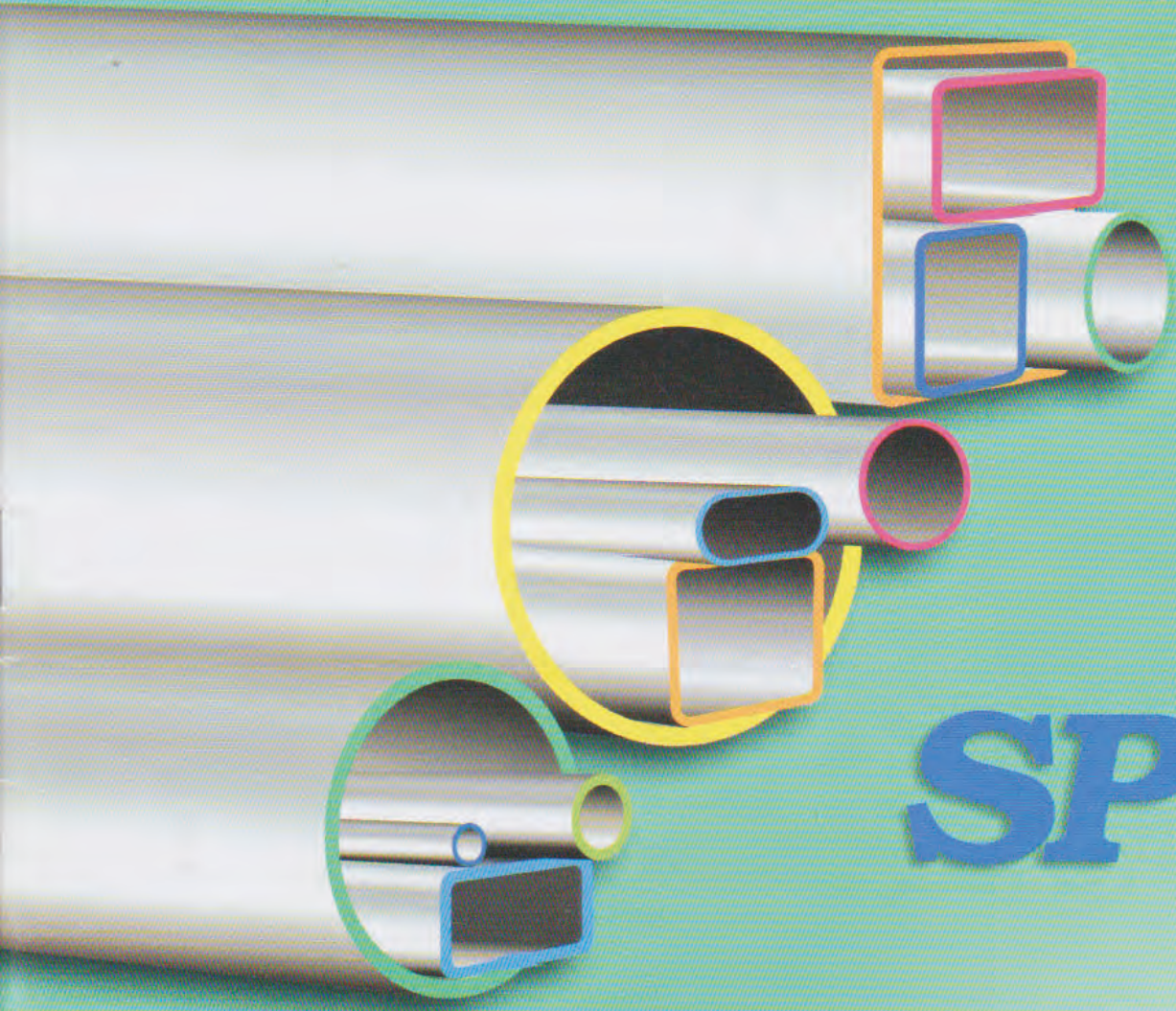


SPS

Serving Around The Globe

STEEL PIPES :

- FIRE FIGHTING / HYDRANT
- CHILLER
- STRUCTURAL
- GALVANIZED
- RECTANGULAR/SQUARE
- OIL & GAS
- PLUMBING

TÜV CERT
EN ISO 9001
Certificate : 16 100 0656

TÜV NORD
ISO 9001:2008

PT. Sirejeki Perdana Steel (SPS)

Steel Tube & Pipe and Coil Center

SPS

COMPANY PROFILE

In 1993, ***PT Srirejeki Perdana Steel*** *opened its factory in Bekasi, West Java, Indonesia. Starting with lipped-channels production, the company has expanded over the years into steel coil center and pipe production.*

We are determined to fulfill our customers' satisfaction with reliable products and on-time delivery. The fruits of our productivity have always been shared with our customers to ensure their competitiveness in the market.

We are ready to serve customers anywhere in the world. We provide this catalogue specially for steel pipes. Our tubes are manufactured with precision, good weld and quality material. We hope the information given is helpful. For further information or inquiries, please contact us.

Facility:

Slitting Line:

Thickness	:	0.3 - 6.4 mm
Coil Width	:	1550 mm
Coil Wieght	:	max. 22 mton

No. 1 Tube Mill Line:

Tube Size	:	13.8 - 60.5 mm
Thickness	:	0.8 - 4.0 mm
Capacity	:	2,000 mton/month

Facing equipment	:	4 units
Recutting machine	:	Several units
Threading machine	:	1 unit up to 114.3 mm

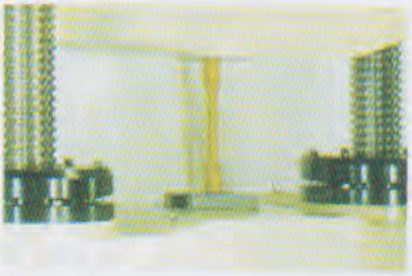
No. 2 Tube Mill Line:

Tube Size	:	50.8 - 110.0 mm
Thickness	:	2.0 - 4.5 mm
Capacity	:	3,000 mton/month

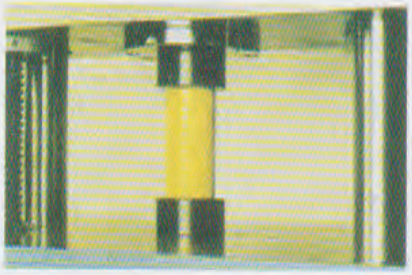
No. 3 Tube Mill Line:

Tube Size	:	50.8 - 220 mm
Thickness	:	3.0 - 8.2 mm
Capacity	:	5,000 mton/month

EXAMPLES OF TESTING



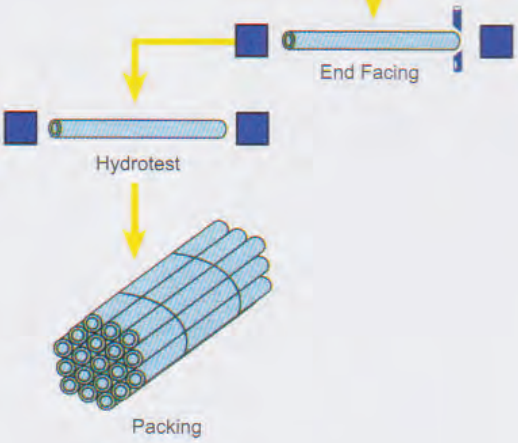
Compression Test

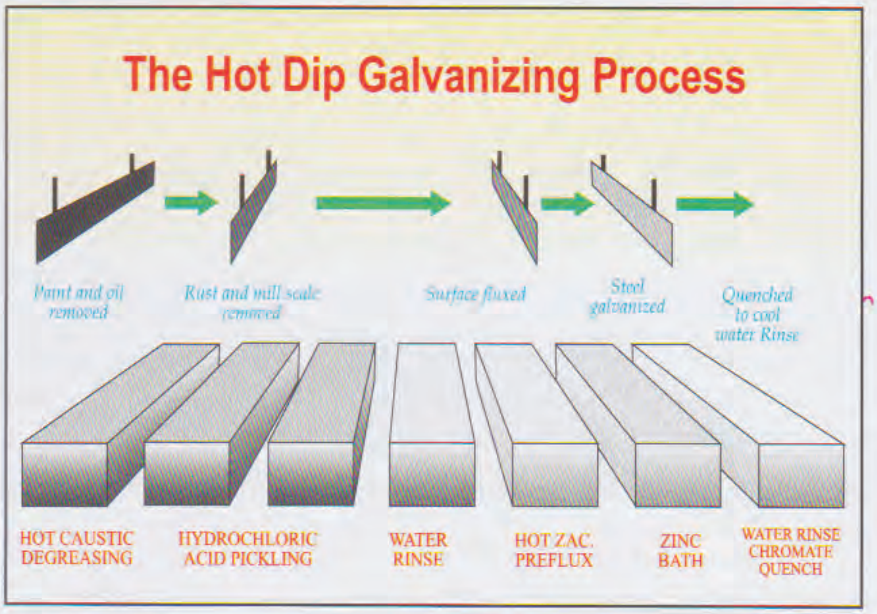


Tensile Test

Bending Test

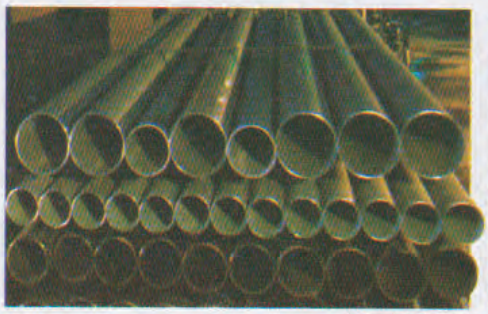
PRODUCTION PROCESSES



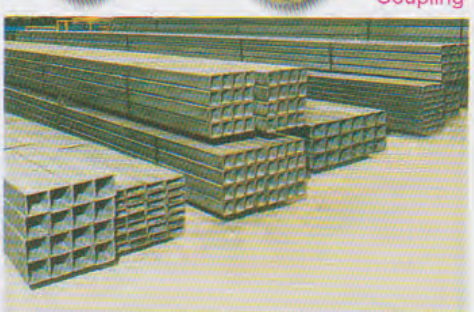



Galvanized Pipes


Thread & Coupling


Black Pipes

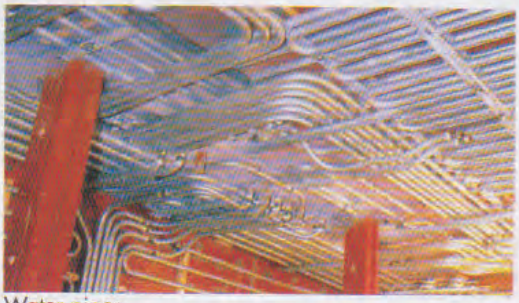

Gas Pipe


RHS

FIRE FIGHTING, STRUCTURAL, PLUMBING

Fire figthing pipes/Hydrant

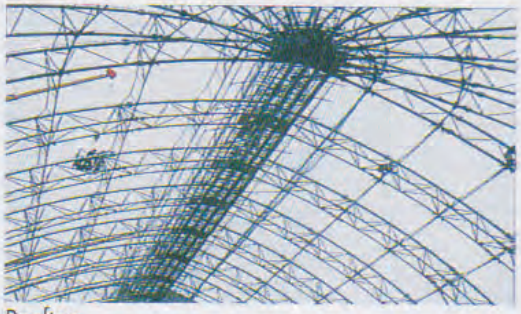
Chiller pipes



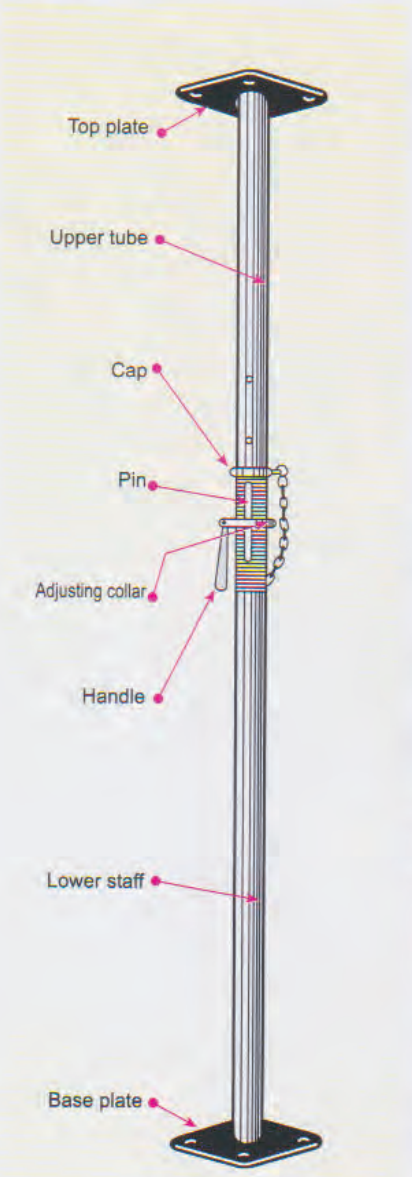
Water pipes

Construction

Building



Rooftop



Scaffolding

Furniture

Bus

Gate

Pedestrian Bridge

Frencing

Bridge

Season City

Gandaria City

Green Park View

Margonda Residence 1

Margonda Residence 2

Margonda Residence 3

Menteng Square

Hampston Park, Jakarta

Bekasi Square

Serpong Town Square

Setos Tangerang

SPECIFICATION BS-1387/85 MEDIUM TUBES
SNI 0039-87 PIPA MEDIUM

GALVANIZED PIPE MEDIUM
PIPA BAJA MEDIUM HITAM (BSP)
PIPA BAJA MEDIUM DI-GALVANIS (GSP)

Diameter Lubang Nominal		Diameter Luar		Tebal	Berat		Pressure test kgf / cm2
					Tanpa Ulir	t/c*	
inch	mm	max (mm)	min (mm)	mm	kg/m	kg/m	
1/2	15	21.7	21.1	2.65	1.22	1.23	50
3/4	20	27.2	26.4	2.65	1.58	1.59	50
1	25	34.1	33.4	3.25	2.44	2.46	50
1 1/4	32	42.9	42.1	3.25	3.14	3.17	50
1 1/2	40	48.8	48.0	3.25	3.61	3.66	50
2	50	60.8	59.8	3.65	5.10	5.16	50
2 1/2	65	76.6	75.4	3.65	6.51	6.64	50
3	80	89.5	88.1	4.05	8.47	8.63	50
4	100	114.9	113.3	4.50	12.00	12.40	50
5	125	140.6	138.7	4.85	19.20	19.80	50
6	150	166.1	164.1	4.85	19.20	19.80	50

STANDARD TOLERANCE : OD : ± 1% ; Thickness ± 10% ; Weight : ± 10%

ASTM STEEL PIPE ASTM A53 / A120

SPECIFICATION FOR STEEL PIPE ORDINARY USES

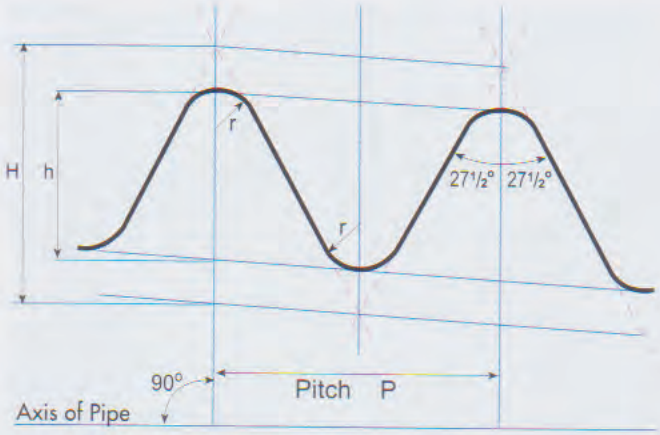
Nominal Size	Outside Diameter		Wall Thickness		Weight						Test Pressure (psi)	Schedule No.
					Plain Ends			Threads & Couplings				
inch	inch	mm	inch	mm	lbs/ft	kg/ft	kg/m	lbs/ft	kg/ft	kg/m	A53-A	
1/2	0.840	21.3	0.109	2.77	0.85	0.39	1.26	0.85	0.39	1.27	700	40
3/4	1.050	26.7	0.113	2.87	1.13	0.51	1.68	1.13	0.51	1.69	700	40
1	1.315	33.4	0.133 0.179	3.38 4.55	1.68 2.17	0.76 0.98	2.50 3.24	1.68 -	0.76 -	2.50 -	700 850	40 80
1 1/4	1.660	42.2	0.140 0.191	3.56 4.85	2.27 3.00	1.03 1.36	3.39 4.47	2.28 -	1.03 -	3.39 -	1.200 1.800	40 80
1 1/2	1.900	48.3	0.145 0.200	3.68 5.08	2.72 3.63	1.23 1.65	4.05 5.41	2.73 -	1.24 -	4.06 -	1.200 1.800	40 80
2	2.375	60.3	0.154 0.218	3.91 5.54	3.65 5.02	1.66 2.28	5.44 7.48	3.68 -	1.67 -	5.48 -	2.300 2.500	40 80
2 1/2	2.875	73.0	0.203 0.276	5.16 7.01	5.79 7.66	2.63 3.47	8.65 11.41	5.82 -	2.64 -	8.66 -	2.500 2.500	40 80
3	3.500	88.9	0.126 0.300	5.49 7.62	7.58 10.25	3.44 4.65	11.29 15.27	7.62 -	3.46 -	11.34 -	2.220 2.500	40 80
3 1/2	4.000	101.6	0.226 0.318	5.74 8.08	9.11 12.51	4.13 5.67	13.57 18.63	9.20 -	4.17 -	13.69 -	2.030 2.800	40 80
4	4.500	114.3	0.237 0.337	6.02 8.56	10.79 14.98	4.89 6.79	16.07 22.32	10.89 -	4.94 -	16.21 -	1.900 2.700	40 80
5	5.563	141.3	0.258 0.375	6.55 9.52	14.62 20.78	6.63 9.43	21.77 30.95	14.81 -	6.72 -	22.04 -	1.670 2.430	40 80
6	6.625	168.3	0.280 0.432	7.11 10.97	18.97 28.57	8.60 12.96	28.26 42.56	19.18 -	8.70 -	28.54 -	1.520 2.350	40 80
8	8.625	219.1	0.277 0.322 0.500	7.04 8.18 12.70	24.70 28.55 43.39	11.20 12.95 19.68	36.81 42.55 64.63	25.55 29.35 -	11.59 13.31 -	38.02 43.68 -	1.160 1.340 2.090	30 40 80
10	10.75	273.0	0.365	9.27	40.48	18.38	60.29	41.49	18.84	63.36	1.220	40
12	12.75	323.8	0.375 0.406	9.52 10.31	49.61 53.52	22.52 24.30	73.78 79.70	51.28 -	23.28 -	76.21 -	1.060 1.150	STD 40

STANDARD TOLERANCE : OD : ± 1% ; Thickness ± 10% ; Weight : ± 10%

CARBON STEEL PIPES FOR ORDINARY PIPING
JIS G 3452

SGP SPECIFICATIONS

Nominal Size		Outside Diameter	Tolerance OD		Wall Thickness		Unit Mass
			Pipes to be cut in taper thread	Other Pipes	Thickness	Tolerance	Excluding Socket
A	B	mm	mm		mm	%	kg/m
6	1/8	10.5	+/- 0.5	+/- 0.5mm	2.0	+ NOT SPECIFIED	0.419
8	1/4	13.8			2.3		0.652
10	3/8	17.3			2.3		0.851
15	1/2	21.7			2.8		1.31
20	3/4	27.2			2.8		1.68
25	1	34.0			3.2		2.43
32	1 1/4	42.7			3.5		3.38
40	1 1/2	48.6			3.5		3.89
50	2	60.5		+/- 1%	3.8		5.31
65	2 1/2	76.3	+/- 0.7		4.2	-12.5%	7.47
80	3	89.1	+/- 0.8		4.2		8.79
90	3 1/2	101.6			4.2		10.1
100	4	114.3			4.5		12.2
125	5	139.8			4.5		15.0
150	6	165.2		+/- 1.6%	5.0		19.8
175	7	190.7	+/- 0.9		5.3		24.2
200	8	216.3	+/- 1.0	+/- 0.8%	5.8		30.1



THREAD
BS21

Thread Height Dimensions

(inches)

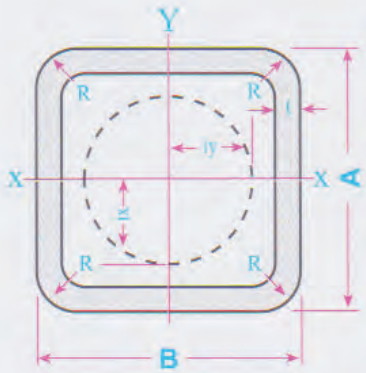
Thread Element	28 Threads per inch p = 0.03571	19 Threads per inch p = 0.05263	14 Threads per inch p = 0.07143	11 Threads per inch p = 0.09091
H = 0.96023p	0.0343	0.0505	0.0686	0.0873
h = 0.640327p	0.0229	0.0337	0.0457	0.0582
r = 0.137278p	0.0049	0.0072	0.0098	0.0125

Nominal Size	Number of threads per inch	Basic diameters at gauge plane			Gauge length				Length of useful thread on pipe end not less than			Fitting allowance	Wrenching allowance	Tolerance on position of gauge plae relative to face of internally taper threaded parts +/-	Diamentral tolerance on parallel internal threads +/-
		major (gauge dia.)	pitch	minor	basic	Tolerance +/-	max	min	for basic gauge length	for max. gauge length	for min. gauge length				
1/16	28	0.304	0.2812	0.2583	4 3/8	1	5 3/8	3 3/8	7 1/8	8 1/8	6 1/8	2 3/4	1 1/2	1 1/4	0.0028
					0.1563	0.0357	0.1920	0.1206	0.2545	0.2902	0.2188	0.0982	0.0536	0.0446	
1/8	28	0.383	0.3601	0.3372	4 3/8	1	5 3/8	3 3/8	7 1/8	8 1/8	6 1/8	2 3/4	1 1/2	1 1/4	0.0028
					0.1563	0.0357	0.1920	0.1206	0.2545	0.2902	0.2188	0.0982	0.0536	0.0446	
1/4	19	0.518	0.4843	0.4506	4 1/2	1	5 1/2	3 1/2	7 1/4	8 1/4	6 1/4	2 3/4	1 1/2	1 1/4	0.0041
					0.2367	0.0526	0.2893	0.1841	0.3814	0.4340	0.3288	0.1447	0.0789	0.0658	
3/8	19	0.656	0.6223	0.5886	4 3/4	1	5 3/4	3 3/4	7 1/2	8 1/2	6 1/2	2 3/4	1 1/2	1 1/4	0.0041
					0.2500	0.0526	0.3026	0.1974	0.3947	0.4473	0.3421	0.1447	0.0789	0.0658	
1/2	14	0.825	0.7793	0.7336	4 1/2	1	5 1/2	3 1/2	7 1/4	8 1/4	6 1/4	2 3/4	1 1/2	1 1/4	0.0056
					0.3214	0.0714	0.3928	0.2500	0.5178	0.5892	0.4464	0.1964	0.1071	0.0893	
3/4	14	1.041	0.9953	0.9496	5 1/4	0	6 1/2	4 1/4	8	9	7	2 3/4	1 1/2	1 1/4	0.0056
					0.3750	0.0714	0.4464	0.3036	0.5714	0.6428	0.5000	0.1964	0.1071	0.0893	
1	11	1.309	1.2508	1.1926	4 1/2	1	5 1/2	3 1/2	7 1/4	8 1/4	6 1/4	2 3/4	1 1/2	1 1/4	0.0071
					0.4091	0.0909	0.5000	0.3182	0.6591	0.7500	0.5682	0.2500	0.1364	0.1136	
1 1/4	11	1.650	1.5918	1.5336	5 1/2	1	6 1/2	4 1/2	8 1/4	9 1/4	7 1/4	2 3/4	1 1/2	1 1/4	0.0071
					0.5000	0.0909	0.5909	0.4091	0.7500	0.8409	0.6591	0.2500	0.1364	0.1136	
1 1/2	11	1.882	1.8238	1.7656	5 1/2	1	6 1/2	5 7/8	8 1/4	9 1/4	7 1/4	2 3/4	1 1/2	1 1/4	0.0071
					0.5000	0.0909	0.5909	0.5341	0.7500	0.8409	0.6591	0.2500	0.1364	0.1136	
2	11	2.347	2.2888	2.2306	6 7/8	1	7 7/8	6 1/16	10 1/8	11 1/8	9 1/8	3 1/4	1 1/2	1 1/4	0.0071
					0.6250	0.0909	0.7159	0.5511	0.9204	1.0113	0.8295	0.2954	0.1364	0.1136	
2 1/2	11	2.960	2.9018	2.8436	7 9/16	1 1/2	9 1/16	7 7/16	11 9/16	13 1/16	10 1/16	4	2	1 1/2	0.0085
					0.6875	0.1364	0.8239	0.6761	1.0511	1.1875	0.9147	0.3636	0.1818	0.1134	
3	11	3.460	3.4018	3.3436	8 15/16	1 1/2	10 7/16	9 1/2	12 15/16	14 7/16	11 7/16	4	2 1/2	1 1/2	0.0085
					0.8125	0.1364	0.9489	0.8636	1.1761	1.3125	1.0397	0.3636	0.2273	0.1134	
4	11	4.450	4.3918	4.3336	11	1 1/2	12 1/2	10 7/8	15 1/2	17	14	4 1/2	3	1 1/2	0.0085
					1.000	0.1364	1.1364	0.9886	1.4091	1.5455	1.2727	0.4091	0.2727	0.1134	

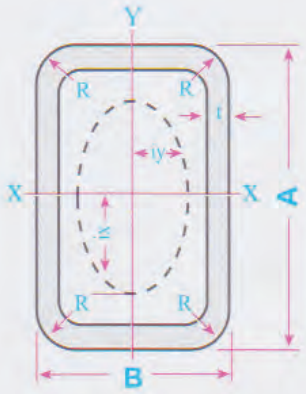
FOR OTHER THREAD, PLEASE CONSULT US

SPS

SQUARE & RECTANGLE



Dimensions mm		Weight kg/m	Area cm2	Moment of Inertia cm4		Section Modulus cm3		Radius of Gyration cm	
A x B	t	w	a	Ix	Iy	zx	zy	ix	iy
40 x 40	2.3	2.62	3.332	7.73	7.73	3.86	3.86	1.52	1.52
	3.2	3.49	4.447	9.72	9.72	4.86	4.86	1.48	1.48
	4.5	4.61	5.868	11.3	11.3	5.64	5.64	1.39	1.39
50 x 50	2.3	3.34	4.252	15.9	15.9	6.34	6.34	1.93	1.93
	3.2	4.50	5.727	20.4	20.4	8.16	8.16	1.89	1.89
	4.5	6.02	7.668	24.9	24.9	10.0	10.0	1.80	1.80
60 x 60	2.3	4.06	5.172	28.3	28.3	9.44	9.44	2.34	2.34
	3.2	5.50	7.007	36.9	36.9	12.3	12.3	2.30	2.30
	4.5	7.43	9.468	46.5	46.5	15.5	15.5	2.22	2.22
70 x 70	2.3	4.78	6.092	46.0	46.0	13.1	13.1	2.75	2.75
	3.2	6.51	8.287	60.6	60.6	17.3	17.3	2.70	2.70
	4.5	8.85	11.27	77.8	77.8	22.2	22.2	2.63	2.63
75 x 75	2.3	5.14	6.552	57.1	57.1	15.2	15.2	2.95	2.95
	3.2	7.01	8.927	75.5	75.5	20.1	20.1	2.91	2.91
	4.5	9.55	12.17	98.6	98.6	26.3	26.3	2.85	2.85
80 x 80	2.3	5.50	7.012	69.9	69.9	17.5	17.5	3.16	3.16
	3.2	7.51	9.567	92.7	92.7	23.2	23.2	3.11	3.11
	4.5	10.3	13.07	122	122	30.4	30.4	3.05	3.05
90 x 90	2.3	6.23	7.932	101	101	22.4	22.4	3.56	3.56
	3.2	8.51	10.85	135	135	29.9	29.9	3.52	3.52
	4.5	11.7	14.87	178	178	39.5	39.5	3.46	3.46
100 x 100	2.3	6.95	8.852	140	140	27.9	27.9	3.97	3.97
	3.2	9.52	12.13	187	187	37.5	37.5	3.93	3.93
	4.5	13.1	16.67	249	249	49.9	49.9	3.87	3.87



Dimensions mm		Weight kg/m	Area cm2	Moment of Inertia cm4		Section Modulus cm3		Radius of Gyration cm	
A x B	t	w	a	Ix	Iy	zx	zy	ix	iy
40 x 20	1.2	1.05	1.345	2.73	0.92	1.36	0.92	1.42	0.83
	1.6	1.38	1.752	3.43	1.151	1.72	1.15	1.40	0.811
40 x 30	1.2	1.24	1.585	3.77	2.41	1.89	1.61	1.54	1.23
	1.6	1.63	2.072	4.61	2.95	2.31	1.97	1.49	1.19
50 x 25	1.6	1.75	2.232	7.02	2.37	2.81	1.90	1.77	1.03
	2.3	2.44	3.102	9.31	3.10	3.72	2.48	1.73	1.00
50 x 30	1.6	1.88	2.392	7.96	3.60	3.18	2.40	1.82	1.23
	2.3	2.62	3.332	10.6	4.76	4.25	3.17	1.79	1.20
60 x 40	1.6	2.38	3.032	15.2	8.16	5.07	4.08	2.24	1.64
	2.3	3.34	4.252	20.7	11.0	6.88	5.50	2.20	1.61
	3.2	4.5	5.727	26.6	14.1	8.87	7.03	2.16	1.57
75 x 50	1.6	3.01	3.832	31.4	16.8	8.38	6.72	2.86	2.09
	2.3	4.24	5.402	43.8	23.2	11.67	9.29	2.85	2.07
	3.2	5.75	7.327	58.5	30.7	15.60	12.30	2.83	2.05
100 x 50	2.3	5.14	6.552	84.8	29.0	17.0	11.6	3.60	2.10
	3.2	7.01	8.927	112	38.0	22.5	15.2	3.55	2.06
125 x 50	2.3	6.05	7.702	148	35.5	23.7	14.1	4.39	2.15
	3.2	8.26	10.53	198	46.7	31.6	18.7	4.33	2.11
	4.0	10.2	12.95	237	55.6	38.0	22.2	4.28	2.07
100 x 75	2.3	6.05	7.702	115.6	74.2	23.1	19.8	3.87	3.10
	3.2	8.26	10.527	156.2	99.8	31.2	26.6	3.85	3.08
	4.0	10.16	12.948	190.2	121.0	38.0	32.3	3.83	3.06
125 x 75	2.3	6.95	8.852	192	87.5	30.6	23.3	4.65	3.14
	3.2	9.53	12.139	257	117	41.1	31.1	4.60	3.10
	4.0	11.73	14.948	311	141	49.7	37.5	4.56	3.07

PRODUCTION SIZE CAPABILITY

SIZE	25	30	40	50	60	75	80	90	100	110	125
20											
25											
30											
40											
45											
50											
60											
75											
80											
90											
100											

METRIC SIZE (mm)

SIZE	2"	2 1/2"	3"	3 1/3"	3 1/2"	4"	5"
2"							
2 1/2"							
3"							
3 1/3"							
3 1/2"							
4"							
5"							

INCH SIZE (in)

Table 2-2. Chemical Composition
(Applicable on and after Jan. 1, 1991)

Designation of grade	C	Si	Mn	P	S
STKR 400	0.25 max.	—	—	0.040 max.	0.040 max.
STKR 490	0.18 max.	0.55 max.	1.51 max.	0.040 max.	0.040 max.

Remarks: When a pipe is made from killed steel and the purchaser requires product analysis, the tolerances on the values given in the above table shall be as specified in Table 1 in JIS G 0321

Mechanical Properties

Tensile Strength, Yield Point or Proof Stress and Elongation The tube shall be tasted in accordance with 8.2 and the resulting tensile strength yield point or proof stress and elongation shall conform to Table 3-1 or Table 3-2.

Table 3-2. Mechanical Properties
(Applicable on and after Jan. 1, 1991)

Designation of grade	Tensile strength N/mm^2	Yield point or proof stress N/mm^2	Elongation %
STKR 400	400 min.	245 min.	23 min.
STKR 490	490 min.	325 min.	23 min.

Remarks
1. When the tube under 8mm in thickness is subjected to tensile test, the minimum value of elongation shall be calculated by sub-tracting 1.5% from the value of elongation given in Table 3-2 for each decrease of 1mm and rounding off the result to a whole number according to JISS Z 8401.
2. When a tensile test piece is to be taken from the welded steel square tube, one shall be taken from a seamless portion.

CARBON STEEL TUBES FOR GENERAL STRUCTURAL PURPOSES JIS G 3444

Table 1. Chemical composition
Unit: %

Symbol of grade	C	Si	Mn	P	S
STK290	-	-	-	0.050 max	0.050 max
STK400	0.25 max	-	-	0.040 max	0.040 max
STK500	0.24 max	0.35 max	0.30 to 1.30	0.040 max	0.040 max
STK490	0.18 max	0.55 max	1.50 max	0.040 max	0.040 max
STK540	0.23 max	0.55 max	1.50 max	0.040 max	0.040 max

Remarks
1. Alloying elements other than those in the above table may added if necessary
2. For the tube of grade STK540 exceeding 12.5 mm in wall thickness, the chemical composition may be agreed upon by the purchaser and manufacturer.
3. When the purchaser requires product analysis for the tube made of killed steel, the tolerances for the values given in the above table shall be as specified in Table 1 (Tolerance on product analysis) in JIS G 0321

Table 2. Mechanical properties

Mechanical properties	Tensile strength	Yield point or proof stress	Elongation %		Bendability (2)		Flattening	Tensile strength in welded zone
			No.11 and No.12 test pieces	No. 5 test piece	Bend angle	Inside radius (D: outside diameter of tube)	Distance between flattening plates (H) (D: outside diameter of tube)	
	N/mm^2	N/mm^2	Longitudinal direction	Transverse direction				N/mm^2
Method of manufacture	Seamless, butt-welding, electric resistance welding and arc welding process				Seamless, butt-welding, electric resistance welding process		Seamless, butt-welding, electric resistance welding process	Arc welding process
Outside diameter	Full range	Full range	Over 40 mm		50 mm or under		Full range	Over 350 mm
STK290	290 min	-	30 min	25 min	90°	6*D*	2/3 *D*	290 min
STK400	400 min	235 min	23 min	18 min	90°	6*D*	2/3 *D*	400 min
STK500	500 min	355 min	15 min	10 min	90°	8*D*	7/8 *D*	500 min
STK490	490 min	315 min	23 min	18 min	90°	6*D*	7/8 *D*	490 min
STK540	540 min	390 min	20 min	16 min	90°	6*D*	7/8 *D*	540 min

Note (2) The bend test, instead of the flattening test, shall be applied to the tube 50 mm under in outside diameter only when specified by the purchaser.

Remarks
1. When the tensile test for the tube under 8 mm in wall thickness is performed using No. 12 or No. 5 test piece, the minimum elongation value shall be determined by reducing 1.5 % per 1 mm decrease in wall thickness from the values in Table 2 and rounding off the value obtained to an integer in accordance with JIS Z 8401. Samples of calculation are given in Informative reference Table 1.
2. The elongation values for the tube 40 mm or under in outside diameter, if particularly required, shall be agreed upon by the purchaser and manufacturer.
3. No. 12 or No. 5 test piece for the tensile test to be sampled from a butt-welded, electric resistance welded or arc welded steel tube shall be taken from a portion without seams.

Attached Table 1. Dimensions and mass of carbon steel tubes for general structural purposes

Outside diameter mm	Thickness mm	Unit mass Kg/m	Informative reference			
			Cross-sectional area cm^2	Geometrical moment of inertia cm^4	Modulus of section cm^3	Radius of gyration of area cm
21.77	2.0	0.972	1.238	0.607	0.560	0.700
27.2	2.0	1.24	1.583	1.26	0.930	0.890
	2.3	1.41	1.799	1.41	1.03	0.880
34.0	2.3	1.80	2.291	2.89	1.70	1.12
42.7	2.3	2.29	2.919	5.97	2.80	1.43
	2.5	2.48	3.157	6.40	3.00	1.42
48.6	2.3	2.63	3.345	8.99	3.70	1.64
	2.5	2.84	3.621	9.65	3.97	1.63
	2.8	3.16	4.029	10.6	4.36	1.62
	3.2	3.58	4.564	11.8	4.86	1.61
60.5	2.3	3.30	4.205	17.8	5.90	2.06
	3.2	4.52	5.760	23.7	7.84	2.03
	4.0	5.57	7.100	28.5	9.41	2.00
76.3	2.8	5.08	6.465	43.7	11.5	2.60
	3.2	5.77	7.349	49.2	12.9	2.59
	4.0	7.13	9.085	59.5	15.6	2.58
89.1	2.8	5.96	7.591	70.7	15.9	3.05
	3.2	6.78	8.636	79.8	17.9	3.04
101.6	3.2	7.76	9.892	120	23.6	3.48
	4.0	9.63	12.26	146	28.8	3.45
	5.0	11.9	15.17	177	34.9	3.42
114.3	3.2	8.77	11.17	172	30.2	3.93
	3.5	9.58	12.18	187	32.7	3.92
	4.5	12.2	15.52	231	41.0	3.89
139.8	3.6	12.1	15.40	357	51.1	4.82
	4.0	13.4	17.07	394	56.3	4.80
	4.5	15.0	19.13	438	62.7	4.79
	6.0	19.8	25.22	566	80.9	4.74
165.2	4.5	17.8	22.72	734	88.9	5.68
	5.0	19.8	25.16	808	97.8	5.67
	6.0	23.6	30.01	952	115	5.63
	7.1	27.7	35.26	110X10	134	5.60
190.7	4.5	20.7	26.32	114X10	120	6.59
	5.3	24.2	30.87	133X10	139	6.56
	6.0	27.3	34.82	149X10	156	6.53
	7.0	31.7	40.40	171X10	179	6.50
	8.2	36.9	47.01	196X10	206	6.46
216.3	4.5	23.5	29.94	168X10	155	7.49
	5.8	30.1	38.36	213X10	197	7.45
	6.0	31.1	39.64	219X10	203	7.44
	7.0	36.1	46.03	252X10	233	7.40
	8.0	41.1	52.35	281X10	263	7.37
	8.2	42.1	53.61	329X10	269	7.36

SPS

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