200	8	219.08	2.77	14.997	3.76	20.264	8.18	43.181	12.70	65.604
250	10	273.05	3.40	22.948	4.19	28.197	9.27	61.204	12.70	82.760
300	12	323.85	3.96	31.707	4.57	36.522	9.52	74.900	12.70	98.909
350	14	355.60	3.96	34.854	4.78	41.973	--	--	--	--
400	16	406.40	4.19	42.182	4.78	48.051	--	--	--	--

Dimensions and Weights of Stainless Steel Gauge Tubes

SIZE	O.D.	10G (3..25)	12G (2.64)	14G (2.03)	16G (1.62)	18G (1.21)	20G (0.91)	22G (0.71)
1/4"	6.35	--	--	--	0.192	0.156	0.124	0.100
5/16"	7.94	0.381	0.350	0.300	0.256	0.204	0.160	0.128
3/8"	9.52	0.510	0.455	0.381	0.320	0.252	0.196	0.157
1/2"	12.70	0.769	0.665	0.542	0.449	0.348	0.269	0.213
3/4"	19.05	1.285	1.084	0.865	0.707	0.540	0.413	0.326
1"	25.40	1.802	1.504	1.187	0.964	0.733	0.558	0.439
1.1/4"	31.75	2.318	1.924	1.510	1.222	0.925	0.702	--
1.1/2"	38.10	2.835	2.343	1.833	1.479	1.117	--	--
1.3/4"	44.45	3.352	2.763	2.155	1.737	1.310	--	--
2"	50.80	3.868	3.182	2.478	1.994	1.502	--	--
2.1/4"	57.15	4.385	3.602	2.801	2.252	1.694	--	--
2.1/2"	63.50	4.901	4.022	3.123	2.509	1.887	--	--
2.3/4"	69.85	5.418	4.441	3.446	2.767	2.079	--	--
3"	76.20	5.934	4.861	3.769	3.024	2.271	--	--
3.1/2"	88.90	6.967	5.700	4.414	3.539	2.656	--	--
4"	101.60	8.001	6.539	5.059	4.054	3.040	--	--

**Chemical Composition of Stainless Steel Pipes / Tubes Confirm to ASTM /
SA312/213 & WP/CR Fittings to ASTM 403**

*	*	TP 304	.08 Max	2.00 Max	0.045	0.030	1.00 Max	18-20	-----	8-11	515 Min	205 Min	28-35	-----
*	*	TP 304 H	.04-0.10	2.00 Max	0.045	0.030	1.00 Max	18-20	-----	8-11	515 Min	205 Min	28-35	-----
*	*	TP 304 L	.035 Max	2.00 Max	0.045	0.030	1.00 Max	18-20	-----	8-13	485 Min	170 Min	28-35	-----
*	*	TP 304 LN	.030 Max	2.00 Max	0.040	0.030	0.75 Max	18-20	-----	8-10.5	515 Min	205 Min	28-35	Nitrogen 0.10-0.16
*	*	TP 304 N	.08 Max	2.00 Max	0.040	0.030	0.75 Max	18-20	-----	8-11	550 Min	240 Min	28-35	Nitrogen 0.10-0.16
*	*	TP 309	0.15 Max	2.00 Max	0.045	0.030	1.00 Max	22-24	---	12-15	515 Min	205 Min	28-35	---
*	*	TP 310	0.15 Max	2.00 Ma	0.045	0.030	1.50 Max	24-26	---	19-22	515 Min	205 Min	28-35	---
*	*	TP 316	0.08 Max	2.00 Max	0.045	0.030	1.00 Max	16-18	2-3	10-14	515 Min	205 Min	28-35	-----
*	*	TP 316 H	0.04-10	2.00 Max	0.045	0.030	1.00 Max	16-18	2-3	10-14	515 Min	205 Min	28-35	-----
*	*	TP 316 LN	.030 Max	2.00 Max	0.040	0.030	.75 Max	16-18	2-3	11-14	515 Min	205 Min	28-35	Nitrogen 0.10-0.16
*	*	TP 316 L	.035 Max	2.00 Max	0.045	0.030	1.00 Max	16-18	2-3	10-15	485 Min	170 Min	28-35	-----
*	*	TP 316 N	.08 Max	2.00 Max	0.040	0.030	.75 Max	16-18	2-3	11-14	550 Min	240 Min	28-35	Nitrogen 0.10-0.16
*	*	TP 321	.08 Max	2.00 Max	0.045	0.030	1.00 Max	17-20	---	9-13	515 Min	205 Min	28-35	---
*	*	TP 321 H	.04-10	2.00 Max	0.045	0.030	1.00 Max	17-20	---	9-13	515 Min	205 Min	28-35	---
*	*	TP 347	.08 Max	2.00 Max	0.045	0.030	1.00 Max	17-20	---	9-13	515 Min	205 Min	28-35	---
*	*	TP 347 H	.04-10	2.00 Max	0.045	0.030	1.00 Max	17-20	---	9-13	515 Min	205 Min	28-35	---



Whether you want to bridge a river, construct a multistoried building, provide a large column-free covered space, to house Industrial or recreational activity, or build a small shed – the choice of Square/ Rectangular Hollow Sections for any particular application will ensure many natural advantages and effect maximum saving.

You will be glad to learn that Square Hollow Sections and Rectangular Hollow Sections (SHS / RHS) – (IS 4923 / 1985) are now easily available to you at a great advantage.

You would certainly appreciate the following benefits of SHS / RHS.

- ❖ A clear net saving of 30 % in weight
- ❖ SHS / RHS offer the maximum radius gyration and equal inertia. These properties result in higher resistance to bending and torsion. Therefore SHS / RHS become the ideal choice for scaffolding materials, where scaffolding has to be an independent load bearing structure, rising to more than 200 meters and above. E.g. In complicated cases like scaffolding of chimney or a cooling tower.
- ❖ Corrosion is restricted only to the outer surface
- ❖ Connection is easier to develop. No cross connection required. Welding at site becomes more dependable.
- ❖ RHS are ideal for supporting the floor boards; chances of shifting the boards as in tabular sections are eliminated altogether in case of RHS.
- ❖ 50% less space required in transportation and storage.
- ❖ Use of roof trusses results in 40% economy weight, fabrication and transportation cost.
- ❖ Greater choice for designer for composite structure with cost effective design, speedy erection and an aesthetic appeal.

Is it any surprise that SHS / RHS are THE MOST SOUGHT AFTER Section in the decade to come?

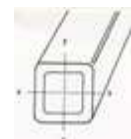
Applications

- EVERY DAY USES** : Milk Booths, Bus Stands, Petrol Stations, Garage, Highway Crash Barriers, Road Divider, Foot Bridges, Storage Racks & Pallets, Cycle & Scooter Sheds, Bus Termini, Exhibition Centers, Furniture, Hospital Equipment, Parapets.
- STRUCTURAL CONSTRUCTION SCAFFOLDING** : Trusses, Columns, Purlins, Industrial Sheds, Warehouses, Cinema Halls, Temporary Housing at Work Site, Scaffolding Systems for high rise buildings, Tall Chimneys, Ship Buildings, Aircraft Assembling, Shoring for Bridges, Mines, Large Span Concrete Structures
- DEFENSE** : Pickets for defense, Gipsy Huts, Ship Building Industry, Light Houses, Indoor Stadium & Auditorium, Portal Frames up to span of 60 meters, for Aircraft Hangers
- ELECTRIFICATION** : Railway Electrification Poles and Portals Transmission Tower
- TRANSPORTATION OF MEN & MATERIALS** : Wheel Barrow Frames, Vehicle Chassis, Trailers, Framework for Hoists & Tractors, Mobile Cabins, Escalators & Conveyor Gantries, Trestles for supporting pipelines, Overhead Cranes
- OFF-SHORE PROJECTS** : Hydraulic & Offshore Platforms



JAIN STEEL TUBE CO.

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, SQUARE HOLLOW SECTION



Sl. No.	Size S x D mm	Thickness t mm	Gauge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia I Cm ⁴	Radius of Gyration r Cm	Elastic Modulus Z Cm ³	Plastic Modulus S Cm ³	Approx. Weight Per Tonne
1.	20 x 20	1.6	16	0.941	1.112	0.608	0.739	0.608	0.751	1063
2.	20 x 20	1.8	15	1.050	1.227	0.653	0.729	0.653	0.817	952
3.	20 x 20	2.0	14	1.157	1.337	0.692	0.720	0.692	0.877	864
4.	20 x 20	2.35	13	1.339	1.517	0.747	0.702	0.747	0.969	747
5.	20 x 20	2.65	12	1.491	1.658	0.782	0.687	0.782	1.034	671
6.	20 x 20	3.25	10	1.780	1.905	0.819	0.656	0.819	1.129	562
7.	25 x 25	1.6	16	1.193	1.432	1.275	0.944	1.020	1.236	838
8.	25 x 25	1.8	15	1.333	1.567	1.384	0.934	1.107	1.355	750
9.	25 x 25	2.0	14	1.471	1.737	1.483	0.924	1.167	1.466	680
10.	25 x 25	2.35	13	1.644	1.987	1.634	0.907	1.307	1.643	608
11.	25 x 25	2.65	12	1.907	2.168	1.741	0.892	1.392	1.778	524
12.	25 x 25	3.25	10	2.290	2.555	1.891	0.862	1.518	2.000	437
13.	25 x 25	4.05	8	2.775	2.971	1.999	0.820	1.800	2.203	360
14.	25.4 x 25.4	2.00	14	1.47	1.738	-	-	1.187	-	680
15.	25.4 x 25.4	2.35	13	1.59	1.982	-	-	1.296	-	629
16.	25.4 x 25.4	-	12	1.89	2.41	2.08	0.93	1.64	2.05	529
17.	25.4 x 25.4	3.25	10	2.25	2.87	2.33	0.90	1.83	2.33	445
18.	32 x 32	1.6	16	1.545	1.840	2.843	1.230	1.777	2.116	647
19.	32 x 32	1.8	15	1.728	2.091	3.112	1.220	1.945	2.335	579
20.	32 x 32	2.0	14	1.911	2.297	3.365	1.210	2.103	2.543	523
21.	32 x 32	2.65	12	2.489	2.930	4.069	1.176	2.543	3.153	402
22.	32 x 32	3.25	10	3.000	3.465	4.573	1.149	2.858	3.628	333
23.	32 x 32	4.05	8	3.665	4.105	5.044	1.109	3.152	4.135	273
24.	38 x 38	1.6	16	1.846	2.264	4.924	1.475	2.591	3.058	542
25.	38 x 38	1.8	15	2.068	2.523	5.416	1.465	2.850	3.385	484
26.	38 x 38	2.0	14	2.289	2.777	5.883	1.456	3.095	3.700	437
27.	38 x 38	2.65	12	2.991	3.566	7.229	1.424	3.605	4.641	334
28.	38 x 38	2.90	11	3.255	3.855	7.681	1.412	4.043	4.971	307
29.	38 x 38	3.25	10	3.620	4.245	8.253	1.394	4.344	5.403	276
30.	38 x 38	4.05	8	4.431	5.077	9.316	1.355	4.903	6.264	226
31.	45 x 45	2.0	14	2.728	3.337	10.119	1.741	4.497	5.323	367
32.	45 x 45	2.5	-	3.380	4.089	12.057	1.717	5.359	6.426	296
33.	45 x 45	2.9	11	3.892	4.667	13.451	1.698	5.978	7.246	257
34.	45 x 45	3.25	10	4.337	5.155	14.561	1.681	6.472	7.918	231
35.	45 x 45	3.65	9	4.831	5.693	15.708	1.661	6.981	8.636	207
36.	45 x 45	4.50	7	5.862	6.768	17.737	1.619	7.883	9.987	171
37.	48.5 x 48.5	2.90	12	4.13	5.26	18.04	1.85	7.44	8.88	242
38.	48.5 x 48.5	3.65	10	5.11	6.51	21.56	1.85	8.89	10.77	196
39.	48.5 x 48.5	4.50	8	6.11	7.78	25.05	1.85	10.33	12.73	164
40.	50 x 50	1.6	16	2.449	3.032	11.704	1.965	4.682	5.461	409



JAIN STEEL TUBE CO.

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, SQUARE HOLLOW SECTION



Sl. No.	Size B x D mm	Thickness t mm	Gauge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia I Cm ⁴	Radius of Gyration r Cm	Elastic Modulus Z Cm ³	Plastic Modulus S Cm ³	Approx. Weight Per Tonne
41.	50 x 50	1.8	15	2.749	3.387	12.048	1.955	5.179	6.070	364
42.	50 x 50	2.0	14	3.044	3.737	14.146	1.945	5.688	6.662	329
43.	50 x 50	2.5	-	3.774	4.589	16.943	1.922	6.777	8.073	285
44.	50 x 50	2.9	11	4.350	5.247	18.982	1.902	7.593	9.132	230
45.	50 x 50	3.25	10	4.846	5.805	20.628	1.885	8.251	10.007	206
46.	50 x 50	3.65	9	5.409	6.423	22.354	1.866	8.942	10.951	185
47.	50 x 50	4.05	8	5.960	7.021	23.921	1.848	9.568	11.833	168
48.	60 x 60	2.0	14	3.670	4.537	25.141	1.354	8.580	9.790	273
49.	60 x 60	2.35	13	4.297	5.277	28.824	2.337	9.609	11.301	233
50.	60 x 60	2.65	12	4.825	5.898	31.820	2.323	10.627	12.549	207
51.	60 x 60	2.90	11	5.259	6.407	34.206	2.311	11.402	13.556	190
52.	60 x 60	3.25	10	5.865	7.105	37.380	2.294	12.460	14.917	171
53.	60 x 60	3.65	9	6.551	7.883	40.775	2.274	13.592	16.402	153
54.	60 x 60	4.50	7	7.892	9.468	47.196	2.233	15.732	19.315	127
55.	63 x 63	3.25	10	5.94	7.454	-	-	13.610	-	168
56.	63 x 63	4.05	8	7.17	9.001	-	-	15.831	-	140
57.	70 x 70	2.0	14	4.298	5.337	40.724	2.792	11.635	13.519	233
58.	70 x 70	2.9	11	8.167	7.963	55.944	2.719	15.984	18.850	162
59.	70 x 70	3.25	10	6.891	8.425	61.373	2.702	17.535	20.691	145
60.	70 x 70	4.05	8	8.498	10.263	72.768	2.663	20.797	23.007	118
61.	70 x 70	4.85	6	10.981	12.652	88.873	2.624	23.678	28.868	99
62.	70.5x70.5	3.25	10	6.82	8.69	64.45	2.72	18.29	21.54	147
63.	70.5x70.5	4.05	8	8.35	10.64	77.45	2.70	21.97	26.16	120
64.	70.5x70.5	4.25	6	8.76	12.43	88.31	2.67	25.05	30.16	103
65.	75 x 75	2.9	11	6.924	6.147	69.619	2.923	18.985	21.624	151
66.	75 x 75	3.25	10	7.397	8.055	76.491	2.906	20.398	24.109	135
67.	75 x 75	3.65	9	8.271	10.073	83.968	2.887	23.391	26.632	121
68.	75 x 75	4.05	8	9.138	11.071	91.044	2.868	24.278	29.060	110
69.	75 x 75	4.85	6	10.847	13.002	104.06	2.829	27.748	33.638	92
70.	80 x 80	3.25	10	7.886	9.705	93.907	3.111	23.477	27.861	127
71.	80 x 80	3.65	9	8.821	10.603	103.242	3.091	25.811	30.569	113
72.	80 x 80	4.05	8	9.747	11.881	112.121	3.072	28.003	33.416	103
73.	80 x 80	4.65	7	11.123	13.437	124.603	3.043	31.151	37.470	90
74.	80 x 80	5.4	5	12.059	15.361	138.836	3.006	34.709	42.225	83
75.	88.9x88.9	3.65	9	9.50	12.001	-	-	32.607	-	105
76.	88.9x88.9	4.65	7	11.74	14.947	-	-	38.640	-	85
77.	90 x 90	2.9	11	7.970	9.867	123.602	3.536	27.488	32.049	126
78.	90 x 90	3.25	10	8.904	11.005	136.283	3.519	30.295	35.495	116
79.	90 x 90	3.65	9	9.984	12.263	150.209	3.500	33.380	39.325	100
80.	90 x 90	4.05	8	11.016	13.501	163.545	3.480	36.343	43.040	91



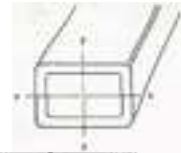
JAIN STEEL TUBE CO.

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, SQUARE HOLLOW SECTION



SL. No.	Size B x D mm	Thickness t mm	Gauge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia I Cm ⁴	Radius of Gyration r Cm	Elastic Modulus Z Cm ³	Plastic Modulus S Cm ³	Approx Metre Per Tonne
81.	90 x 90	4.65	7	12.580	15.317	182.468	3.451	40.548	48.400	80
82.	100x100	3.25	10	10.965	10.305	189.800	3.927	37.960	44.304	91
83.	100x100	3.65	9	12.279	13.723	209.610	3.908	41.922	49.156	-
84.	100x100	4.05	8	12.315	15.121	228.682	3.889	45.736	53.879	-
85.	100x100	4.50	7	13.634	16.668	249.269	3.867	49.854	59.040	73
86.	100x100	5.00	6	15.087	18.355	271.083	2.843	54.217	64.587	66
87.	100x100	6.00	5	16.77	21.355	-	-	60.749	-	60
88.	110x110	3.25	10	10.965	13.605	255.758	4.336	46.502	54.089	91
89.	110x110	3.65	9	12.279	15.183	282.907	4.317	51.438	60.082	81
90.	110x110	4.85	6	16.172	19.792	358.973	4.259	65.268	72.212	62
91.	110x110	5.40	5	17.933	21.841	391.205	4.232	71.128	89.642	56
92.	125 x 125	4.0	8	15.325	18.947	457.205	4.912	73.513	85.330	65
93.	125 x 125	4.85	6	18.461	22.702	536.736	4.871	86.198	101.342	54
94.	125 x 125	5.00	7	18.30	23.163	-	-	87.115	-	55
95.	125 x 125	5.4	5	20.482	25.081	588.729	4.845	94.197	111.318	49
96.	125 x 125	6.00	5	21.70	27.355	-	-	100.643	-	46
97.	125 x 125	6.3	-	23.755	28.888	665.967	4.801	106.555	126.996	42
98.	150 x 150	4.85	6	22.275	27.552	956.602	5.892	127.547	148.835	45
99.	150 x 150	5.00	7	22.30	28.163	-	-	129.402	-	45
100.	150 x 150	6.00	5	26.40	33.355	-	-	150.536	-	38
101.	150 x 150	5.40	5	24.728	30.481	1048.822	5.866	139.843	163.878	40
102.	150 x 150	6.30	-	28.709	35.188	1192.956	5.823	159.061	187.708	35
103.	175 x 175	4.5	7	24.236	30.168	1448.771	6.939	165.574	191.743	41
104.	175 x 175	5.4	5	28.962	35.881	1701.775	6.887	194.489	226.563	35
105.	175 x 175	6.3	-	33.649	41.488	1943.073	6.844	222.065	260.232	30
106.	200 x 200	4.5	7	27.770	34.668	2191.464	7.951	219.146	252.853	36
107.	200 x 200	5.4	5	33.143	41.281	2581.336	7.908	258.134	299.373	30
108.	200 x 200	6.3	-	38.597	47.788	2955.692	7.864	295.569	344.569	26
109.	215 x 215	4.5	7	29.890	37.368	2740.067	8.563	254.890	293.568	34
110.	215 x 215	5.4	5	35.748	44.521	3231.885	8.520	300.640	347.919	28
111.	215 x 215	6.3	-	41.566	51.568	3705.845	8.477	344.711	400.842	24

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, RECTANGULAR HOLLOW SECTION

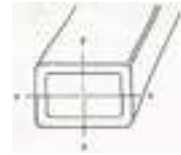


Sl. No.	Size B x D mm	Thickness t mm	Gauge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia		Elastic Modulus		Plastic Modulus		Radius of Gyration		Approx Mass Per Tonne
						I _{xx} Cm ⁴	I _{yy} Cm ⁴	Z _{xx} Cm ³	Z _{yy} Cm ³	S _{xx} Cm ³	S _{yy} Cm ³	r _{xx} Cm	r _{yy} Cm	
1.	20 x 30	1.6	16	1.193	1.432	1.663	0.879	1.108	0.879	1.366	1.045	1.078	0.784	838
2.	20 x 30	1.8	15	1.393	1.587	1.806	0.952	1.204	0.952	1.520	1.144	1.067	0.775	718
3.	20 x 30	2.0	14	1.471	1.737	1.936	1.017	1.291	1.017	1.645	1.237	1.056	0.765	680
4.	20 x 30	2.65	12	1.907	2.188	2.275	1.184	1.516	1.184	1.995	1.494	1.026	0.738	524
5.	20 x 30	3.25	10	2.290	2.555	2.479	1.281	1.653	1.281	2.244	1.674	0.985	0.708	437
6.	20 x 30	4.05	8	2.775	2.971	2.808	1.338	1.739	1.338	2.471	1.834	0.937	0.671	360
7.	20 x 40	1.6	16	1.444	1.752	3.434	1.151	1.717	1.152	2.182	1.399	1.400	0.811	693
8.	20 x 40	1.8	15	1.616	1.947	3.753	1.251	1.876	1.251	2.403	1.472	1.368	0.802	619
9.	20 x 40	2.0	14	1.876	2.137	4.049	1.343	2.025	1.343	2.614	1.587	1.377	0.793	533
10.	20 x 40	2.35	13											
11.	20 x 40	2.65	12	2.323	2.718	4.861	1.586	2.430	1.586	3.222	1.953	1.337	0.764	431
12.	20 x 40	3.25	10	2.801	3.205	5.416	1.743	2.708	1.743	3.684	2.218	1.300	0.739	357
13.	20 x 40	4.05	8	3.411	3.781	5.889	1.864	2.945	1.864	4.159	2.480	1.248	0.702	293
14.	25 x 40	2.65	12	2.480	3.160	6.560	2.940	3.170	2.350	3.990	2.630	1.420	0.960	403
15.	25 x 40	3.25	10	2.970	3.780	7.350	3.360	3.680	2.690	4.700	3.310	1.390	0.940	337
16.	25 x 40	4.05	8	3.570	4.550	8.530	3.820	4.270	3.060	5.560	3.880	1.370	0.920	280
17.	25 x 50	1.6	16	1.846	2.232	7.019	2.372	2.807	1.897	3.525	2.172	1.773	1.031	542
18.	25 x 50	1.8	15	2.068	2.467	7.719	2.598	3.087	2.078	3.902	2.399	1.762	1.022	484
19.	25 x 50	2.0	14	2.289	2.737	8.283	2.809	3.353	2.247	4.262	2.616	1.750	1.013	437
20.	25 x 50	2.65	12	2.991	3.573	10.293	3.403	4.117	2.722	5.941	3.258	1.712	0.984	334
21.	25 x 50	2.90	11	3.255	3.797	10.930	3.595	4.372	2.876	5.717	3.480	1.697	0.973	310
22.	25 x 50	3.25	10	3.820	4.180	11.375	3.833	4.694	3.066	6.209	3.767	1.676	0.958	276
23.	25 x 50	4.05	8	4.431	4.996	13.204	4.249	5.282	3.399	7.182	4.325	1.626	0.922	226
24.	25.4 x 50.8	2.90	11	3.19	4.06	12.81	4.03	4.96	3.17	6.33	3.79	1.78	1.00	314
25.	25.4 x 50.8	3.25	10	3.53	4.50	13.72	4.34	5.40	3.42	6.95	4.15	1.75	0.98	283
26.	25.4 x 50.8	4.05	8	4.28	5.45	16.10	4.98	6.34	3.91	8.29	4.88	1.72	0.95	234
27.	30 x 40	1.6	16	1.895	2.072	4.614	2.955	2.307	1.670	2.787	2.295	1.492	1.194	590
28.	30 x 40	1.8	15	1.896	2.307	5.067	3.239	2.533	2.160	3.091	2.535	1.482	1.185	527
29.	30 x 40	2.0	14	2.098	2.537	5.494	3.507	2.747	2.338	3.374	2.765	1.472	1.176	477
30.	30 x 40	2.65	12	2.740	3.248	6.712	4.263	3.356	2.842	4.212	3.445	1.436	1.146	365
31.	30 x 40	3.25	10	3.311	3.855	7.617	4.816	3.808	3.211	4.878	3.983	1.406	1.118	302
32.	30 x 50	1.6	16	1.947	2.382	7.955	3.600	3.182	2.400	3.912	2.750	1.824	1.227	514
33.	30 x 50	1.8	15	2.185	2.667	8.765	3.956	3.506	2.637	4.334	3.043	1.813	1.218	498
34.	38 x 50	2.0	14	2.417	2.837	9.535	4.292	3.814	2.862	4.742	3.325	1.802	1.209	414
35.	30 x 50	2.65	12	3.161	3.778	11.780	5.257	4.712	3.505	5.968	4.170	1.764	1.180	316
36.	30 x 50	2.90	11	3.441	4.067	12.541	5.579	5.018	3.719	6.400	4.465	1.752	1.168	291
37.	30 x 50	3.25	10	3.828	4.505	13.613	5.985	5.405	3.990	6.969	4.852	1.732	1.153	261
38.	30 x 50	4.05	8	4.691	5.401	15.348	6.732	6.139	4.488	8.133	5.624	1.686	1.116	213
39.	32.5 x 65.0	2.90	11	4.15	5.29	27.65	9.02	8.51	5.55	10.72	6.48	2.29	1.31	241
40.	32.5 x 65.0	3.55	9	5.13	6.54	33.21	10.64	10.22	6.55	13.03	7.82	2.25	1.28	195



JAIN STEEL TUBE CO.

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, RECTANGULAR HOLLOW SECTION

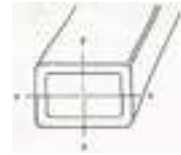


Sl No.	Size B x D mm	Thick- ness t mm	Ga- uge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia		Elastic Modulus		Plastic Modulus		Radius of Gyration		Approx Moyle Per Tonne
						I _{xx} Cm ⁴	I _{yy} Cm ⁴	Z _{xx} Cm ³	Z _{yy} Cm ³	S _{xx} Cm ³	S _{yy} Cm ³	r _{xx} Cm	r _{yy} Cm	
41.	32.5 x 65.0	4.50	7	6.14	7.82	38.39	12.16	11.81	7.48	15.27	9.15	2.22	1.25	183
42.	40 x 60	2.0	14	3.044	3.737	18.410	9.830	8.137	4.915	7.470	5.854	2.220	1.522	329
43.	40 x 60	2.50	12	3.774	4.589	22.069	11.735	7.356	5.868	9.055	6.841	2.193	1.599	265
44.	40 x 60	2.90	11	4.350	5.247	24.743	13.114	8.848	6.857	10.244	7.729	2.172	1.581	228
45.	40 x 60	3.65	9	5.409	6.423	29.169	15.367	9.723	7.884	12.268	9.249	2.131	1.547	185
46.	40 x 60	4.50	7	6.574	7.888	33.304	17.434	11.101	8.717	14.320	10.747	2.084	1.506	152
47.	40 x 80	2.0	14	3.670	4.537	37.354	12.721	9.339	6.361	11.607	7.174	2.869	1.675	273
48.	40 x 80	2.85	12	4.825	5.898	47.308	15.970	11.827	7.985	14.877	9.180	2.832	1.646	207
49.	40 x 80	2.90	11	5.259	6.407	50.864	17.113	21.716	8.557	15.071	9.891	2.818	1.634	190
50.	40 x 80	3.00	12	5.20	6.539	-	-	12.784	8.829	-	-	-	-	192
51.	40 x 80	3.25	10	5.885	7.105	55.596	18.619	13.899	9.309	17.683	10.851	2.797	1.619	171
52.	40 x 80	3.65	9	6.551	7.883	60.656	20.206	15.164	10.103	19.442	11.902	2.774	1.601	153
53.	40 x 80	4.50	7	7.982	9.468	70.212	23.135	17.553	11.568	22.867	13.942	2.723	1.583	127
54.	47.25x94.5	3.25	10	6.86	8.74	98.45	32.55	20.34	13.82	25.87	15.83	3.38	1.93	146
55.	47.25x94.5	4.05	8	8.40	10.70	118.70	38.83	25.12	16.44	31.58	19.14	3.33	1.90	119
56.	47.25x94.5	4.85	6	9.81	12.50	134.30	44.20	28.44	18.75	36.08	22.17	3.28	1.88	102
57.	50 x 75	2.0	14	3.827	4.737	37.165	19.905	9.909	7.984	11.958	9.082	2.801	2.050	282
58.	50 x 75	2.9	11	5.480	6.897	50.765	27.034	13.537	10.814	16.588	12.547	2.793	2.009	183
59.	50 x 75	3.25	10	6.114	7.430	55.583	29.521	14.817	11.808	18.279	13.806	2.735	1.983	163
60.	50 x 75	4.05	8	7.539	9.045	65.532	34.638	17.475	13.855	21.876	16.487	2.692	1.957	133
61.	50 x 75	4.85	6	8.932	10.571	74.165	39.004	19.777	15.602	25.132	18.801	2.646	1.920	112
62.	50 x 90	2.9	11	6.167	7.567	79.580	31.885	17.687	12.746	21.945	14.595	3.243	2.052	182
63.	50 x 90	3.25	10	6.884	8.405	87.344	34.857	19.410	13.945	24.217	16.085	3.224	2.036	145
64.	50 x 90	4.05	8	8.498	10.081	103.883	41.087	23.036	16.427	29.118	19.279	3.179	2.001	118
65.	50 x 90	4.85	6	10.081	12.032	118.086	46.408	26.241	18.579	33.511	22.185	3.133	1.965	98
66.	50 x 100	2.9	11	6.624	8.147	103.475	35.086	20.695	14.034	25.873	15.961	3.584	2.075	151
67.	50 x 100	3.25	10	7.397	9.055	113.717	38.414	22.743	15.366	28.582	17.604	3.544	2.060	135
68.	50 x 100	3.65	9	8.271	10.073	124.860	41.998	24.972	16.799	31.572	19.410	3.521	2.042	121
69.	50 x 100	4.05	8	9.198	11.071	135.412	45.354	27.082	18.142	34.449	21.140	3.497	2.024	108
70.	50 x 100	4.85	6	10.847	13.002	154.785	51.410	30.957	20.564	38.869	24.375	3.450	1.985	92
71.	50 x 127	2.9	11	7.970	9.713	189.132	43.782	29.784	17.513	37.828	19.649	4.413	2.123	126
72.	50 x 127	3.25	10	8.904	10.910	206.458	48.019	32.828	19.207	41.991	21.707	4.361	2.108	112
73.	50 x 127	3.65	9	9.964	12.044	229.660	52.808	36.167	21.042	46.502	23.978	4.367	2.090	100
74.	50 x 127	4.05	8	11.016	13.258	249.929	56.928	39.359	22.771	50.871	26.164	4.342	2.072	91
75.	50 x 127	4.85	7	12.580	15.038	278.612	62.932	43.879	25.173	57.182	29.288	4.304	2.046	80
76.	50 x 150	3.25	10	9.947	12.305	319.993	58.200	42.888	22.480	55.282	25.201	5.100	2.137	101
77.	50 x 150	3.65	9	11.135	13.723	353.282	61.642	47.104	24.857	61.318	27.889	5.074	2.119	90
78.	50 x 150	4.05	8	12.315	15.121	385.287	66.787	51.372	26.715	67.188	30.445	5.048	2.102	81
79.	50 x 150	4.50	7	13.834	16.568	419.774	72.232	55.970	28.893	73.598	33.234	5.018	2.082	73
80.	50 x 150	5.0	6	15.087	18.355	456.235	77.868	60.831	31.147	80.474	36.199	4.988	2.060	66



JAIN STEEL TUBE CO.

STRUCTURAL HOLLOW SECTIONS SIZES AND PROPERTIES, RECTANGULAR HOLLOW SECTION



Sl. No.	Size B x D mm	Thickness t mm	Gauge	Mass M Kg/m	Sectional Area A Cm ²	Moment of Inertia		Elastic Modulus		Plastic Modulus		Radius of Gyration		Approx Metre Per Tonne
						I _{xx} Cm ⁴	I _{yy} Cm ⁴	Z _{xx} Cm ³	Z _{yy} Cm ³	S _{xx} Cm ³	S _{yy} Cm ³	r _{xx} Cm	r _{yy} Cm	
81.	50.8 x 127	3.65	10	9.50	12.001	-	-	35.827	21.179	-	-	-	-	105
82.	50.8 x 127	4.65	7	11.74	14.947	-	-	43.180	25.218	-	-	-	-	85
83.	75 x 125	3.25	10	9.947	12.305	260.401	118.348	41.864	31.558	50.809	35.768	4.800	3.101	101
84.	75 x 125	3.65	9	11.135	13.723	287.687	130.460	46.030	34.789	56.378	39.853	4.579	3.083	89
85.	75 x 125	4.05	8	12.315	15.121	313.974	142.068	50.236	37.885	61.799	43.427	4.557	3.085	81
86.	75 x 125	4.50	7	13.634	16.668	342.369	154.536	54.779	41.209	67.724	47.543	4.532	3.045	73
87.	75 x 125	5.0	6	15.087	18.355	372.479	167.671	59.597	44.712	74.093	51.955	4.505	3.022	66
88.	75 x 145	3.25	10	10.985	13.805	374.757	135.091	51.691	36.924	63.764	40.432	5.248	3.151	91
89.	75 x 145	3.65	9	12.279	15.183	414.652	149.058	57.139	39.749	70.831	44.862	5.226	3.133	81
90.	75 x 145	4.85	6	16.172	19.792	526.515	187.713	72.623	50.057	91.028	57.454	5.158	3.080	62
91.	75 x 145	5.40	5	17.933	21.891	573.945	203.858	79.165	54.382	99.787	62.882	5.126	3.055	56
92.	75 x 175	4.85	6	18.461	22.702	648.314	223.571	96.722	59.619	122.899	67.661	6.106	3.138	54
93.	75 x 175	5.40	5	20.482	25.081	924.330	243.174	105.701	64.846	134.979	74.157	6.073	3.114	49
94.	75 x 175	6.30	-	23.755	28.888	1046.175	273.958	119.563	72.789	153.951	84.290	6.018	3.074	42
95.	100 x 150	4.85	6	18.461	22.702	781.051	374.523	93.474	74.905	113.636	86.017	5.557	4.062	54
96.	100 x 150	5.00	7	18.30	23.183	-	-	94.346	75.745	-	-	-	-	55
97.	100 x 150	5.40	5	20.482	25.081	788.417	408.690	102.189	81.738	124.836	94.425	5.528	4.037	49
98.	100 x 150	6.00	5	21.70	27.355	-	-	109.040	87.293	-	-	-	-	46
99.	100 x 150	6.30	-	23.755	28.888	867.515	867.219	115.669	92.244	142.442	107.612	5.480	3.996	42
100.	100 x 200	4.85	6	22.275	27.592	1421.226	484.392	142.123	96.878	176.454	109.091	7.182	4.193	45
101.	100 x 200	5.00	7	22.30	28.163	-	-	143.890	98.329	-	-	-	-	45
102.	100 x 200	5.40	5	24.728	30.481	1558.806	529.634	155.861	105.927	194.289	119.967	7.151	4.168	40
103.	100 x 200	6.00	6	26.40	33.355	-	-	167.375	113.837	-	-	-	-	38
104.	100 x 200	6.30	-	28.709	35.188	1773.405	599.708	177.340	119.941	222.538	137.127	7.099	4.128	35
105.	100 x 250	4.50	7	24.236	30.168	2325.543	557.305	186.043	111.461	234.672	123.502	8.780	4.798	41
106.	100 x 250	5.40	5	28.962	35.881	2731.811	650.579	218.545	130.116	277.243	145.609	8.726	4.258	35
107.	100 x 250	6.30	-	33.649	41.488	3119.150	738.196	249.532	147.639	318.384	166.843	8.671	4.218	30
108.	100 x 300	4.5	7	27.770	34.668	3696.822	659.984	246.455	131.997	315.715	144.990	10.326	4.363	36
109.	100 x 300	5.4	5	33.143	41.281	4353.531	771.524	290.235	154.305	373.896	171.051	10.289	4.323	30
110.	100 x 300	6.3	-	38.597	47.788	4983.499	876.684	332.233	175.337	429.980	196.158	10.212	4.283	26
111.	120 x 300	4.5	7	29.980	37.368	4286.279	1174.980	285.752	180.766	355.606	199.016	10.710	5.607	34
112.	130 x 300	5.4	5	35.748	44.521	5056.602	1379.990	337.107	212.308	421.421	235.403	10.657	5.567	28
113.	130 x 300	6.3	-	41.566	51.568	5798.778	1575.519	386.585	242.387	485.490	270.676	10.604	5.527	24