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G S P L RHINO

**Solid Pipes. Solid Choice.** 

**India's leading Steel Tubes & Pipes Manufactures** 

HR Coils | ERW Black Pipes | GI Pipes | GP Pipes

## **Introducing GSPL: Premier Steel Plant**

With a strong foothold in the Indian steel industry, GSPL is a leading steel plant specializing in the production of steel tubes and pipes. As a significant contributor to the overall steel consumption, we pride ourselves on delivering superior products that meet global standards. Our advanced facilities, cutting-edge technology, and skilled team enable us to provide innovative and sustainable solutions.

Founded in 2002 by Mr. Rajendra Prasad Singla, GSPL has emerged as the premier steel plant in Goa. Our commitment to excellence has positioned us as industry leaders, renowned for our high-quality products. Offering a diverse range of precisely manufactured grades, GSPL ensures world-class quality in all our offerings.

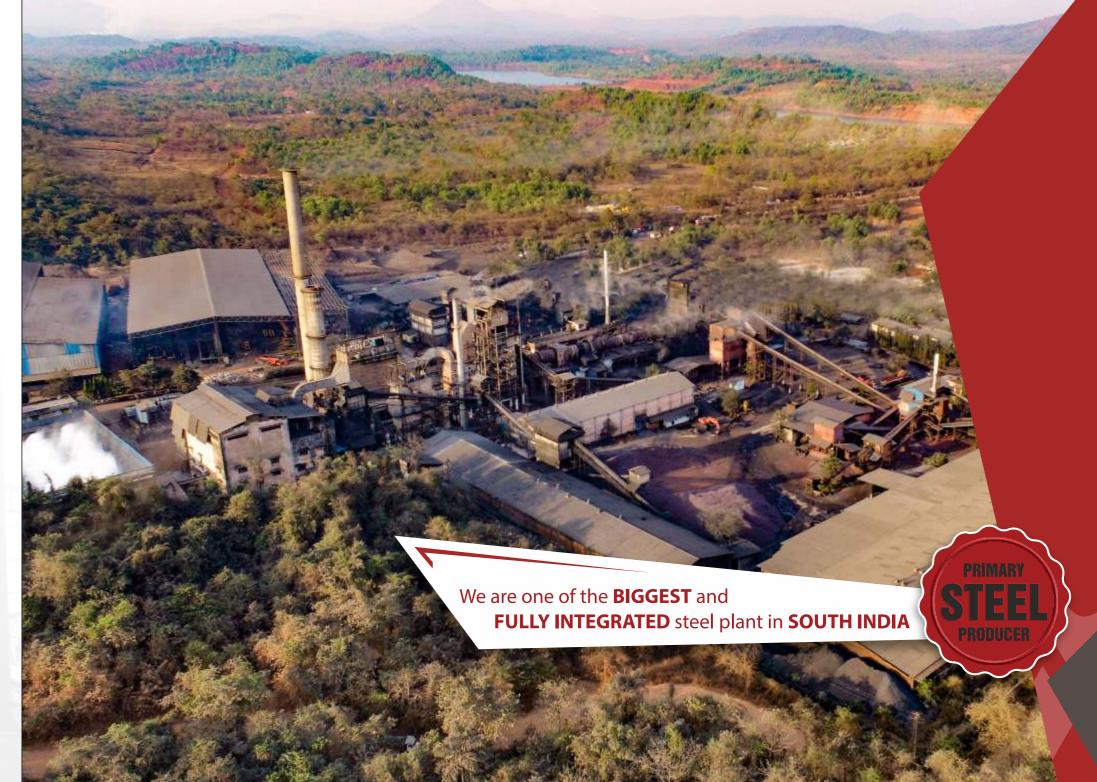
At GSPL, we boast an annual capacity of 1.25 Lakh MT, making us Goa's primary steel producer. Our operations include a 350 TPD DRI kiln with WHRB and CFCB power plants, enabling efficient and sustainable production. In addition to our core plant, we have associated entities within the GSPL Group, namely Arya Steel Rollings, Sunrise Electromelt Pvt Ltd, Shree Balaji Rollings Mills, and Nilanjan Iron Pvt Ltd.

Introducing GSPL RHINO Tubes & Pipes, our dedicated division that offers superior products and services for agriculture, construction, and industry.

With GSPL RHINO, you can rely on reliable and superior solutions for your agricultural, construction, and industrial needs.

## Major Manufacturing Operations

Steel Tubes for Structural use	IS: 1161
Steel Tubes Structural	IS: 3601
Hollow Section for Structural use	IS: 4923
<ul><li>Steel Tubes for Water Air &amp; Gas</li></ul>	IS: 1239
Structural use	IS: 2062
HR Steel Strips	IS: 10748





# 'Primary Steel Producer'

GSPL's vertically integrated production process, which includes mining its own iron ore, producing sponge iron, and manufacturing its final products, sets them apart as a **Primary Steel Producer** with a strong focus on quality and sustainability.



## **ZERO Waste**

At GSPL, we take great pride in our commitment to being a **Zero Waste** producing primary steel manufacturing facility in the State of Goa, India. Our sustainable practices allow us to utilize 100% of our production waste, including slag, fly ash, and waste fuel gas, for their respective reproductions. We have implemented innovative solutions such as using these by-products to manufacture fly ash bricks and generate energy, which not only minimizes waste but also contributes to the local economy. Additionally, we have invested in an exceptional rainwater harvesting facility and water storage system to meet our plant's production water requirements. By adopting such measures, we ensure that every aspect of our operations is geared towards achieving our **zero-waste** manufacturing goal.



## **Applications of Rhino Products**









- Water Supply Systems
- Drainage and Sewer Systems Handrails and Balustrades
- Fencing and Gates
- Canopies and Shelters
- Architectural Details



• Water Distribution Systems

Sewage and Drainage Systems

Plumbing Systems

Gas Distribution

• Structural Support

Irrigation Systems

• Fencing and Handrails







#### **INDUSTRIAL** Applications

- Plumbing and Water DistributionFire Sprinkler SystemsHVAC Systems
- Oil and Gas Transmission
- Structural Applications
- Fencing and Guardrails
- Greenhouses and Agricultural Applications











#### **GENERAL ENGINEERING** Applications

- PlumbingFire Sprinkler Systems
- HVAC Systems ´
- Industrial Piping
- Irrigation Systems
- Structural Support
- Fencing and Railing
- Signage and Lighting Installations







### **ERW Black Steel Tubes**

(15 - 100mm) confirming to IS:1239(Pt-1)

Applications: Water Supply

Oil and Gas

Air and Steam

Irrigation Lines

Tube Wells

**General Engineering** 





### **Square Hollow Sections**

Confirming to IS:4923

Applications:

Industrial Unit

Cabins

Railings

**Vehicles Bodies** 



Confirming to IS:4923

Applications:

Industrial Unit

Cabins

Railings

**Vehicles Bodies** 





### **Structural Steel Tubes**

(15 - 100mm) confirming to IS:1161(Pt-1)
Applications:
Scaffoldings
Column and Trusses
Electric Poles
Railings
General Engineering

### Hot Dipped Galvanised Steel Tubes

Confirming to IS: 3601

Applications:

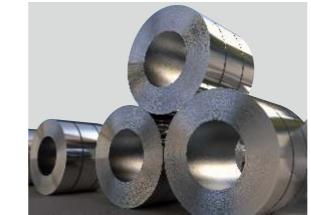
Fencing

Green House

Cabins

Milk Booth





### **HR Coils and Slits**

(150mm - 550mm) Confirming to IS:10748
Applications:
Constructions
Cabins
Cycle and Automobiles
General Engineering



## **ERW Tubes & Pipes**

**GSPL Rhino ERW Tubes and Pipes** are manufactured through a meticulous and precise process that ensures high-quality and durable products. Here are the steps involved in the manufacturing process:

#### Slitting and Uncoiling HR Coils:

We start by slitting HR coils to predetermined widths for each size of pipe. The slitted coil is then uncoiled at the entry of the ERW mill. The ends are sheared and welded one after another, forming a single endless strip.

#### Forming and Welding the Endless Strip:

The endless strip is then shaped into a U-shape and further formed into a cylindrical shape with open edges using a series of forming rolls. This process results in a seamless and continuous pipe without any welding.

#### Heating and Press Welding the Open Edges:

The open edges of the pipe are then heated to the forging temperature through high frequency, low voltage, and high current. Forge rolls press weld the heated edges, creating a strong and durable bond without the use of any filler materials.

#### **Trimming and Normalizing:**

After welding, any excess flash on top and inside is trimmed out using carbide tools. If required, the welded portion and heat-affected zone are normalized, ensuring uniformity in the structure of the pipe.

#### Cooling, Sizing, and Cutting:

The pipes are then cooled down in an air cooling bed and, if necessary, water quenched. Sizing rolls apply a slight reduction to the pipes before they are cut to the required lengths by a flying cut-off disc/saw cutter.

#### Further Processing of Tubes:

GSPL Rhino plain-ended tubes can be further processed according to the customer's requirements, such as galvanizing, threading, black varnishing, and more.

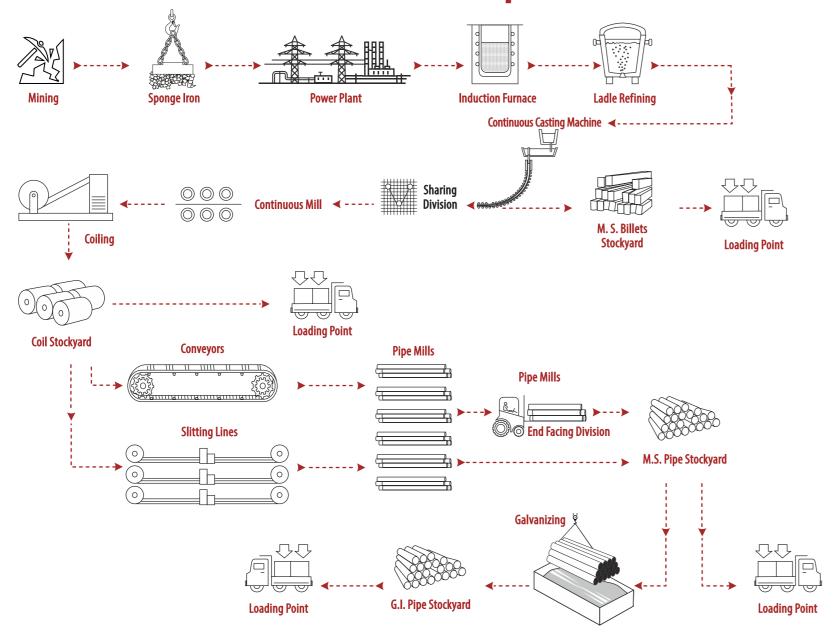
In conclusion, GSPL Rhino ERW Tubes and Pipes are made with precision, care, and attention to detail, resulting in products that meet the highest industry standards. Contact us for all your ERW tube & pipe needs.

#### **Quality Assurance:**

The implementation of quality assurance measures commences at the initial stage of raw material procurement and is sustained throughout the entire manufacturing process, culminating in the packaging of pipes for dispatch. The quality assurance department is supported by a cutting-edge laboratory that facilitates metallurgical and chemical tests, as well as a test house dedicated to assessing physical properties. GSPL's unwavering commitment to quality is demonstrated by its attainment of several prestigious certifications for its exceptional quality systems.



## Manufacturing Process of ERW Tubes and Pipes



## **Product Strength & Advantages**

- GSPL Rhino pipes and tubes consistently provide **superior quality** while remaining competitively priced, offering customers a great value for their money.
- The tubes and pipes we offer bear the ISI mark and are capable of withstanding pressures many times higher than typical pressure requirements, ensuring their **longevity**.
- We use **high-quality**, **low-carbon**, **fully fine-grained**, **control-rolled**, **and continuously-casted steel** for our tubes and pipes, ensuring their strength and durability.
- GSPL Rhino tubes and pipes are **highly resistant to corrosion**, possess high malleability, and are sturdy and durable, providing optimal performance and **long-lasting use**.
- We have our **own steel yards** that enable us to supply our products quickly and easily, ensuring a steady supply for our customers.
- GSPL Rhino tubes and pipes possess mechanical properties ranging from 240 MPA to 340 MPA, and we offer a variety of sizes ranging from 15NB to 80NB, 72X72 I 40X20 I 20X20 and 96X48.
- GSPL Rhino tubes and pipes feature an exemplary surface finish with **no end burrs**, and a **rust-free surface** finish, while remaining straight for optimal performance.



### **GALVANISED & BLACK PIPES FOR WATER, GAS & AIR**

Confirming to IS: 1239 (Part-I) 2004

/TON	METER	e Outside Diameter Wall Thickness NOMINAL WEIGHT		ide Diameter Wall Thickness NOMINAL WEIGHT METERS / TOI		al Bore	Nomi <u>n</u>			
		Kg/Meters					Maximum	Minimum	.B.)	(N
S & S	P.E.	S & S	P.E.	S & S	мм	CLASS	MM	мм	INCH	мм
1046	1056	0.96	0.95	14	2.00	L	21.40	21.00	(1/2")	15
820	826	1.22	1.21	12	2.60	М	21.80	21.00		
690	694	1.45	1.44	10	3.20	Н	21.80	21.00		
719	725	1.39	1.38	13	2.30	L	26.90	26.40	(3/4")	20
637	641	1.57	1.56	12	2.60	М	27.30	26.50		
532	535	1.88	1.87	10	3.20	Н	27.30	26.50		
500	505	2.00	1.98	12	2.60	L	33.80	33.20	(1")	25
411	415	2.43	2.41	10	3.20	М	34.20	33.30		
339	341	2.95	2.93	8	4.00	Н	34.20	33.30		
389	394	2.57	2.54	12	2.60	L	42.50	41.90	(1/1/4")	32
319	322	3.13	3.10	10	3.20	М	42.90	42.00		
262	264	3.82	3.79	8	4.00	Н	42.90	42.00		
306	310	3.27	3.23	11	2.90	L	48.40	47.80	(1/1/2")	40
278	281	3.60	3.56	10	3.20	М	48.80	47.90		
227	229	4.41	4.37	8	4.00	Н	48.80	47.90		
241	245	4.15	4.08	11	2.90	L	60.20	59.60	(2")	50
196	199	5.10	5.03	9	3.60	М	60.80	59.70		
160	161	6.26	6.19	7	4.50	Н	60.80	59.70		
171.5	175	5.83	5.71	10	3.20	L	76.00	75.20	(2/1/2")	65
153	156	6.54	6.42	9	3.60	М	76.60	75.30		
124	126	8.05	7.93	7	4.50	Н	76.60	75.30		
145	149	6.89	6.72	10	3.20	L	88.70	87.90	(3")	80
117	120	8.53	8.36	8	4.00	М	89.50	88.00		
99	101	10.10	9.90	6	4.80	Н	89.50	88.00		
100	102	10.00	9.75	9	3.60	L	113.90	113.00	(4")	100
80	82	12.50	12.20	7	4.50	М	115.00	113.10		
67	69	14.80	14.50	5	5.40	Н	115.00	113.10		
61	63	16.40	15.90	6	4.80	М	140.80	138.50	(5")	125
54	56	18.40	17.90	5	5.40	Н	140.80	138.50		
51	53	19.50	18.90	6	4.80	М	166.50	163.90	(6")	150
47	47	21.90	21.30	5	5.40	Н	166.50	163.90		

#### **TOLERANCE**

#### Thickness:

Light Tubes : + not limited - 8%

Medium &

### Heavy Tubes: + not limited - 10%

Single Tube : + 10% (light series) - 8% Single Tube : +/- 10% (Medium & Heavy series)

For quantities per load of 10 ton Min.: +7.5% (light series) -5.0%

For quantities per load of 10 ton Min.: +/- 7.5% (Medium & Heavy series)

#### Chemical Composition

As per IS: 10748 – 2004

#### Physical Properties

ensile strength : Min. 320 Mpa

Elongation % age : 20% Min. above 25 mm NB

12% Min. upto 25 mm NB

Hydro Test Pressure : 5 Mpa

\* Standard Wire Gauge

### STEEL PIPES FOR STRUCTURAL PURPOSE

### **Confirming to IS: 1161-2014**

Nominal Bore		Outside	Thick	(ness	Outside Diamete	
(N	.B.)	Diameter D	Т		Minimum	Maximum
MM	INCH	ММ	MM	SWG	Kg/Meter	Meter/Ton
15	(1/2")	21.30	2.00	14	0.947	1056
			2.60	12	1.210	826
			3.20	10	1.440	694
20	(3/4")	26.90	2.30	13	1.380	725
			2.60	12	1.560	641
			3.20	10	1.870	535
25	(1")	33.70	2.60	12	1.980	505
			3.20	10	2.410	415
			4.00	8	2.930	341
32	(1/1/4")	42.40	2.60	12	2.540	394
			3.20	10	3.100	322
			4.00	8	3.790	264
40	(1/1/2")	48.30	2.90	11	3.230	310
			3.20	10	3.560	281
			4.00	8	4.370	229
50	(2")	60.30	2.90	11	4.080	245
			3.60	9	5.030	199
			4.50	7	6.190	162
65	(2/1/2")	76.10	3.20	10	5.710	175
			3.60	9	6.420	156
			4.50	7	7.930	126
80	(3")	88.90	3.20	10	6.720	149
			4.00	8	8.360	120
			4.80	6	9.990	101
100	(4")	114.30	3.60	9	9.750	102
			4.50	7	12.200	82
			5.40	5	14.500	70
110	(5")	127.00	4.50	7	13.600	74
			4.80	6	14.500	69
			5.40	5	16.200	62
125	(6")	139.70	4.50	7	15.000	66.5
			4.80	6	15.900	63
			5.40	5	17.900	56

Nominal Bore (N.B.)		Outside Diameter D	Thickness T			i weight Tubes i End
MM	INCH	MM	MM	SWG	Kg/Meter	Meter/Ton
135		152.40	4.50	7	16.400	61
			4.80	6	17.500	57
			5.40	5	19.600	51
150	(6")	165.10	4.50	7	17.800	56
			4.80	5	18.900	53
			5.40	5	21.300	47
150	(6")	168.30	4.50	7	18.200	55
			4.80	6	19.400	51.5
			5.40	5	21.700	46
			6.30	3	25.200	40

Chemical Properties	Weight	
C 0.20% Max	Single tubes (light series)	
Mn 1.3% Max		
P 0.04% Max		
S 0.04% Max	Single tubes	
Physical Properties	(medium & heavy series)	
Grade YS TS % age	Weight Truck Load	
(Min.) (Min.) (Min.) Mpa Mpa Elong.	For lot of 10 Ton Min. Light Series	
YST-210 210 330 20	medium & heavy series	

YST-240 240 410 17 YST-310 310 450 14

Note: For tubes upto size 25mm

NB including Elongation of 12%

shall be permissible.

Light Conco	
medium & heavy series	+/-
Toloronoo	

Outside diameter:

upto and including 48.3mm + 0.4mm - 0.8mm

Over 48.3mm +/- 1%

Thickness

+ Not Limited - 10%

-8%

+/- 10%



15

### **STEEL TUBES CONFIRMING TO DIN 2440**

### **Technical Specification Type - B**

Nominal Size	Size In	OD MM	Wall Thickness	Outside Diameter		Mass PE Tube	Mass Socketed		Confirm 2986
DN	Inch	мм	мм	Min (MM)	Max (MM)	(Kg/Mtr)	Tube (Kg/Mtr)	OD MM Min	Length MM Min
15	(1/2")	21.3	2.65	21.0	21.8	1.22	1.23	26.4	34.0
20	(3/4")	26.9	2.65	26.5	27.3	1.58	1.59	31.8	36.0
25	(1")	33.7	3.25	33.3	34.2	2.44	2.46	39.5	43.0
32	(1/1/4")	42.4	3.25	42.0	42.9	3.14	3.17	48.3	48.0
40	(1/1/2")	48.3	3.25	47.9	48.8	3.61	3.65	54.5	48.0
50	(2")	60.3	3.65	59.7	60.8	5.10	5.17	66.3	56.0
65	(2/1/2")	76.3	3.65	75.3	76.6	6.51	6.63	82.0	65.0
80	(3")	88.9	4.05	88.0	89.5	8.47	8.64	95.0	71.0
100	(4")	114.3	4.50	113.1	115.0	12.10	14.40	120.0	83.0
125	(5")	139.7	4.85	138.5	140.8	16.20	16.70	147.0	92.0
150	(6")	165.1	4.85	163.9	166.5	19.20	19.80	174.0	92.0

#### **Tolerances**

St. 33-2 Confirming to DIN 17100 **Galvanizing in accordance with DIN 2444** 

Material

Wall Thickness 12.5%

Mass

For Single tube +-10% For a ten ton lot +-7.5

Diameters Pipe Size Dn or larger +-1%

+-10%

Galvanizing min. 490g/sq mtr

#### Pipes Confirming to ASTM-53 GR A & B

DN	OD	Wall	Mass of Plain	Test P	ressure
		Thickness	End Pipes	Grade A	Grade B
	мм	мм	(Kg/Mtr)	MPA	MPA
15	21.3	2.27	1.27	4.8	4.8
20	26.7	2.87	1.69	4.8	4.8
25	33.4	3.38	2.5	4.8	4.8
32	42.2	3.56	3.39	8.3	9.0
40	48.3	3.68	4.05	8.3	9.0
50	60.3	319	5.44	15.9	17.2
65	73.0	5.16	8.63	17.2	17.2
80	88.9	5.49	11.29	15.3	17.2
90	101.6	5.74	13.57	14.0	16.3
100	114.3	6.02	16.07	13.1	15.2
125	114.3	6.55	21.77	11.5	13.4
150	168.3	7.11.	28.26	10.5	12.3
200	219.1	8.18	42.55	9.2	10.8

### **Tolerances**

Outside Pipe Size up to & Dn40 +- 0.4mm Thickness +-12.5% (max)

STEEL TUBES FOR MECHANICAL AND GENERAL ENGINEERING PURPOSES

#### TECHNICAL DATA OF BLACK & GALVANIZED PIPES SPECIFICATION

NB (mm)	OUTSIDE DIAMETER (MM)	WALL THICKNESS (MM)	GALVA BLACK PLAI	L WEIGHT NIZED & (TUBES N END
4.5	04.0	1.0	KG/M	MTR.TON
15	21.3	1.8	0.866	1155
		2.0	0.952	1053
		2.6	1.20	833
		3.2	1.43	699
		4.0	1.71	585
20	26.9	1.8	1.11	901
		2.0	1.23	813
		2.3	1.40	714
		2.6	1.56	641
		3.2	1.87	535
		4.0	2.26	442
25	33.7	2.0	1.56	641
		2.3	1.78	562
		2.6	1.99	503
		3.2	2.41	415
		4.0	2.93	341
		4.5	3.24	309
32	42.4	2.3	2.27	441
		2.6	2.55	392
		3.2	3.09	324
		3.6	3.44	291
		4.0	3.79	264
40	48.3	2.3	2.61	383
		2.6	2.93	341
		2.9	3.25	308
		3.2	3.56	281
		3.6	3.97	252
		4.0	4.37	229

NB (mm)	OUTSIDE DIAMETER (MM)	WALL THICKNESS (MM)	GALVAN BLACK	IIZED & TUBES
	(IVIIVI)	(IVIIVI)	PLAIN KG/M	MTR.TON
50	60.3	2.3	3.29	304
		2.6	3.70	270
		2.9	4.11	243
		3.2	4.51	222
		3.6	5.03	199
		4.0	5.55	180
		4.5	6.19	162
65	76.1	2.6	5.24	191
		2.9	5.75	174
		3.2	6.44	155
		3.6	7.11	141
		4.5	7.95	126
		5.0	8.77	114
80	88.9	2.9	6.15	163
		3.2	6.76	148
		4.0	8.38	119
		5.0	10.30	97
90	101.6	3.6	8.70	115
		4.0	9.63	104
		5.0	11.90	84
100	114.3	3.2	8.77	114
		3.6	9.83	102
		4.5	12.2	82
		5.4	14.5	69
		6.3	16.8	60

GRADE	YS (min)	TS (min)	%Elogation ( min.	
	(111111)	(min)	<33.7mm OD	>33.7mm OD
WT 1600	160	310	15	22
WT 210	210	330	12	20
WT 240	240	410	10	15
WT 310	310	450	6	10





### **HOLLOW STEEL SECTIONS FOR STRUCTURAL USE SQUARE HOLLOW SECTION (SHS)**

### Conforming to IS:4923-1997

SHS (DxB)*	THICKNESS	UNIT WEIGHT	
ММ	MM	KG/M	MTR.TON
15 x 15	1.20	0.53	1900
	1.60	0.69	1455
	2.00	0.84	1190
19 x19	2.00	0.99	1010
	2.60	1.20	833
	2.90	1.30	769
25 x 25	2.00	1.36	735
	2.60	1.69	592
	3.20	1.98	505
32 x 32	2.60	2.26	442
	3.20	2.69	372
	4.00	3.19	313
38 x 38	2.00	2.18	459
	2.60	2.75	364
	3.20	3.29	304
	4.00	3.95	253
40 x 40	2.00	2.31	433
	2.60	2.92	342
	3.20	3.49	287
	4.00	4.20	238
49.5 X 49.5	2.60	3.69	271
	3.20	4.45	225
	4.50	5.95	168

SHS (DxB)*	THICKNESS	UNIT WEIGHT	
MM	MM	KG/M	MTR.TON
60 x 60	2.60	4.55	220
	3.20	5.50	182
	3.50	5.96	168
	4.50	7.43	135
72 x 72	3.20	6.71	149
	4.00	8.22	122
	5.00	10.01	100
80 x 80	3.20	7.51	133
	4.00	9.22	108
	5.00	11.27	89
91.5 x 91.5	3.60	9.67	103
	4.50	11.88	84
	5.40	14.01	71
100 X 100	3.60	10.64	94
	4.50	13.08	76
	6.00	16.98	59
113.5 x 113.5	4.00	13.43	74
	5.00	16.53	60
	6.00	19.53	51
125 x 125	4.00	14.87	67
	5.00	18.33	55
	6.00	21.69	46
132 X 132	4.00	15.75	63
	5.00	19.43	51
	6.00	23.01	43

OTHER ALLOWABLE STRESS VALUES (in Mpa)		
Steel Grade	Min. Yield Stress	Min. UTS
Yst 210	210	330
Yst 240	240	410
Yst 310	310	450







### HOLLOW STEEL SECTIONS FOR STRUCTURAL USE RECTANGULAR HOLLOW SECTION (SHS)

### Conforming to IS:4923-1997

SHS (DxB)*	THICKNESS	UNIT WEIGHT	
MM	ММ	KG/M	MTR.TON
40 x 20	200	1.68	595
	2.60	2.10	476
	3.20	2.49	402
40 x 25	1.60	1.57	640
	2.00	1.94	518
	2.50	2.39	419
50 x 25	200	2.15	465
	2.60	2.71	369
	3.20	3.24	309
	4.00	3.88	258
50 x 30	2.00	2.41	418
	2.50	2.98	337
	2.90	3.43	293
50 x 40	2.00	2.88	370
	2.50	3.56	297
	2.90	4.11	260
60 x 40	2.60	3.73	268
	3.20	4.50	222
	4.50	6.02	166
66 x 33	2.60	369	271
	3.20	4.45	225
	4.50	5.95	168
75 x 25	2.60	3.73	268
	3.20	4.50	222
	4.50	6.02	166
80 x 40	2.90	5.03	199
	3.50	5.96	168
	4.50	7.43	135
96 x 48	3.20	6.71	149
	4.00	8.22	122
	5.00	10.01	100
90 x 60	3.20	7.01	143
	4.00	8.59	116
	5.00	10.48	95

SHS (DxB)*	THICKNESS	UNIT	WEIGHT
MM	ММ	KG/M	MTR.TON
100 x 50	3.20	7.01	143
	4.00	8.59	116
	5.40	11.21	89
	6.00	12.27	81
120 x 60	3.60	9.50	105
	4.50	11.67	86
	5.40	13.76	73
122 x 61	3.60	9.67	103
	4.50	11.88	84
	5.40	14.01	71
125 x 75	4.00	12.16	83
	5.00	15.08	67
	6.00	17.95	56
125 x 100	4.00	13.71	73
	5.00	17.02	59
	6.00	20.27	49
145 x 82	3.60	12.16	82
	4.50	14.99	67
	5.40	17.74	56



Spec:	IS:4923:1997
Length:	6.0mtrs. +/-6.0mm customized length ranging from 4 mtrs. to 8mtrs. May be supplied.
Thickness:	For all sizes: +/- 10.0%
Outer Dimensions:	1% with a Min. of 0.5mm
Corner Squareness	s: 90° +/- 2°
Corner Radii:	Max. 3x (thickness of the section)
Weight:	on individual length: +10%, -8% on lots of 10 MT: +/- 7.5%
Straightness:	Min1:600 <sup>th</sup> of any length measured along the center line (mill straightened condition) unless otherwise specifically arranged.
Twist Tolerance:	Max. 2mm:+:0.5mm /1m length, the measured relative vertical shift of any adjacent corner of the measured by keeping one side on flat surface.
End Finish:	Plain Ended- Mechanically sheared, mill-cut finish without further machining.
Surface Finish:	Black without any surface treatment of oiling or varnishing.
Raw Material:	Sulphur content: 0.05% max. Phosphorus content:0.05% max.





Note: Min.% Elongation: 10% for GR. Yst 310, 15% for GR.
Yst 240 & 20% for Yst 210
e: The sizes which are not covered in the Table can also be supplied as per customer requirement (Clause – 8.1)

\* D: Depth B: Breadth