Admiring Steel....

JAN

Jabal Al Noor Building Material & Hardware Trdg. LLC

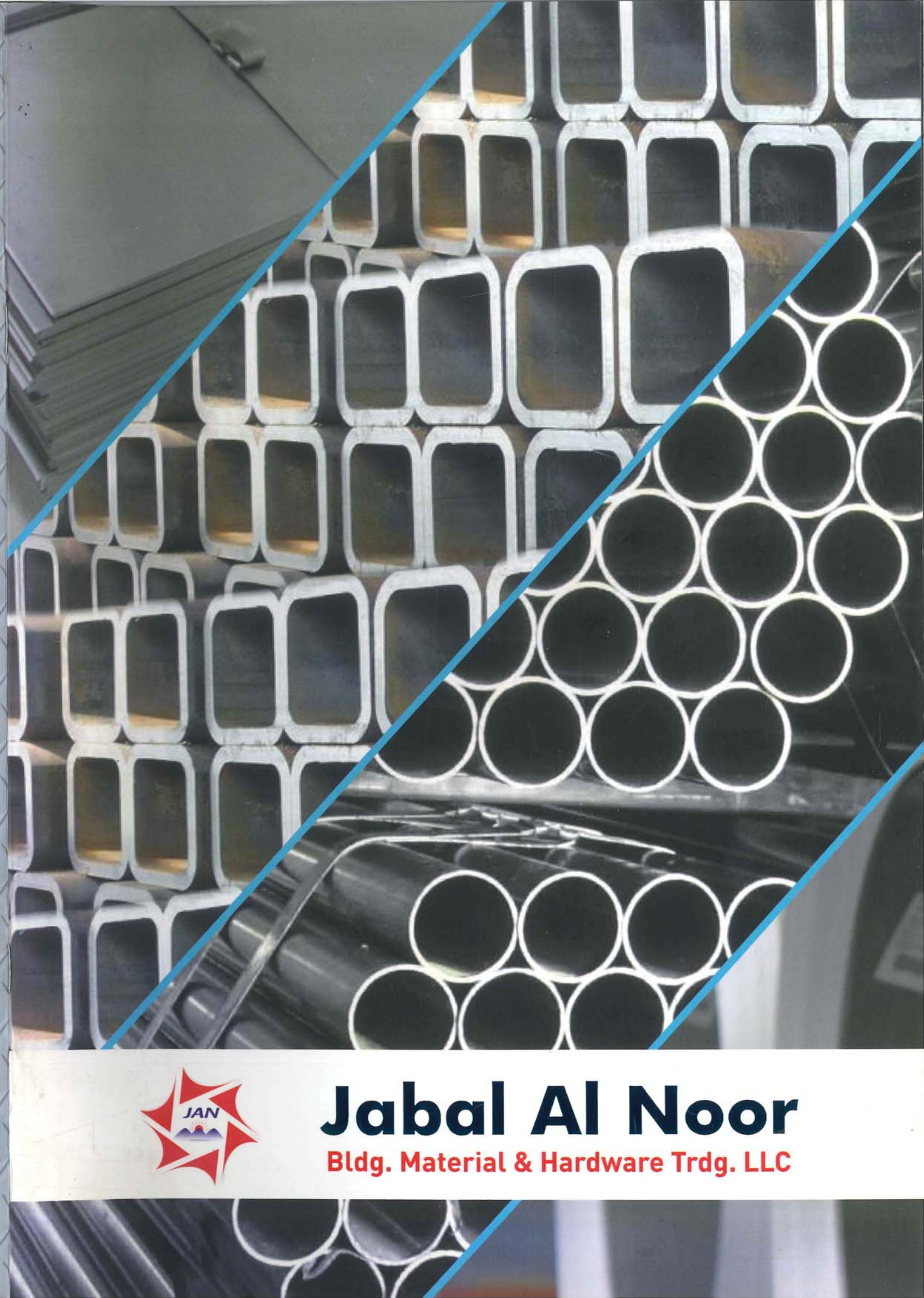
Head Office

P.O. Box 33521 Indl Area 17, Sharjah, UAE, Tel: +971 6 5354 021, Fax: +971 6 5354 024

Hamriyah Free Zone

P.O. Box 42942, Sharjah, UAE

E-mail: alnoorsteel@eim.ae, www.alnoorsteel.com



JAN

Jabal Al Noor

Bldg. Material & Hardware Trdg. LLC

INTRODUCTION

Jabal al noor Building Material is one of the most fast growing steel trading company based in Sharjah, United Arab Emirates. The company has gained strong foothold in the local, regional and African market by providing competitive product line which are complying excellent quality parameters with standard norms for engineering, fabrication, scaffolding, Oil and Gas, construction and EPC Contracting companies.

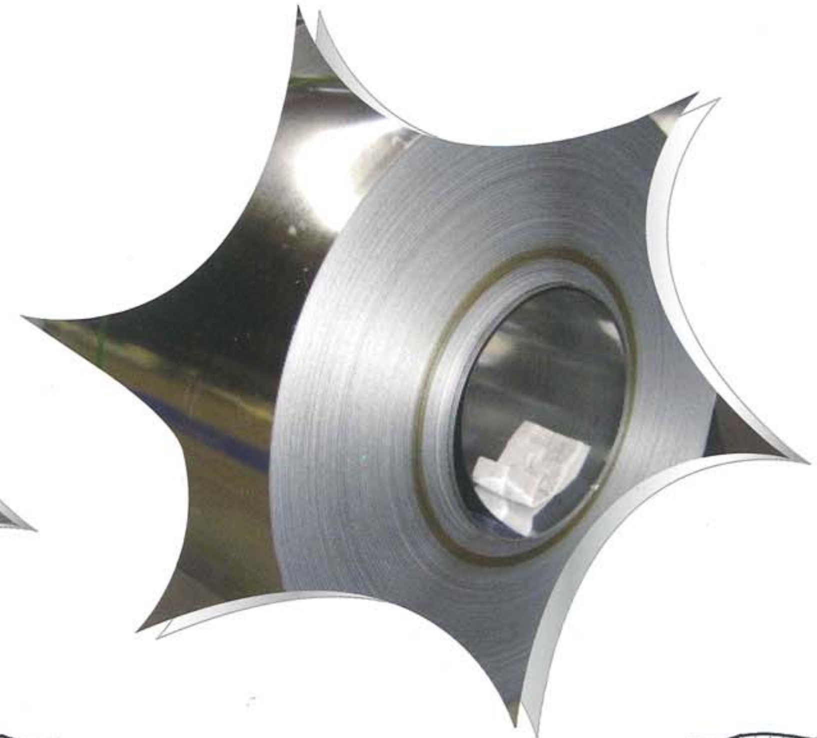
The wide product range including seamless pipe, welded pipes, Galvanized pipes and Tubes, MS Plates, GI coils and sheet, Corrugated sheets, Beams, Angles, Channels, Flat Bars, Round Bars, Square Bars available in ASTM, BS, JIS, EN AND DIN Standards. Supported by highly experienced and technically sound team deliver excellent results to meet the customers steel demands. Strategic location of warehouse and fleet of vehicles provide outstanding level of service to satisfy all customers need by providing time bound deliveries.

Jabal al noor Building Material aspire to became the regional leader in steel industry and committed to continuously create value for all valued customers and employees.

HOT ROLLED COILS/SHEETS/PLATES

STANDARD DIMENSIONS

1219 MM	1.2MM TO 20MM	ASTM A36/ST 37-2/BS 4360 43A
4 ' x 8'	1.2MM TO 100 MM	ASTM A36/S275JR
5' x 20'	2.8MM TO 20MM	ASTM A36/SS400/S275JR/ST37- 2
2M X 6M	4MM TO 100MM	ASTM A36/BS 4360 43A/S275JR/ S355JR/A572GR50/SA 516 GR70
2.5 X 12M	6MM TO 50MM	ASTM A36/BS 4360 43A/S275JR/ S355JR/A572GR50/SA 516 GR70
3.05M X 12M	10MM TO 100MM	ASTM A36/BS 4360 43A/S275JR/ S355JR/A572GR50/SA 516 GR70



EQUAL ANGLES & UNEQUAL ANGELS

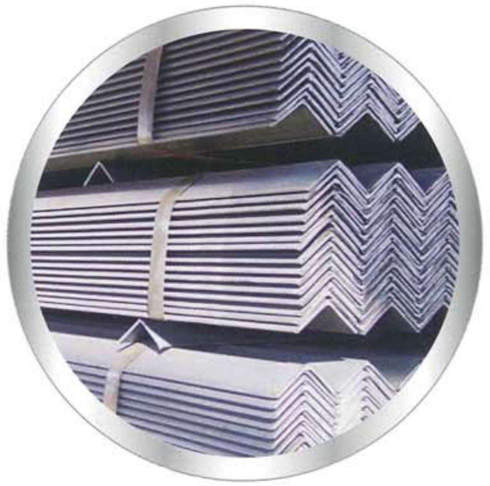
Specification:
JIS G3101 - SS400 / ASTM A36 /
EN 10025 S275JR

STANDARD DIMENSIONAL PROGRAM

Designation				
Size A	Thickness t	Mass per meter	Area of section	Distance of centre of gravity c
mm	mm	kg	cm^2	cm
200 X 200	24	71.1	90.8	5.84
	20	59.9	76.6	5.68
	18	54.2	69.14	5.60
	16	48.5	61.8	5.52
150 X 150	18	40.1	51.0	4.37
	15	33.8	43.0	4.25
	12	27.3	34.8	4.12
	10	23.0	29.14	4.03
100 X 100	15	21.9	27.9	3.02
	12	17.8	22.7	2.90
	10	15.0	19.2	2.82
	8	12.2	15.5	2.74
90 X 90	12	15.9	20.3	2.66
	10	13.4	17.1	2.58
	8	10.9	13.9	2.50
	6	8.30	10.6	2.41
80 X 80	10	11.9	15.1	2.34
	8	9.63	12.3	2.26
	6	7.34	9.25	2.17
70 X 70	10	10.3	13.1	2.09
	8	8.36	10.6	2.01
	6	6.38	8.13	1.83
60 X 60	10	8.69	11.1	1.85
	8	7.09	9.03	1.77
	6	5.42	6.91	1.69
	5	4.57	5.82	1.64
50 X 50	8	5.82	7.41	1.52
	6	4.47	5.69	1.45
	5	3.77	4.80	1.40
40 X 40	6	3.52	4.48	1.20
	5	2.97	3.79	1.16
	4	2.42	3.08	1.12
25 X 25	5	1.77	2.26	0.80
	4	1.45	1.85	0.76
	3	1.11	1.42	0.72

STANDARD DIMENSIONAL PROGRAM

Designation		Mass per meter	Area of section	Distance of centre of gravity		Moment of Inertia
Size A x B	Thickness t			cx	cx	Axis x-x
mm	mm	kg	cm^2	cm	cm	cm^2
200 x 150	18	47.1	60.0	6.33	3.85	2376
	15	39.6	50.5	6.21	3.73	2022
	12	32.0	40.8	6.08	3.61	1652
200 x 100	15	33.7	43.0	7.16	2.22	1758
	12	27.3	34.8	7.03	2.10	1440
	10	23.0	29.2	6.93	2.01	1220
150 x 90	15	26.6	33.9	5.21	2.23	761
	12	21.6	27.5	5.08	2.12	627
	10	18.2	23.2	5.00	2.04	533
125 x 75	12	17.8	22.7	4.31	1.84	354
	10	15.0	19.1	4.23	1.76	302
	8	12.2	15.5	4.14	1.68	247
100 x 75	12	15.4	19.7	3.27	2.03	189
	10	13.0	16.6	3.19	1.95	162
	8	10.6	13.5	3.10	1.87	133
100 x 65	10	12.3	15.6	3.36	1.63	154
	8	9.94	12.7	3.27	1.55	127
	7	8.77	11.2	3.23	1.51	113
80 x 60	8	8.34	10.6	2.55	1.56	66.3
	7	7.36	9.38	2.51	1.52	59.0
	6	6.37	8.11	2.47	1.48	51.4
75 x 50	8	7.39	9.41	2.52	1.29	52.0
	6	5.65	7.19	2.44	1.21	40.5
65 x 50	8	6.75	8.60	2.11	1.37	34.8
	6	5.16	6.58	2.04	1.29	27.2
	5	4.35	5.54	1.99	1.25	23.2



UNIVERSAL BEAMS

Specification As per:
EN 10025 S275JR /
BS 4360 GR 43A / S355JR

STANDARD DIMENSIONAL PROGRAM

Designation	Mass per metre	Depth of Section h	Width of Section b	Thickness web S	Thickness Flange t	Root Radius r	Depth between fillets d	Ratios for Local Buckling	
	kg/m	mm	mm	mm	mm	mm	mm	Flange b/21	Web d/s
356x127x39	39.1	353.4	126.0	6.6	10.7	10.2	311.6	5.89	47.2
356x127x33	33.1	349.0	125.4	6.0	8.5	10.2	311.6	7.38	51.9
305x165x54	54.0	310.4	166.9	7.9	13.7	8.9	265.2	6.09	33.6
305x165x46	46.1	306.6	165.7	6.7	11.8	8.9	265.2	7.02	39.6
305x165x40	40.3	303.4	165.0	6.0	10.2	8.9	265.2	8.09	44.2
305x127x48	48.1	311.0	125.3	9.0	14.0	8.9	265.2	4.47	29.5
305x127x42	41.9	307.2	124.3	8.0	12.1	8.9	265.2	5.14	33.2
305x127x37	37.0	304.4	123.3	7.1	10.7	8.9	265.2	5.77	37.4
305x102x33	32.8	312.7	102.4	6.6	10.8	7.6	275.9	4.47	41.8
305x102x28	28.2	308.7	101.8	6.0	8.8	7.6	275.9	5.78	46.0
305x102x25	24.8	305.1	101.6	5.8	7.0	7.6	275.9	7.26	47.6
254x146x43	43.0	259.6	147.3	7.2	12.7	7.6	219.0	5.80	30.4
254x146x37	37.0	256.0	146.4	6.3	10.9	7.6	219.0	6.72	34.8
254x146x31	31.1	251.4	146.1	6.0	8.6	7.6	219.0	8.49	36.5
254x102x28	28.3	260.4	102.2	6.3	10.0	7.6	225.2	5.11	35.7
254x102x25	25.2	257.2	101.9	6.0	8.4	7.6	225.2	6.07	37.5
254x102x22	254.0	254.0	101.6	5.7	6.8	7.6	225.2	7.47	39.5
203x133x30	30.0	206.8	133.9	6.4	9.6	7.6	172.4	6.97	26.9
203x133x25	25.1	203.2	133.2	5.7	7.8	7.6	172.4	8.54	30.2
203x102x23	23.1	203.2	101.8	5.4	9.3	7.6	169.4	5.47	31.4
178x102x19	19.0	177.8	101.2	4.8	7.9	7.6	146.8	6.41	30.6
152x89x16	16.0	152.4	88.7	4.5	7.7	7.6	121.8	5.76	27.1
127x76x13	13.0	127.0	76.0	4.0	7.6	7.6	96.6	5.00	24.1

STANDARD DIMENSIONAL PROGRAM

Designation	Mass per metre	Depth of Section h	Width of Section b	Thickness web S	Thickness Flange t	Root Radius r	Depth between fillets d	Ratios for Local Buckling	
	kg/m	mm	mm	mm	mm	mm	mm	Flange b/21	Web d/s
610x229x140	139.9	617.2	230.2	13.1	22.1	12.7	547.6	5.21	41.8
610x229x125	125.1	612.2	229.0	11.9	19.6	12.7	547.6	5.84	46.0
610x229x113	113.0	607.6	228.2	11.1	17.3	12.7	547.6	6.60	49.3
610x229x101	101.2	602.6	227.6	10.5	14.8	12.7	547.6	7.69	52.2
533x210x122	122.0	544.5	211.9	12.7	21.3	12.7	476.5	4.97	37.5
533x210x109	109.0	539.5	210.8	11.6	18.8	12.7	476.5	5.61	41.1
533x210x101	101.0	536.7	210.0	10.8	17.4	12.7	476.5	6.03	44.1
533x210x92	92.1	533.1	209.3	10.1	15.6	12.7	476.5	6.71	47.2
533x210x82	82.2	528.3	208.8	9.6	13.2	12.7	476.5	7.91	49.6
457x191x98	98.3	467.2	192.8	11.4	19.6	10.2	407.6	4.92	35.8
457x191x89	89.3	463.4	191.9	10.5	17.7	10.2	407.6	5.42	38.8
457x191x82	82.0	460	191.3	9.9	16.0	10.2	407.6	5.98	41.2
457x191x74	74.3	457.0	190.4	9.0	14.5	10.2	407.6	6.57	45.3
457x191x67	67.1	453.4	189.9	8.5	12.7	10.2	407.6	7.48	48.0
457x152x82	82.1	465.8	155.3	10.5	18.9	10.2	407.6	4.11	38.8
457x152x74	74.2	462.0	154.4	9.6	17.0	10.2	407.6	4.54	42.5
457x152x67	67.2	458.0	153.8	9.0	15.0	10.2	407.6	5.13	45.3
457x152x60	59.8	454.6	152.9	8.1	13.3	10.2	407.6	5.75	50.3
457x152x52	52.3	449.8	152.4	7.6	10.9	10.2	407.6	6.99	53.6
406x178x74	74.2	412.8	179.5	9.5	16.0	10.2	360.4	5.61	37.9
406x178x67	67.1	409.4	178.8	8.8	14.3	10.2	360.4	6.25	41.0
406x178x60	60.1	406.4	177.9	7.9	12.8	10.2	360.4	6.95	45.6
406x178x54	54.1	402.6	177.7	7.7	10.9	10.2	360.4	8.15	46.8
406x140x46	46.0	403.2	142.2	6.8	11.2	10.2	360.4	6.35	53.0
406x140x39	39.0	141.8	398.0	6.4	8.6	10.2	360.4	8.24	56.3
356x171x67	67.1	363.4	173.2	9.1	15.7	10.2	311.6	5.52	34.2
356x171x57	57.0	358.0	172.2	8.1	13.0	10.2	311.6	6.62	38.5
356x171x51	51.0	355.0	171.5	7.4	11.5	10.2	311.6	7.46	42.1
356x171x45	45.0	351.4	171.1	7.0	9.7	10.2	311.6	8.82	44.5

STANDARD DIMENSIONAL PROGRAM

Designation	Mass per metre	Depth of Section h	Width of Section b	Thickness web S	Thickness Flange t	Root Radius r	Depth between fillets d	Ratios for Local Buckling	
	kg/m	mm	mm	mm	mm	mm	mm	Flange b/21	Web d/s
1016x305x487	487.0	1036.1	308.5	30.0	54.1	30.0	867.8	2.85	29.0
1016x305x438	438.0	1025.9	305.4	26.9	49.0	30.0	868.0	3.12	32.3
1016 305x393	393.0	1016.0	303.0	24.4	43.9	30.0	868.2	3.45	35.7
1016x305x349	349.0	1008.1	302.0	21.1	40.0	30.0	868.0	3.78	41.2
1016x305x314	314.0	1000.0	300.0	19.1	35.9	30.0	868.2	4.18	45.6
1016x305x272	272.0	990.1	300.0	16.5	31.0	30.0	868.0	4.84	52.7
1016x305x249	249.0	980.2	300.0	16.5	26.0	30.0	868.0	5.77	52.7
1016x305x222	222.0	970.3	300.0	16.0	21.1	30.0	867.8	7.11	54.4
914x419x388	388.0	921.0	420.5	21.4	36.6	24.1	799.6	5.74	37.4
914x419x343	343.3	911.8	418.5	19.4	32.0	24.1	799.6	6.54	41.2
914x305x289	289.1	926.6	307.7	19.5	32.0	19.1	824.4	4.81	42.3
914x305x253	253.4	918.4	305.5	17.3	27.9	19.1	824.4	5.47	47.7
914x305x224	224.2	910.4	304.1	15.9	23.9	19.1	824.4	6.36	51.8
914x305x201	200.9	903.0	303.3	15.1	20.2	19.1	824.4	7.51	54.6
838x292x226	226.5	850.9	293.8	16.1	26.8	17.8	761.7	5.48	47.3
838x292x194	193.8	840.7	292.4	14.7	21.7	17.8	761.7	6.74	51.8
838x292x176	175.9	834.9	291.7	14.0	18.8	17.8	761.7	7.76	54.4
762x267x197	196.8	769.8	268.0	15.6	25.4	16.5	686.0	5.28	44.0
762x267x173	173.0	762.2	266.7	14.3	21.6	16.5	686.0	6.17	48.0
762x267x147	146.9	754.0	265.2	12.8	17.5	16.5	686.0	7.58	53.6
762x267x134	133.9	750.0	264.4	12.0	15.5	16.5	686.0	8.53	57.2
686x254x170	170.2	692.9	255.8	14.5	23.7	15.2	615.1	5.40	42.4
686x254x152	152.4	687.5	254.5	13.2	21.0	15.2	615.1	6.06	46.6
686x254x140	140.1	683.5	253.7	12.4	19.0	15.2	615.1	6.68	49.6
686x254x125	125.2	677.9	253.0	11.7	16.2	15.2	615.1	7.81	52.6
610x305x238	238.1	635.8	311.4	18.4	31.4	16.5	540.0	4.96	29.3
610x305x179	179.0	620.2	307.1	14.1	23.6	16.5	540.0	6.51	38.3
610x305x149	149.1	612.4	304.8	11.8	19.7	16.5	540.0	7.74	45.8

SQUARE HOLLOW SECTIONS

Specification:
As per JIS G3466 STKR 400/
ASTM A500 GR A&B

STANDARD DIMENSIONAL PROGRAM

Size (mm)	Kg/mtr	Size (mm)	Kg/mtr
20x20x2mm	6m	100x100x6mm	6m
25x25x2mm	6m	100x100x8mm	12m
25x25x2.5mm	6m	100x100x10mm	12m
25x25x3mm	6m	120x120x5mm	6m
30x30x2mm	6m	120x120x6mm	12m
30x30x2.5mm	6m	120x120x8mm	12m
30x30x3mm	6m	120x120x10mm	12m
40x40x2mm	6m	120x120x12mm	12m
40x40x2.5mm	6m	150x150x5mm	6m
40x40x3mm	6m	150x150x6mm	6m
40x40x4mm	6m	150x150x8mm	12m
40x40x5mm	6m	150x150x10mm	12m
50x50x2mm	6m	150x150x12.5mm	12m
50x50x2.5mm	6m	180x180x8mm	12m
50x50x3mm	6m	180x180x10mm	12m
50x50x4mm	6m	200x200x5mm	12m
50x50x5mm	6m	200x200x6mm	12m
60x60x3mm	6m	200x200x8mm	12m
60x60x5mm	6m	200x200x10mm	12m
70x70x3mm	6m	200x200x12.5mm	12m
70x70x5mm	6m	250x250x6mm	12m
80x80x3mm	6m	250x250x8mm	12m
80x80x4mm	6m	250x250x10mm	12m
80x80x5mm	6m	250x250x12.5mm	12m
80x80x6mm	6m	300x300x6.3mm	12m
90x90x3mm	6m	300x300x8mm	12m
90x90x5mm	6m	300x300x10mm	12m
100x100x4mm	6m	300x300x12mm	12m
100x100x5mm	6m		

RECTANGULAR HOLLOW SECTIONS

Specification: As per JIS G3466 STKR 400/ASTM A500 GR A&B

STANDARD DIMENSIONAL PROGRAM

Size (mm)	Kg/mtr	Size (mm)	Kg/mtr
40x20x1.5mm	6m	160x80x8mm	12m
50x25x2mm	6m	160x80x10mm	12m
50x25x2.5mm	6m	200x100x5mm	12m
50x25x3mm	6m	200x100x6mm	12m
60x40x3mm	6m	200x100x8mm	12m
60x40x5mm	6m	200x100x10mm	12m
80x40x3mm	6m	200x150x6mm	12m
80x40x4mm	6m	200x150x10mm	12m
80x40x5mm	6m	250x100x5mm	12m
100x50x3mm	6m	250x100x6mm	12m
100x50x4mm	6m	250x100x8mm	12m
100x50x5mm	6m	250x150x6mm	12m
120x60x3mm	6m	250x150x8mm	12m
120x60x5mm	6m	250x150x10mm	12m
120x80x5mm	6m	250x150x12.5mm	12m
120x80x6mm	12m	250x150x16mm	12m
120x80x8mm	12m	300x200x6mm	12m
150x100x5mm	12m	300x200x8mm	12m
150x100x6mm	12m	300x200x10mm	12m
150x100x8mm	12m	300x200x12mm	12m
150x100x10mm	12m	400x200x10mm	12m
160x80x5mm	6m	400x200x12.5mm	12m
160x80x6mm	12m		

IPE / IPE (AA) - HEA / HEB / HEM

Specification:
As per ASTM A36 / EN 10025 S275JR

STANDARD DIMENSIONAL PROGRAM

Designation	G	h	b	t_w	t_f	r	A	h_i	d
	kg/m	mm	mm	mm	mm	mm	cm^2	mm	mm
IPE 100 A	6.89	98	55	3.6	4.7	7	8.78	88.6	74.6
IPE 100	8.10	100	55	4.1	5.7	7	10.3	88.6	74.6
IPE 120 A	8.66	118	64	3.8	5.1	7	11.0	107.4	93.4
IPE 120	10.4	120	64	4.4	6.3	7	13.2	107.4	93.4
IPE 140 A	10.5	138	73	3.8	5.6	7	13.4	126.0	112.2
IPE 140	12.9	140	73	4.7	6.9	7	16.4	126.2	112.2
IPE 140 R	14.4	142	72	5.3	7.8	7	18.4	126.4	112.4
IPE 160 A	12.7	157	82	4.0	5.9	9	16.2	145.2	127.2
IPE 160	15.8	160	82	5.0	7.4	9	20.1	145.2	127.2
IPE 160 R	17.7	162	81	5.6	8.5	9	22.6	145.0	127.0
IPE 180 A	15.4	177	91	4.3	6.5	9	19.6	164.0	146.0
IPE 180	18.8	180	91	5.3	8.0	9	23.9	164.0	146.0
IPE 180 O	21.3	182	92	6.0	9.0	9	27.1	164.0	146.0
IPE 180 R	22.1	183	89	6.4	9.5	9	28.1	164.0	146.0
IPE 200 A	18.4	197	100	4.5	7.0	12	23.5	183.0	159.0
IPE 200	22.4	200	100	5.6	8.5	12	28.5	183.0	159.0
IPE 200 O	25.1	202	102	6.2	9.5	12	32.0	183.0	159.0
IPE 200 R	26.6	204	98	6.6	10.5	12	33.9	183.0	159.0
IPE 220 A	22.2	217	110	5.0	7.7	12	28.3	201.6	177.6
IPE 220	26.2	220	110	5.9	9.2	12	33.4	201.6	177.6
IPE 220 O	29.4	222	112	6.6	10.2	12	37.4	201.6	177.6
IPE 220 R	31.6	225	108	6.7	11.8	12	40.2	201.6	177.4
IPE 240 A	26.2	237	120	5.2	8.3	15	33.3	220.4	190.4
IPE 240	30.7	240	120	6.2	9.8	15	39.1	220.4	190.4
IPE 240 O	34.3	242	122	7.0	10.8	15	43.7	220.4	190.4
IPE 240 R	37.3	245	118	7.5	12.3	15	47.5	220.4	190.4

STANDARD DIMENSIONAL PROGRAM

Designation	G	h	b	t_w	t_f	r	A	h_i	d
	kg/m	mm	mm	mm	mm	mm	cm^2	mm	mm
IPE 270 A	30.7	267	135	5.5	8.7	15	39.1	249.6	219.6
IPE 270	36.1	270	135	6.6	10.2	15	45.9	249.6	219.6
IPE 270 O	42.3	274	136	7.5	12.2	15	53.8	249.6	219.6
IPE 270 R	44.0	276	133	7.7	13.1	15	56.0	249.6	219.8
IPE 300 A	36.5	297	150	6.1	9.2	15	46.5	278.6	248.6
IPE 300	42.2	300	150	7.1	10.7	15	53.8	278.6	248.6
IPE 300 O	49.3	304	152	8.0	12.7	15	62.8	278.6	248.6
IPE 300 R	51.7	306	147	8.5	13.7	15	65.9	278.6	248.6
IPE 330 A	43.0	327	160	6.5	10.0	18	54.7	307.0	271.0
IPE 300	49.1	330	160	7.5	11.5	18	62.6	307.0	271.0
IPE 330 O	57.0	334	162	8.5	13.5	18	72.6	307.0	271.0
IPE 330 R	60.3	336	158	9.2	14.5	18	76.8	307.0	271.0
IPE 360 A	50.2	357.6	170	6.6	11.5	18	64.0	334.6	298.6
IPE 360	57.1	360	170	8.0	12.7	18	72.7	334.6	298.6
IPE 360 O	66.0	364	172	9.2	14.7	18	84.1	334.6	298.6
IPE 360 R	70.3	366	168	9.9	16.0	18	89.6	334.6	298.0
IPE 400 A	57.4	397	180	7.0	12.0	21	73.1	373.0	331.0
IPE 400	66.3	400	180	8.6	13.5	21	84.5	373.0	331.0
IPE 400 O	75.7	404	182	9.7	15.5	21	96.4	373.0	331.0
IPE 400 R	81.5	407	178	10.6	17.0	21	104	373.0	331.0
IPE 400 V	84.0	408	182	10.6	17.5	21	107	373.0	331.0
IPE 450 A	67.2	447	190	7.6	13.1	21	85.5	420.8	378.8
IPE 450	77.6	450	190	9.4	14.6	21	98.8	420.8	378.8
IPE 450 O	92.4	456	192	11.0	17.6	21	118	420.8	378.8
IPE 450 R	95.2	458	188	11.3	18.6	21	121	420.8	378.8
IPE 450 V	104	460	194	12.4	19.6	21	132	420.8	378.8

STANDARD DIMENSIONAL PROGRAM

Designation	G	h	b	t_w	t_f	r	A	h_i	d
	kg/m	mm	mm	mm	mm	mm	cm^2	mm	mm
IPE 500 A	79.4	497	200	8.4	14.5	21	101	468.0	426.0
IPE 500	90.7	500	200	10.2	16.0	21	116	468.0	426.0
IPE 500 O	107	506	202	12.0	19.0	21	137	468.0	426.0
IPE 500 R	111	508	198	12.6	20.0	21	142	468.0	426.0
IPE 500 V	129	514	204	14.2	23.0	21	164	468.0	426.0
IPE 550 A	92.1	547	210	9.0	15.7	24	117	515.6	467.6
IPE 550	106	550	210	11.1	17.2	24	134	515.6	467.6
IPE 550 O	123	556	212	12.7	20.2	24	156	515.6	467.6
IPE 550 R	134	560	210	14.0	22.2	24	170	515.6	467.6
IPE 550 V	159	566	216	17.1	25.2	24	202	515.6	467.6
IPE 600 A	108	597	220	9.8	17.5	24	137	562.0	514.0
IPE 600	122	600	220	12.0	19.0	24	156	562.0	514.0
IPE 600 O	154	610	224	15.0	24.0	24	197	562.0	514.0
IPE 600 R	144	608	218	14.0	23.0	24	184	562.0	514.0
IPE 600 V	184	618	228	18.0	28.0	24	234	562.0	514.0
IPE750X137	137	753	263	11.5	17.0	17	175	719.0	685.0
IPE750X147	147	753	265	13.2	17.0	17	187	719.0	685.0
IPE750X161	160	758	266	13.8	19.3	17	204	719.0	685.4
IPE750X173	173	762	267	14.4	21.6	17	221	719.0	685.8
IPE750X185	185	766	267	14.9	23.6	17	236	719.0	685.8
IPE750X196	196	770	268	15.6	25.4	17	251	719.0	685.2
IPE750X210	210	775	268	16.0	28.0	17	268	719.0	685.0
IPE750X222	222	778	269	17.0	29.5	17	283	719.0	685.0

IPE / IPE (AA) - HEA / HEB / HEM

Specification: As per ASTM A36 / EN 10025 S275JR / S355JR

STANDARD DIMENSIONAL PROGRAM

Designation	Weight per Metre	Depth of Section	Width of Section	Thickness of web	Thickness of Flange	Radius if the Root fillet	Radius if Section	Radius if between Flanges	Dept of straight Portion of web
	G	h	b	t_w	t_f	r	A	h_i	d
HE 100 AA	12.2	91	100	4.2	5.5	12	15.6	80	56
HE 100 A	16.7	96	100	5.0	8.0	12	21.2	80	56
HE 100 B	20.4	100	100	6.0	10.0	12	26.0	80	56
HE 120 AA	14.6	109	120	4.2	5.5	12	18.6	98	74
HE 120 A	19.9	114	120	5.0	8.0	12	25.3	98	74
HE 120 B	26.7	120	120	6.5	11.0	12	34.0	98	74
HE 140 AA	18.1	128	140	4.3	6.0	12	23.0	116	92
HE 140 A	24.7	133	140	5.5	8.5	12	31.4	116	92
HE 140 B	33.7	140	140	7.0	12.0	12	43.0	116	92
HE 160 AA	23.8	148	160	4.5	7.0	15	30.4	134	104
HE 160 A	30.4	152	160	6.0	9.0	15	38.8	134	104
HE 160 B	42.6	160	160	8.0	13.0	15	54.3	134	104
HE 160 M	76.2	180	166	14.0	23.0	15	97.1	134	104
HE 180 AA	28.7	167	180	5.0	7.5	15	36.5	152	122
HE 180 A	35.5	171	180	6.0	9.5	15	45.3	152	122
HE 180 B	51.2	180	180	8.5	14.0	15	65.3	152	122
HE 180 M	88.9	200	186	14.5	24.0	15	113	152	122
HE 200 AA	34.6	186	200	5.5	8.0	18	44.1	170	134
HE 200 A	42.3	190	200	6.5	10.0	18	53.8	170	134
HE 200 B	61.3	200	200	9.0	15.0	18	78.1	170	134
HE 200 M	103	220	206	15.0	25.0	18	131	170	134
HE 220 AA	40.4	205	220	6.0	8.5	18	51.5	188	152
HE 220 A	50.5	210	220	7.0	11.0	18	64.3	188	152
HE 220 B	71.5	220	220	9.5	16.0	18	91.0	188	152
HE 220 M	117	240	226	15.5	26.0	18	149	188	152
HE 240 AA	47.4	224	240	6.5	9.0	21	60.4	206	164
HE 240 A	60.3	230	240	7.5	12.0	21	76.8	206	164
HE 240 B	83.2	240	240	10.0	17.0	21	106	206	164
HE 240 M	157	270	248	18.0	32.0	21	200	206	164
HE 260 AA	54.1	244	260	6.5	9.5	24	69.0	225	177
HE 260 A	68.2	250	260	7.5	12.5	24	86.8	225	177
HE 260 B	93.0	260	260	10.0	17.5	24	118	225	177
HE 260 M	172	290	268	18.0	32.5	24	220	225	177

STANDARD DIMENSIONAL PROGRAM

Designation	G	h	b	t_w	t_f	r	A	h_i	d
	kg/m	mm	mm	mm	mm	mm	cm^2	mm	mm
HE 550 AA	120	522	300	11.5	15.0	27	153	492	438
HE 550 A	166	540	300	12.5	24.0	27	212	492	438
HE 550 B	199	550	300	15.0	29.0	27	254	492	438
HE 550 M	278	572	306	21.0	40.0	27	354	492	438
HE 600 AA	129	571	300	12.0	15.5	27	164	540	486
HE600X137	137	575	300	11.8	17.5	27	175	540	486
HE600X151	151	582	300	11.6	20.6	27	193	540	486
HE600X174	174	588	300	13.6	23.9	27	223	540	486
HE 600 A	178	590	300	13.0	25.0	27	226	540	486
HE 600 B	212	600	300	15.5	30.0	27	270	540	486
HE 600 M	285	620	305	21.0	40.0	27	364	540	486
HE 650 AA	138	620	300	12.5	16.0	27	176	588	534
HE 650 A	190	640	300	13.5	26.0	27	242	588	534
HE 650 B	225	225	300	16.0	31.0	27	286	588	534
HE 650 M	293	293	305	21.0	40.0	27	374	588	534
HE 700 AA	150	670	300	13.0	17.0	27	191	636	582
HEX700X166	166	678	300	12.5	21.0	27	212	636	582
HE 700 A	204	690	300	14.5	27.0	27	260	636	582
HE 700 B	241	700	300	17.0	32.0	27	306	636	582
HE 700 M	301	716	304	21.0	40.0	27	383	636	582
HE 800 AA	172	770	300	14.0	18.0	30	218	734	674
HE 800 A	224	790	300	15.0	28.0	30	286	734	674
HE 800 B	262	800	300	17.5	33.0	30	334	734	674
HE 800 M	317	814	303	21.0	40.0	30	404	734	674
HE 900 AA	198	870	300	15.0	20.0	30	252	830	770
HE 900 A	252	890	300	16.0	30.0	30	321	830	770
HE 900 B	291	900	300	18.5	35.0	30	371	830	770
HE 900 M	333	910	302	21.0	40.0	30	424	830	770
HE 1000 AA	222	970	300	16.0	21.0	30	282	928	868
HE 1000 A	272	990	300	16.5	31.0	30	347	928	868
HE 1000 B	314	1000	300	19.0	36.0	30	400	928	868
HE 1000 M	349	1008	302	21.0	40.0	30	444	928	868

STANDARD DIMENSIONAL PROGRAM

Designation	G	h	b	t_w	t_f	r	A	h_i	d
	kg/m	mm	mm	mm	mm	mm	cm^2	mm	mm
HE 280 AA	61.2	264	280	7.0	10.0	24	78	244	196
HE 280 A	76.4	270	280	8.0	13.0	24	97.3	244	196
HE 280 B	103	280	280	10.5	18.0	24	131	244	196
HE 280 M	189	310	288	18.5	33.0	24	240	244	196
HE 300 AA	69.8	283	300	7.5	10.5	27	88.9	262	208
HE 300 A	88.3	290	300	8.5	14.0	27	113	262	208
HE 300 B	117	300	300	11.0	19.0	27	149	262	208
HE 300 C	177	320	305	16.0	29.0	27	225	262	208
HE 300 M	238	340	310	21.0	39.0	27	303	262	208
HE 320 AA	74.2	301	300	8.0	11.0	27	94.6	279	225
HE 320 A	97.6	310	300	9.0	15.5	27	124	279	225
HE 320 B	127	320	300	11.5	20.5	27	161	279	225
HE 320 M	245	359	309	21.0	40.0	27	312	279	225
HE 340 A	105	330	300	9.5	16.5	27	133	297	243
HE 340 B	134	340	300	12.0	21.5	27	171	297	243
HE 340 M	248	377	309	21.0	40.0	27	316	297	243
HE 360 AA	83.7	339	300	9.0	12.0	27	107	315	261
HE 360 A	112	350	300	10.2	17.5	27	143	315	261
HE 360 B	142	360	300	12.5	22.5	27	181	315	261
HE 360 M	250	395	308	21.0	40.0	27	319	315	261
HE 400 AA	92.4	378	300	9.5	13.0	27	118	352	298
HE400X107	107	384	297	10.0	16.0	27	136	352	298
HE 400 A	125	390	300	11.0	19.0	27	159	352	298
HE 400 B	155	400	300	13.5	24.0	27	198	352	298
HE 400 M	256	432	307	21.0	40.0	27	326	352	298
HE 450 AA	100	425	300	10.0	13.5	27	127	398	344
HE450X123	123	435	300	10.2	18.5	27	158	398	344
HE 450 A	140	440	300	11.5	21.0	27	178	398	344
HE 450 B	171	450	300	14.0	26.0	27	218	398	344
HE 450 M	263	478	307	21.0	40.0	27	335	398	344
HE 500 AA	107	472	300	10.5	14.0	27	137	444	390
HE 500 A	155	490	300	12.0	23.0	27	198	444	390
HE 500 B	187	500	300	14.5	28.0	27	239	444	390
HE 500 M	270	524	306	21.0	40.0	27	344	444	390

MILD STEEL ROUND BARS

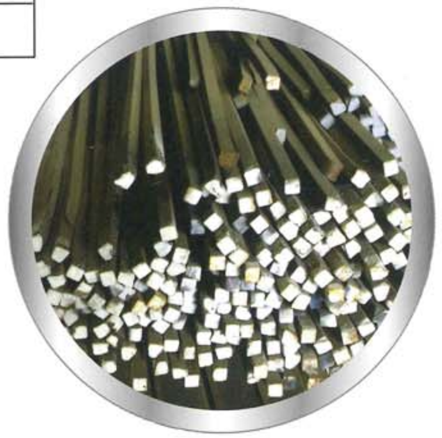
M.S. Round Bars Specification: JIS G3101 - SS400/ASTM A 36/ EN 10025 S275JR

STANDARD DIMENSIONAL PROGRAM

Metric Size (mm)	kg/m	Mtrs/Tonne
6	0.22	4505
8	0.39	2532
10	0.62	1621
12	0.89	1120
16	1.58	632
20	2.47	404
25	3.85	259
32	6.31	158

Metric Size (mm)	kg/m	Mtrs/Tonne
40	9.86	101
45	12.5	80
50	15.40	64
60	22.20	45
65	26.00	38
75	34.70	29
90	49.90	20
100	61.60	16

MILD STEEL SQUARE BARS



M.S. Square Bars Specification: JIS G3101 - SS400

STANDARD DIMENSIONAL PROGRAM

Metric Size (mm)	kg/m	Mtrs/Tonne
8	0.50	2000
10	0.79	1265
12.5	1.22	820
16	2.01	497
20	3.14	318
25	4.91	204
30	7.07	141
32	8.04	125

Metric Size (mm)	kg/m	Mtrs/Tonne
40	12.60	80
45	15.90	63
50	19.60	51
60	28.30	35
75	44.20	23
90	63.60	16
100	78.50	13

MILD STEEL CHEQUERED SHEETS

STANDARD DIMENSIONAL PROGRAM

WIDTH / SIZE	THICKNESS	GRADE
4ft x 8ft	2.5 mm to x 12mm	ASTM A36
1.5mtr x 6mtr	4 mm to x 12mm	ASTM A36

BUTT WELD FITTINGS

Dimensional / Tolerance Stands:
ANSI B16.9 / B16.28/MSS SP75

Sizes Range:
1/2" to 36"

Pressure Rating:
All Common Wall Thickness Shedules, from Sch 10 to Sch-XXX

Materials:
* A234 - WPB & WP5, WP9, WP11, WP22
* A420 - WPL3 & WPL6
* A403 - WP304/ L; WP316/L
* A860 - WPHY 42-46/52-60-70

Special Materials such as monel, inconel, Cu-Ni SS etc are available on request.

Coatings:
Special Coating i.e Cement Mortar Lining, FBE Coating, Galvanized (Hot Dipped & Electro-Plating), PTEF coating etc.can be provided.

FORGED STEEL FITTINGS

Dimensional / Tolerance Stands:
ANSI B16.11

Pressure Rating:
#2000, #3000, #6000, #9000, Threaded and Socket Weld

Materials:
ASTM 105N, A350 LF2, A182 F304/L, A 182 F316/L (Other Grades Available on Request)

Black / Galvanized Fittings (Electro and Hot Dip)

VALVES

Types:
Gate Valve, Globe Valve, Check Valve Ball Valve in Forged & Cast Steel

Standard:
ASME B16.34, B16.10, API SPECS

Sizes Range
1/2" to 24"

Pressure Rating:
#150, #300, #600, #900, #1500 & # 2500

Materials:
ASTM A105, A182, A216WCB/WCC,A217, A315 A352, A351 CF8/CF8M.

Trim Material:
13% Cr, SS304, SS310, SS316, Monel, Alloy 20

FLANGES

Types:
Weld Neck, Slip On, Socket Weld, Lap Joint Threaded, Blind, Reducing and Spectacle Plate

Standard:
ANSI B16.5, MSS SP-44 B16. 47A, API 605 B16.47 B, DIN

Sizes Range
1/2" to 48"

Pressure Rating:
#150, #300, #600, #900, #1500 & #2500

Materials:
ASTM A105, A182,Gr. F304/L F316/L, A350 LF2, A694-F42 TO F70 (Other Grades available on Request)

Galvanizing
(Electro or Hot Hot Dip) Can be provided

PIPES

Pipe:

Seamless and Welded

Dimensional Standard:

ANSI B36.10 / B36.19

Material:

Carbon Steel (AP15L / A53B / A106B - X42 in PSLI & PSL2 A333-Gr.6) Alloy Steel, Stainless Steel (A312 - TP316 / 316 L & TP304 / 304 L)

Sizes:

1/2" to 36" (Larger diameter available on request). Galvanized pipes are available from 1/4" to 8" (In all schedules. Sch 40 & Sch 80)

Lengths:

6 mtr & 12 mtr (with tolarance)
Single Random : 4.8 mtr to 6.7 mtr
Double Random : 10.5 mtr to 12.5 mtr.

Coatings:

Special Coating i.e Cement Mortar Lining, FBE Coating, Galvanized (Hot Dipped). PTEF coating etc.can be provided.

SI - UNITS (METRIC)

ANSI Pipe Schedule SI-Units (Metric)

OD = mm, Wall Thickness = mm

Weight = kg/m, Vol /m = m^3

															Figures based austenitic steel				Shipping
Nominal pipe size Inches/mm	OD MM	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS	5S	10S	40S	80S	Vol/m
1/8	10.30				1.73 0.37	1.73 0.37		2.41 0.47	2.41 0.47							1.24 0.28	1.73 0.36	2.41 0.48	0.0001
1/4	13.70				2.24 0.63	2.24 0.63		3.02 0.80	3.02 8.80							1.65 0.51	2.24 0.64	3.02 0.82	0.0001
3/8	17.10				2.31 0.84	2.31 0.84		3.20 1.10	3.20 1.10							1.65 0.64	2.31 0.86	3.20 1.12	0.0003
1/2	21.30				2.77 1.27	2.77 1.27		3.73 1.62	3.73 1.62				4.78 1.95	7.47 2.55	1.65 0.82	2.11 1.01	2.77 1.30	3.73 1.65	0.0004
3/4	26.70				2.87 1.69	2.87 1.69		3.91 2.20	3.91 2.20				5.56 2.90	7.82 3.64	1.65 1.04	2.11 1.31	2.87 1.71	3.91 2.24	0.0007
1	33.40				3.38 2.50	3.38 2.50		4.55 3.24	4.55 3.24				6.35 4.24	9.09 5.45	1.65 1.33	2.77 2.13	3.38 2.55	4.55 3.29	0.0011
1¼	42.20				3.56 3.39	3.56 3.39		4.85 4.47	4.85 4.47				6.35 5.61	9.70 7.77	1.65 1.68	2.77 2.76	3.56 3.46	4.85 4.56	0.0018
1½	48.30				3.68 4.05	3.68 4.05		5.08 5.41	5.08 5.41				7.14 7.25	10.15 9.56	1.65 1.95	2.77 3.17	3.68 4.13	5.08 5.51	0.0023
2	60.30				3.91 5.44	3.91 5.44		5.54 7.48	5.54 7.48				8.74 11.11	11.07 13.44	1.65 2.44	2.77 4.01	3.91 5.54	5.54 7.63	0.0036
2½	73.00				5.16 8.63	5.16 8.63		7.01 11.41	7.01 11.41				9.53 14.92	14.02 20.39	2.11 3.77	3.05 5.36	5.16 8.81	7.01 11.64	0.0053
3	88.90				5.49 11.29	5.49 11.29		7.62 15.27	7.62 15.27				11.13 21.35	15.24 27.68	2.11 4.60	3.05 6.59	5.49 11.52	7.62 15.59	0.0079
3½	101.60				5.74 13.57	5.74 13.57		8.08 18.63	8.08 18.63						2.11 5.29	3.05 7.55	5.74 13.84	8.08 19.01	0.0103
4	114.30				6.02 16.07	6.02 16.07		8.56 22.32	8.56 22.32		11.13 28.32		13.49 33.54	17.12 41.03	2.11 5.96	3.05 8.52	6.02 16.40	8.56 22.77	0.130
5	141.30				6.55 21.77	6.55 21.77		9.53 30.97	9.53 30.97		12.70 40.28		15.88 49.11	19.05 57.43	2.77 9.67	3.40 11.82	6.55 22.20	9.53 31.59	0.199
6	168.30				7.11 28.26	7.11 28.26		10.97 42.56	10.97 42.56		14.27 54.20		18.26 67.56	21.95 79.22	2.77 11.55	3.40 14.13	7.11 28.83	10.97 43.42	0.028
8	219.10		6.35 33.31	7.04 36.81	8.18 42.55	8.18 42.55	10.31 5308	12.70 64.64	12.70 64.64	15.09 75.92	18.26 90.44	20.62 100.92	23.01 111.27	22.23 107.92	2.77 15.09	3.76 20.37	8.18 43.39	12.70 65.95	0.048
10	273.10		6.35 41.77	7.805 51.03	9.27 60.31	9.27 60.31	12.70 81.55	12.70 81.55	15.09 96.01	18.26 114.75	21.44 133.06	25.40 155.15	28.58 172.33	25.40 155.15	3.40 23.08	4.19 28.34	9.27 61.52	12.70 83.19	0.074
12	323.90		6.35 49.73	8.38 65.20	9.53 73.88	10.31 79.73	14.27 108.96	12.70 97.46	17.48 132.08	21.44 159.91	25.40 186.97	28.58 208.14	33.32 238.76	25.40 186.97	3.96 31.89	4.57 36.73	9.52 75.52	12.70 99.43	0.104
14	355.60	6.35 54.69	7.92 67.90	9.53 81.33	9.53 81.33	11.13 94.55	15.09 126.71	12.70 107.39	19.05 158.10	23.83 194.96	27.79 224.65	31.75 253.56	35.71 281.70		3.96 35.06	4.78 42.14			0.126
16	406.40	6.35 62.64	7.92 77.83	9.53 93.27	9.53 93.27	12.70 123.30	16.66 160.12	12.70 123.30	21.44 203.53	21.19 245.56	30.96 286.64	36.53 333.19	40.49 365.35		4.19 42.41	4.78 48.26			0.165
18	457.00	6.35 70.57	7.92 87.71	11.13 122.38	9.53 105.16	14.27 155.50	19.05 205.74	12.70 139.15	23.88 254.55	29.36 309.62	34.93 363.56	39.67 408.26	45.24 459.37		4.19 47.77	7.78 54.36			0.208
20	508.00	6.35 78.55	9.53 117.15	12.70 155.12	9.53 117.15	15.09 183.42	20.62 247.83	12.70 155.12	26.19 311.17	32.54 381.53	38.10 441.49	44.45 508.11	50.01 564.81		4.78 60.46	5.54 70.00			0.258
22	559.00	6.35 86.54	9.53 129.13	12.70 171.09	9.53 129.13		22.23 294.25	12.70 171.09	28.58 373.83	34.93 451.42	41.28 527.02	47.63 600.63	53.98 672.26		4.78 66.57	5.54 77.06			0.312
24	610.00	6.35 94.53	9.53 141.12	14.27 209.64	9.53 141.12	17.48 255.41	24.61 355.26	12.70 187.06	30.96 442.08	38.89 547.71	46.02 640.03	52.37 720.15	59.54 808.22		5.54 84.16	6.35 96.37			0.372
26	600.00	7.92 127.36	12.70 202.72		9.53 152.87			12.70 202.72											0.435
28	711.00	7.92 137.32	12.70 218.69	15.88 271.21	9.53 164.85			12.70 218.69											0.505
30	762.00	7.92 147.28	12.70 234.67	15.88 292.18	9.53 176.84			12.70 234.67							6.35 120.72	6.35 120.72			0.580
32	813.00	7.92 157.24	12.70 250.64	15.88 312.15	9.53 188.82	17.48 342.91		12.70 250.64											0.660
34	864.00	7.92 167.20	12.70 266.61	15.88 332.12	9.53 200.31	17.48 364.90		12.70 266.61											0.746
36	914.00	7.92 176.96	12.70 282.27	15.88 351.70	9.53 212.56	19.05 420.42		12.70 282.27											0.235
38	965.00				9.53 224.54			12.70 298.24											0.931
40	1016.00				9.53 236.53			12.70 314.22											1.032
42	1067.00				9.53 248.52			12.70 330.19											1.138
44	1118.00				9.53 260.50			12.70 346.16											1.249
46	1168.00				9.53 272.25			12.70 351.82											1.364
48	1219.00				9.53 284.24			12.70 377.79											1.485