



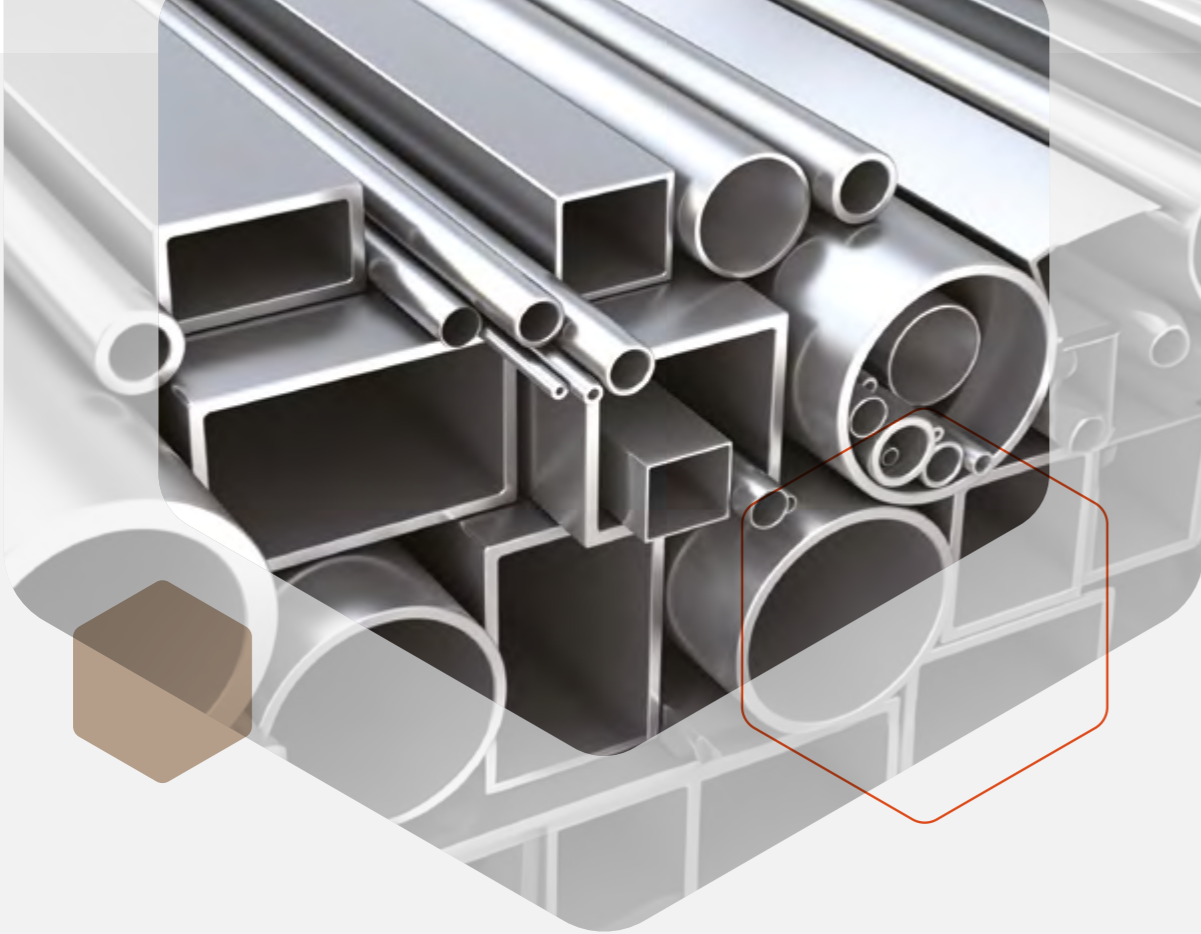
**JTL
INDUSTRIES
LIMITED**
(Formerly known as JTL Infra Limited)
STEEL PIPES

Forging The Future of **Steel** Structure

• we are
innovative
we see
things

different

Amidst the dynamic business landscape, **JTL Industries** shines as a beacon of **Adaptability, Flexibility & Perseverance**, underpinned by an unwavering commitment to excellence. The company's entrenched position in the steel industry stems from its profound **Industry Knowledge**, unparalleled **Manufacturing Capabilities**, ground breaking **Technological Advancements & Robust Distribution Network**.



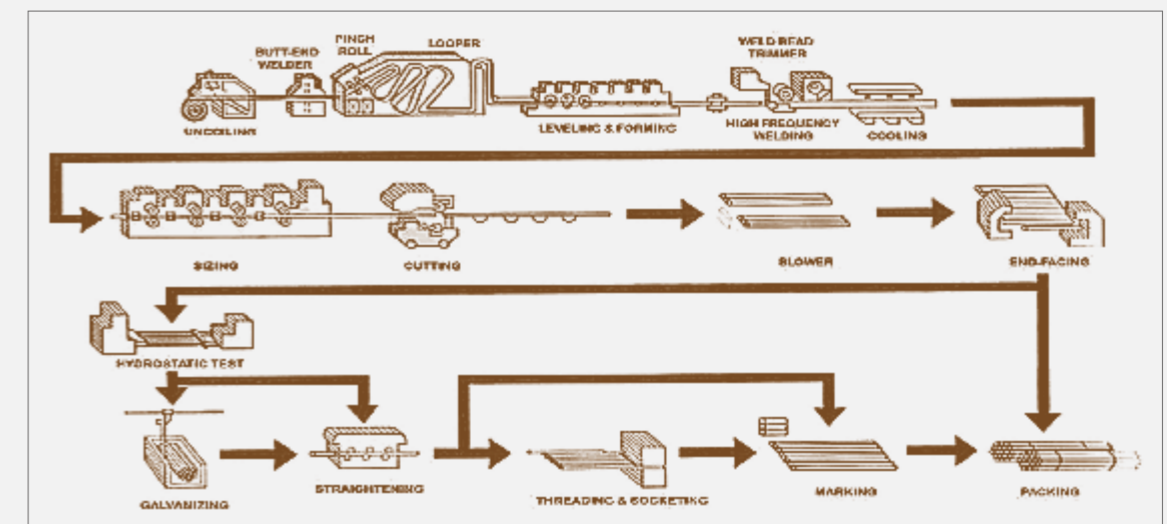
Product Range

DETAILS	Round Pipes (CHS)	Square Hollow Section (SHS)	Rectangular Hollow Section (RHS)
Shape			
Size	15 NB - 300 NB	20 mm x 20 mm - 350 mm x 350 mm	40 mm x 20 mm - 400 mm x 300 mm
Thickness	1.0 mm - 12.0 mm	1.0 mm - 14 mm	1.0 mm - 14 mm
Length	3 m - 12 m	3 m - 12 m	3 m - 12 m
Grade	Fe330, Fe410 & Fe450	YST 210, 240, 310 & 355	YST 210, 240, 310 & 355
Specification	IS1239-2004 (Part-1), IS 3589-2001, IS 1161-2014, IS 3601-2006, IS 2713-1 IS 1239-2004 (Part-1), IS 3589-2001, IS 1161-2014, IS 3601-2006, IS 2713-1, AS1074 & AS1163, ASTM A53, ASTM A57, EN 10255 & EN 10219, EN 39, BS 1387	IS 4923-2017, EN 10219-1: 2006* / ASTM A-500	IS 4923-2017, EN 10219-1: 2006* / ASTM A-500

Excellence in Manufacturing: Setting the Standard for Quality

JTL Industries' ERW Pipes & Tubes adhere to stringent Quality & Manufacturing Standard, including set by **BIS, EN, ASTM & ISO**, ensuring **Reliability & Performance**.

Manufacturing Process



BIS Approvals



Build to Endure

JTL Industries, head quartered at Chandigarh, specializes in manufacturing **ERW Pipes & Tubes**. Over the course of **3 decades**, the company has diversified its product portfolio, now offering a comprehensive **range of 1200+ SKUs in ERW Pipes & Tubes segment-Black, Galvanized & Pre-Galvanized Hollow Sections like Circular, Square & Rectangular along with Solar Mounting Structures, Road Crash Barrier, Tubular Poles & Special Products.**

This broad product range allows JTL Industries to effectively cater to a wide array of domestic as well as international needs, with a capacity of **1 million MTPA**.

JTL Industries has a global marketing presence across **20 countries across 5 continents**, along with a strong national footprint through 800+ dealers. Globally, with increasing demand for steel pipes & tubes, the company is well-positioned to capitalize on this growth with a **Buyer First approach**, coupled with **Customer Satisfaction & Loyalty**.



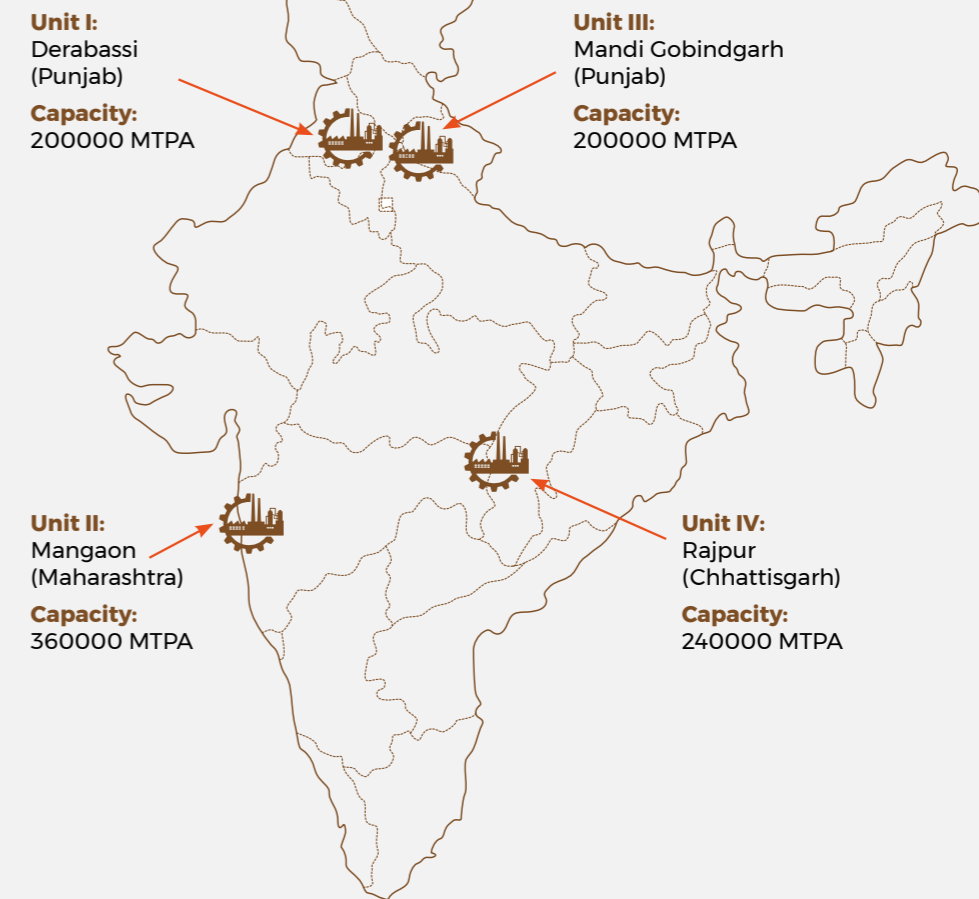
Strategic Plant Placement: JTL's strategy focuses on market penetration as a key to unlocking success





JTL Industries operates from **4 Strategically Located State-of-the-art Manufacturing Facilities** across India. These include **2 in Punjab** (Derabassi & Mandi Gobindgarh), **1 in Maharashtra** (Mangaon) & **1 in Chhattisgarh** (Raipur).

Strategically positioned, these facilities

empower JTL to efficiently serve diverse regions while seamlessly exporting to international markets. These plants strategically nestle close to raw material suppliers, ensuring streamlined operations & optimized logistics. JTL Industries utilizes advantageous competitive benefits to enhance its **Market Penetration & Effective Service Delivery**.

Total Production Capacity 1 Million MTPA



Brand Logo				
Location	Mumbai (Mangaon)	Chhattisgarh (Raipur)	Punjab (Mandi Gobindgarh)	Punjab (Derabassi)
Production Capacity	360000 MT	240000 MT	200000 MT	200000 MT
Size Range	Round - 15 NB - 300 NB Square - 20x20 - 350x350 Rectangular - 40x20 - 400x300 Thickness - 1.0 MM - 14.0 MM	Round - 15 NB - 200 NB Square - 20x20 - 180x180 Rectangular - 40x20 - 240x120 Thickness - 1.2 MM - 6.0 MM	Round - 15 NB - 80 NB Square - 20x20 - 72x72 Rectangular - 40x20 - 100x50 Thickness - 1.2 MM - 4.0 MM	Round - 15 NB - 300 NB Square - 20x20 - 250x250 Rectangular - 40x20 - 300x200 Thickness - 1.2 MM - 14.0 MM
Products	15 NB - 300 NB	Black, GI & Strip / Coil	Black & GI	Black & GI
BIS Specification	IS:1239, IS:3589, IS:1161, IS:3601 IS:4923, AS1074, ASTM, A53, EN:10255, EN: 10219, EN39, BS:1387	IS:1239, IS:1161, IS:3601, IS:4923, IS:10748	IS:1239, IS:1161, IS:3601, IS:4923, IS:10748	IS:1239, IS:3589 IS:1161, IS:3601, IS:4923, IS:10748
Brands	JTL ULTRA	JTL ATLANTIC	JTL APPLE	JTL JAGAN



JTL Industries: Spearheading the Steel Tube Industry with Unique Product Advantages

In today's industrial terrain, selecting the **Right Tubing Solution** is essential for effective operations. **JTL Industries offers Electric Resistance Welded (ERW) pipes** range, renowned for their numerous advantages. With relentless manufacturing prowess, **JTL's structural steel pipe & tubes range exhibit unique characteristics, making them highly suitable for a wide array of industrial applications.**

Strength & Durability:

JTL pipes & tubes boast excellent strength & durability, ideal for transmission of crude oil, natural gas & refined petroleum products over long distances in the Oil & Gas Industry. JTL tubular sections are widely used in Tubular Construction & other Infrastructure Projects.

Cost-Effectiveness:

The cost-effectiveness makes them a preferred choice in various sectors, including construction. The most extensive uses are in Structural Frameworks, Scaffolding & Fluid Transmission.



Welding Efficiency:

The longitudinal weld seam in JTL structural tubes provides a strong & reliable joint, ensuring efficient integration into Industrial Application & facilitating easy incorporation into Buildings Metros, Airports, Warehouses & Bridges etc.

Dimensional Accuracy:

Their uniform dimensions & standardized fittings ensure compatibility with various connectors, valves & fixtures in Automotive, Water Supply, Gas, Oil Industries & other structural Implementation.

Corrosion Resistance:

JTL pipes are coated with anti-corrosive materials like (zinc black paint, powder coating etc.) making them suitable for use in environments where moisture & chemicals are present. Each GI product undergoes a Zinc Coating test to maintain quality & standards.

Modernized Testing & Measuring Proof:

JTL has state of art Testing & Measuring Equipment to provide quality products as per the industry standard. These facilities include **Crashing Test Machine, Drift Test Machine, Bend Test Machine, Hydro Test Machine, Tensile Test Machine, Spectro Test Machine.**

TECHNICAL DATA OF MS BLACK ROUND TUBES

Specification IS = 1239 (PART -1) 2004-D 2439, DIN 2440, DIN 2441
 (Equivalent BS : 1387 : 1985 / En 10255 : 2024 / DIN 2444)

N.B. & Series	Outside Diameter		Wall Thickness		Nominal Weight				
	Min	Max	mm	SWG	Plain End		Screwed & Socketed		
	mm	mm			Kg/m	m/tonne	Kg/m	m/tonne	
15	L	21.0	21.4	2.0	14	0.95	1052	0.96	1046
	M	21.0	21.8	2.6	12	1.21	826	1.22	819
	H	21.0	21.8	3.2	10	1.44	694	1.45	689
20	L	26.4	26.9	2.3	13	1.38	724	1.39	719
	M	26.5	27.3	2.6	12	1.56	641	1.57	637
	H	26.5	27.3	3.2	10	1.87	534	1.88	532
25	L	33.2	33.8	2.6	12	1.98	505	2.00	500
	M	33.3	34.2	3.2	10	2.41	415	2.43	411.5
	H	33.3	34.2	4.0	8	2.93	341	2.95	339
32	L	41.9	42.5	2.6	12	2.54	394	2.57	389
	M	42.0	42.9	3.2	10	3.10	322	3.13	319
	H	42.0	42.9	4.0	8	3.79	264	3.82	262
40	L	47.8	48.4	2.9	11	3.23	310	3.27	306
	M	47.8	48.8	3.2	10	3.56	281	3.60	278
	H	47.9	48.8	4.0	8	4.37	229	4.41	227
50	L	59.6	60.2	2.9	11	4.08	245	4.15	241
	M	59.7	60.8	3.6	9	5.03	199	5.10	196
	H	59.7	60.8	4.5	7	6.19	161	6.26	160
65	L	75.2	76.0	3.2	10	5.71	175	5.83	171.5
	M	75.3	76.6	3.6	9	6.42	156	6.54	153
	H	75.3	76.6	4.5	7	7.93	126	8.05	124
80	L	87.9	88.7	3.2	10	6.72	149	6.89	145
	M	88.0	89.5	4.0	8	8.36	120	8.53	117
	H	88.0	89.5	4.8	6	9.90	101	10.10	96
100	L	113.0	113.9	3.6	9	9.75	102	10.00	100
	M	113.1	115.0	4.5	7	12.20	82	12.50	80
	H	113.1	115.0	5.4	5	14.50	69	14.80	67.5
125	M	138.5	140.8	4.8	6	15.90	63	16.40	61
	H	138.5	140.8	5.4	5	17.90	56	18.40	54
150	M	163.9	166.5	4.8	6	18.90	53	19.50	51
	H	163.9	166.5	5.4	5	21.30	47	21.90	46

Thickness & Mass are applicable for Black & Galvanised Steel Tubes as per clause 8.1.1 of IS : 1239 (Part-1) 2004
This specification conforms to CE Mark conferred by Det Norske Veritas, Netherlands.

TOLERANCE

A - Thickness	Tolerance	B-Weight	Tolerance	Length Tolerance
1. Light Tubes	+ not limited -8%	1. Single Tube (Light Series)	0.02	Unless otherwise
2. Medium & Heavy Tubes	+ not limited -10%	2. Single Tube (Medium & Heavy Series)	±10%	Specified 4 to 7 mtrs.
		3. For quantities per load of 10 tonnes minimum (Light Series)	0.025	Can also be supplied in
		4. For quantities per load of 10 tonnes minimum (Medium & Heavy Series)	±7.5%	Fix Lengths ±5cm.

ERW STEEL TUBE FOR WATER & SEWAGE PURPOSE CONFORMING TO IS : 3589/2001

N. B. size	Outside Diameter	Wall Thickness	Plain end	
			Mass	Meters
mm	mm	mm	Kg./Mtr.	Tonne
150	168.3	2.60	10.60	94
		3.20	13.00	77
		4.00	16.20	62
		4.50	18.20	55
		5.00	20.10	50
175	193.7	6.30	25.20	40
		2.60	12.30	81
		3.60	16.90	59
		4.50	21.00	48
		6.30	29.10	34
200	219.1	2.60	23.80	72
		3.60	33.10	52
		4.50	23.80	42
		6.30	33.10	30
		3.60	23.90	42
250	273	4.00	26.50	38
		5.00	33.90	30
		6.30	41.40	24
		7.10	46.57	21
		8.00	52.30	19
		10.00	64.90	15
		4.00	31.60	32
300	323.9	5.00	35.40	28
		5.60	44.00	23
		7.10	55.50	18
		5.60	48.33	21
		6.40	55.11	18
350	355.6	7.10	61.02	16
		7.90	67.74	15
		8.70	74.42	13
		9.50	81.08	12
		5.60	48.33	21
		6.40	55.11	18
		7.90	67.74	15

TOLERANCE

A	Outside diameter of pipe	±0.75%
B	Ovality	=Max. 1%
C	Thickness	±10%
D	Length Unless other specified, length are in single random length of 4 to 7 meter.	
E	Mass per truck load of 10 tonnes of above	7.50%

PHYSICAL PROPERTIES

Grade	T.S. Mpa MIN	Y.S. Mpa MIN	% age Elongation of MIN
Fe 330	330	195	20
Fe 410	410	235	18
Fe 450	450	275	15

Note: These are preferred OD & thickness. Other sizes not included may be supplied as specified by the customer.

ERW STEEL TUBE FOR WATER WALLS CONFORMING TO IS : 4270/ 2001 PLAIN END CASING PIPES / SCREWED & SOCKETED CASING PIPES G

N. B. size	Outside Diameter	Wall Thickness	Nominal weight		Socket	Socket Length (min)	
			Kg./m	m/onne			
mm	mm	mm	Kg./m	m/onne	mm	mm	
100	114.3	5.00	13.48	74	130	144.3	
		5.40	14.50	69	157	120.6	
125	141.3	5.00	16.80	59			
		5.40	18.10	55	184	127.0	
150	168.3	7.10	23.50	42.5			
		5.00	20.13	50	211.16	152.4	
175	193.7	5.40	21.60	46			
		7.10	28.20	35.5	237	152.4	
200	219.1	5.40	25.10	40			
		6.40	29.60	34	291	177.8	
250	273.1	8.00	36.60	27			
		5.40	28.46	35	346	177.8	
300	323.9	8.00	33.60	30			
		10.00	41.60	24			
350	378.1	7.10	46.57	21			
		8.00	52.30	19			
		10.00	64.90	15			
		323.9	7.10	55.47	18		
		8.00	62.30	16			
		10.00	77.40	13			
		355.6	5.60	48.33	21		
		6.40	55.11	18			
		7.10	61.02	16			
		7.90	67.74	15			
		8.70	74.42	13			
		9.50	81.08	12			

TOLERANCE

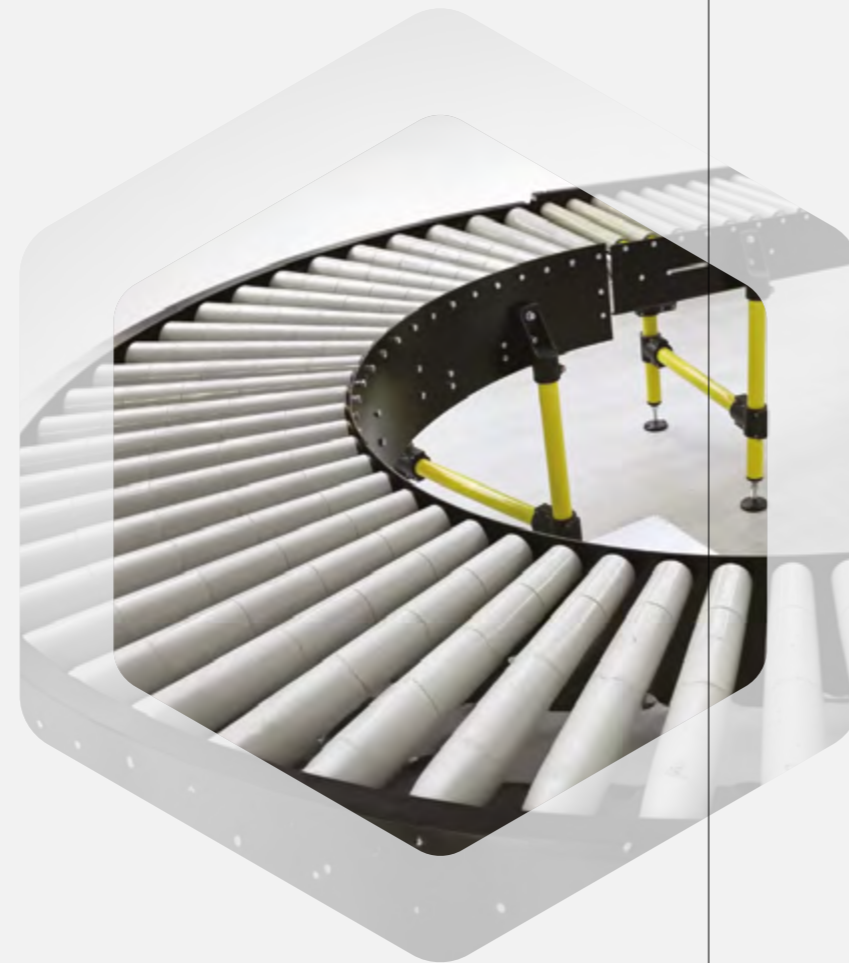
A	Outside diameter of pipe	±1%
B	Thickness Up to 406.4 mm OD	(+)15% (-)12.5%
C	Weight	(+)10%
	- Single tube	(-)8%
D	Length (Unless otherwise specified)	4 to 7 mtrs

PHYSICAL PROPERTIES

Grade	Y.S. (min) Mpa MIN	T.S. (min) Mpa MIN	% age Elongation on 5.65/so=Gl.
Fe 410	235	410	15%
Fe 450	275	450	13%

ERW STEEL TUBES - IDLERS FOR BELT CONVEYORS AS PER IS 9295 - 1983 DIMENSION & NOMINAL MASSES

Outside Diameter	Thickness	Mass	Meters
mm	mm	Kg./Mtr.	Tonne
63.50	3.65	5.39	186
	4.05	5.94	168
	4.50	6.55	153
	4.85	7.01	143
	5.40	4.74	143
76.10	6.30	8.89	129
	3.65	6.52	153
	4.05	7.20	139
	4.50	7.95	126
	4.85	8.52	117
88.90	5.40	9.42	106
	6.30	10.84	92
	4.05	8.74	118
	4.50	9.37	107
	4.85	15.05	99
101.60	5.40	11.12	90
	6.30	12.83	78
	4.05	9.74	103
	4.50	10.78	93
	4.85	11.57	86
114.30	4.50	12.19	78
	4.85	13.09	76
	5.40	14.50	69
	6.30	13.59	53
	4.50	14.61	74
127.00	4.85	16.19	68
	5.40	18.75	62
	6.30	15.00	53
	4.50	14.30	69.9
	4.85	15.33	65.2
139.70	5.40	16.99	58.8
	4.50	15.00	67
	4.85	16.13	62
	5.40	17.89	56
	6.30	20.73	48
152.40	4.50	16.41	61
	4.85	17.65	57
	5.40	19.58	51
	6.30	22.70	44
	4.50	17.15	58
165.10	5.40	18.44	49
	4.85	20.46	42
	6.30	23.72	49
	4.50	17.82	56
	4.85	19.17	52
168.30	27.00	21.00	47
	6.30	24.67	41
	4.50	18.18	55
	4.85	19.55	51
	5.40	21.69	46
193.70	6.30	25.69	40
	5.40	25.08	40
	6.30	29.12	34
	5.40	28.46	34
	6.30	33.06	30



a. Outside Diameter (OD)	± 0.8%
b. Ovality below 168.3mm	0.5mm
c. Ovality including 168.3mm & above	1.0mm
d. Weight kg/mtr - Single tube	±10%
e. Truck Load (10 MT)	±7.5%
f. Thickness	±10%
g. Grade	YST 210 & YST 240 & YST 310

STEEL TUBES FOR STRUCTURAL PURPOSES CONFORMING TO IS:1161-2014

NB	OD	Thk	Mass	Area of Cross-Section	Internal Volume	Surface		Moment of Inertia	Modulus of Section	Radius of Gyration	Square of Radius of Gyration
						External cm ² /m (7)	Internal cm ² /m (8)				
mm (1)	mm (2)	mm (3)	kg/m (4)	cm ² (5)	cm ³ /m (6)	External cm ² /m (7)	Internal cm ² /m (8)	cm ⁴ /m (9)	cm ³ (10)	cm (11)	cm ² (12)
15	21.3	2.0	0.952	1.21	235	669	543	0.57	0.54	0.69	0.47
	21.3	2.6	1.20	1.53	204	669	506	0.68	0.64	0.67	0.45
	21.3	3.2	1.43	1.82	174	669	468	0.77	0.72	0.65	0.42
20	26.9	2.3	1.40	1.78	391	845	701	1.36	1.01	0.87	0.76
	26.9	2.6	1.56	1.98	370	845	682	1.48	1.10	0.86	0.75
	26.9	3.2	1.87	2.38	330	845	644	1.70	1.27	0.85	0.71
25	33.7	2.6	1.99	2.54	638	11159	895	3.09	1.84	1.10	1.22
	33.7	3.2	2.41	3.07	585	1059	858	3.60	2.14	1.08	1.18
	33.7	4.0	2.93	3.73	519	1059	807	4.19	2.49	1.06	1.12
32	42.4	2.6	2.55	3.25	1087	1332	1169	6.46	3.05	1.41	1.99
	42.4	3.2	3.00	3.94	1018	1332	1131	7.62	3.59	1.39	1.93
	42.4	4.0	3.79	4.83	929	1332	1081	8.99	4.24	1.36	1.86
40	48.3	2.9	3.25	4.14	1419	1517	1335	10.70	4.43	1.61	2.59
	48.3	3.2	3.56	4.53	1379	1517	1316	11.59	4.80	1.60	2.56
	48.3	4.0	4.37	5.57	1276	1517	1266	13.77	5.70	1.57	2.47
50	60.3	2.9	4.11	5.23	2333	1894	1712	21.59	7.16	2.03	4.13
	60.3	3.6	5.03	6.41	2215	1894	1668	25.87	8.58	2.01	4.03
	60.3	4.5	6.19	7.89	2067	1894	1612	30.90	10.25	1.98	3.92
65	76.1	2.9	5.24	6.67	3882	2391	2209	44.74	11.76	2.59	6.71
	76.1	3.6	6.44	8.20	3728	2391	2165	54.01	14.19	2.57	6.59
	76.1	4.5	7.95	10.12	3536	2391	2108	65.12	17.11	2.54	6.43
80	88.9	3.2	6.76	8.62	5346	2793	2592	79.21	17.82	3.03	9.19
	88.9	4.0	8.38	10.67	5140	2793	2542	96.34	21.67	3.00	9.03
	88.9	4.8	9.96	12.68	4939	2793	2491	112.49	25.31	2.98	8.87
90	101.6	3.6	8.70	11.08	6999	3192	2966	133.24	26.23	3.47	12.02
	101.6	4.0	9.63	12.26	6881	3192	2941	146.28	28.8	3.45	11.93
	101.6	4.8	11.46	14.60	6648	3192	2890	171.39	33.74	3.43	11.74
100	114.3	3.6	9.83	12.52	9009	3591	3365	191.98	33.59	4.33	15.33
	114.3	4.5	12.19	15.52	8709	3591	3308	234.32	41.00	4.32	15.10
	114.3	5.4	14.5	18.47	8413	3591	3252	274.54	48.04	4.3	14.86
110	127	4.5	13.59	17.32	10936	3990	3707	325.29	51.23	4.33	18.78
	127	4.8	14.47	18.43	10825	3990	3688	344.50	54.25	4.32	18.69
	127	5.4	16.19	20.63	10605	3990	3651	382.04	60.16	4.3	18.52
125	139.7	4.5	15.00	19.11	13417	4389	4106	437.20	62.59	4.78	22.87
	139.7	4.8	15.97	20.34	13295	4389	4087	463.33	66.33	4.77	22.78
	139.7	5.4	17.89	22.78	13050	4389	4050	514.50	73.66	4.75	22.58
135	152.4	4.5	16.41	20.91	16151	4788	4505	572.24	75.10	5.23	27.37
	152.4	4.8	17.47	22.26	16016	4788	4486	606.76	79.63	5.22	27.26
	152.4	5.4	19.58	24.94	15748	4788	4448	674.51	88.52	5.20	27.05
150	165.1	4.5	17.82	22.70	19138	5187	4904	732.57	88.74	5.68	32.27
	165.1	4.8	18.98	24.17	18991	5187	4885	777.13	94.14	5.67	32.15
	165.1	5.4	21.27	27.09	18699	5187	4847	864.70	104.75	5.65	31.92
150	165.1	5.9	23.20	29.50	18465	5189	4818	970.00	113.40	5.63	31.72
	165.1	6.3	24.67	31.43	18265	5187	4791	992.28	120.20	5.62	31.57
	168.3	4.5	18.18	23.16	19931	5287	5005	777.22	92.36	5.79	33.56
150	168.3	4.8	19.35	24.66	19781	5287	4986	824.57	97.99	5.78	33.44
	168.3	5.4	21.69	27.64	19483	5287	4948	917.69	109.05	5.76	33.21
	168.3	6.3	25.17	32.06	19040	5287	4891	1053.42	125.18	5.73	32.85
175	193.7	4.8	22.36	28.49	26619	6085	5784	1271.39	131.27	6.68	44.63
	193.7	5.4	25.08	31.94	26273	6085	5746	1416.97	146.31	6.66	44.36
	193.7	5.9	27.33	34.81	25987	6085	5715	1536.13	158.61	6.64	44.13
175	193.7	6.3	29.12	37.09	25759	6085	5689	1630.05	168.31	6.63	43.95

STEEL TUBES FOR STRUCTURAL PURPOSES CONFORMING TO IS:1161-2014

NB	OD	Thk	Mass	Area of Cross-Section	Internal Volume	Surface		Moment of Inertia	Modulus of Section	Radius of Gyration	Square of Radius of Gyration
						External	Internal				
mm (1)	mm (2)	mm (3)	kg/m (4)	cm ² (5)	cm ³ /m (6)	cm ³ /m (7)	cm ³ /m (8)	cm ² /m (9)	cm ³ (10)	cm (11)	cm ² (12)
200	219.1	4.8	25.37	32.32	34471	6883	6582	1856.03	169.42	7.58	57.43
	219.1	5.6	29.49	37.56	33947	6883	6531	2141.61	195.49	7.55	57.02
	219.1	5.9	31.02	39.52	33751	6883	6513	2247.01	205.11	7.54	56.86
	219.1	6.3	33.06	42.12	33491	6883	6487	2386.14	217.81	7.53	56.65
	219.1	8.0	41.65	53.06	32397	6883	6381	2959.63	270.16	7.47	55.78
	219.1	10.0	51.57	65.69	31134	6883	6255	3598.44	328.47	7.40	54.78
250	273.0	5.9	38.86	49.51	53584	8577	8206	4417.18	323.60	9.45	89.22
	273.0	6.3	41.44	52.79	53256	8577	8181	4695.82	344.02	9.43	88.96
	273.0	8.0	52.28	66.60	51875	8577	8074	5851.71	428.70	9.37	87.86
	273.0	10	64.86	82.62	50273	8577	7948	7154.09	524.11	9.31	86.59
300	323.9	6.3	49.34	62.86	76111	10176	9780	7928.90	489.59	11.23	126.14
	323.9	8.0	62.32	79.39	74458	10176	9673	9910.08	611.92	11.17	124.82
	323.9	10.0	77.41	98.61	72536	10176	9547	12158.34	750.75	11.10	123.29
350	355.6	8.0	68.58	87.36	90579	11172	10669	13201.37	742.48	12.29	151.11
	355.6	10.0	85.23	108.57	88457	11172	10543	16223.50	912.46	12.22	149.42

*254 mm OD is available on demand.

TENSILE PROPERTIES

Grade	Y.S. (min) Mpa	T.S. (min) Mpa	% age Elongation on
YST- 210	210	330	20
YST- 240	240	410	17
YST- 310	310	450	14
YST- 355	355	490	10

WEIGHT	TOLERANCE
Single Tube	±10%
10 ton lot	±7.5%

TOLERANCE	
1	On outside diameter up to & including 48.3= +0.4mm/-0.8mm
2	Over 48.3mm=±/-1%

THICKNESS	TOLERANCE
For all size	±10%
Welded tubes	±10%

TENSILE PROPERTIES

Size		Thickness		Ovality		Weight	
Inches	mm	Inches	mm	Inches	mm	Inches	mm
1½	48.3	0.126	3.2	0.02	0.5	2.392	3.56
1½	48.3	0.157	4.0	0.02	0.5	2.937	4.37

TOLERANCE

Outside Diameter	Thickness	Weight
0.5	±/-10%	±7.5% On Single Tube

STEEL GRADE : S235JRH

MECHANICAL PROPERTIES

YIELD STRENGTH : 235 MPA MIN
 TENSILE STRENGTH : 340 / 520 MPA

CHEMICAL COMPOSITION

CARBON : 0.20% Max
 SILICON : 0.05% Max
 MANGANESE : 0.40% Max
 PHOSPHOROUS : 0.40% Max
 SULPHUR : 0.45% Max
 ALUMINIUM : 0.02% Max

END FINISH : SQUARE CUT
 STRAIGHTNESS : 1MM IN 600MM
 FLATTENING TEST : TWO STAGES
 FLATTEN UPTO 75% OF TUBE DIA FOR WELD
 FLATTEN UPTO 60% OF TUBE DIA FOR MATERIAL
 BEND TEST ALSO AVAILABLE

ZINC COATING : 45 MICRONS MINIMUM OUTSIDE

MARKING : EN 39 JTL TUBES -3.2/4.0
 DELIVERY CONDITION : a) AS ROLLED CONDITION (WITHOUT PROTECTION)
 b) HOT DIP GALVANISED



TECHNICAL DATA OF IS: 3601 2006 TUBES FOR MECHANICAL & GENERAL ENGG. PURPOSE

N. B. size		Approx O.D	Thickness	Weight	Meters per
Mm	In	mm	mm	Kg./Mtr.	Tonne
15	½"	21.3	1.8	0.86	1155
			2.0	0.95	1050
			2.6	1.20	833
			3.2	1.43	699
			4.0	1.71	585
20	¾"	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	1"	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	1.25"	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
			5.0	4.61	217
			5.4	4.93	203
			2.3	2.61	383
40	1.5"	48.3	2.6	2.93	341
			2.9	3.25	308
			3.2	3.56	281
			4.0	4.37	229
			4.9	5.23	191
			5.0	5.34	187
			5.6	5.90	170
			5.9	6.16	162
			2.3	3.29	304
			50	2"	60.3
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			
5.0	6.82	147			
5.6	7.55	133			
6.3	8.39	119			
65	2.5"	76.1			
			3.2	5.75	174
			3.6	6.44	155
			4.0	7.11	141
			4.5	7.95	126
			5.0	8.77	114
80	3"	88.9	5.4	9.42	106
			6.3	10.80	93
			7.1	12.10	83
			2.9	6.15	163
			3.2	6.76	148
			4.0	8.38	119
			5.0	10.30	97
			5.4	11.10	90
			5.6	11.50	87
6.3	12.80	78			

Grade: ERW-WP- 100

TECHNICAL DATA OF PIPES CONFORMING TO ASTM A-53 GR. A&B SCH. 20/40/80

Nominal Bore		Outside Diameter		Schedule	Wall Thickness		Weight of Pipes Plain End		No. of Pcs per Bundle
Mm	Inch	Mm	Inch		Mm	Inch	Kg/Mtr.	Lbs/Ft	
15	½"	21.3	0.84	40	2.77	0.109	1.27	0.85	120
				80	3.73	0.147	1.62	1.09	
20	¾"	26.7	1.05	40	2.87	0.113	1.69	1.13	90
				80	3.91	0.154	2.2	1.48	
25	1"	33.4	1.315	40	3.38	0.133	2.5	1.68	60
				80	4.55	0.179	3.24	2.17	
32	1¼"	42.2	1.66	40	3.56	0.14	3.39	2.27	42
				80	4.85	0.191	4.47	3	
40	1½"	48.3	1.9	40	3.68	0.145	4.05	2.72	36
				80	5.08	0.2	5.41	3.63	
50	2"	60.3	2.375	40	3.91	0.154	5.44	3.66	26
				80	5.54	0.218	7.48	5.03	
65	2½"	73	2.875	40	5.16	0.203	8.63	5.8	18
				80	7.01	0.276	11.41	7.67	
80	3"	88.9	3.5	40	5.49	0.216	11.29	7.58	14
				80	7.62	0.3	15.27	10.26	
90	3½"	101.6	4	40	5.74	0.226	13.57	9.12	12
				80	8.08	0.318	18.63	12.52	
100	4"	114.3	4.5	40	6.02	0.237	16.07	10.8	10
				80	8.56	0.337	22.32	15	
125	5"	141.3	5.56	40	6.55	0.258	21.77	14.63	8
				80	9.14	0.354	25.57	17.5	
150	6"	168.3	6.625	40	7.11	0.28	24.26	16.33	7
				80	10.03	0.393	28.26	19.99	
200	8"	219.1	8.625	20	6.35	0.25	33.31	22.38	5
				30	7.04	0.277	36.31	24.72	
				40	8.18	0.322	42.55	28.58	
250	10"	273	10.748	20	6.35	0.25	41.75	28.06	3
				30	7.8	0.307	51.01	34.27	
				40	9.27	0.365	60.29	40.52	
300	12"	323.8	12.748	20	6.35	0.25	49.71	33.41	3
				30	8.38	0.33	65.18	43.1	
				STD	9.52	0.375	73.78	49.61	
				40	10.31	0.406	79.70	53.57	
350	14"	355.6	14	10	6.35	0.25	54.69	36.75	3
				20	7.92	0.312	67.9	45.65	
				30	9.52	0.375	81.25	54.62	

CHEMICAL PROPERTIES

COMPOSITION, (max%)

	Carbon	Manganese	Phosphorus	Sulphur	Copper	Nickel	Chromium A	Molybdenum A	Vanadium A
Grade A	0.25	0.95	0.05	0.045	0.4	0.4	0.4	0.15	0.08
				80	3.37	0.147	1.62	1.09	20230
Grade B	0.3	1.2	0.05	0.045	0.4	0.4	0.4	0.15	0.08

TOLERANCE

Outside Diameter (OD)	Pipe Size upto & including Dn40 Pipe Size DN 50 or longer	±0.4mm +1-1% Thickness -12.5max Weight ±10%
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MECHANICAL PROPERTIES

	Grade A	Grade B
Yield Strength	205Mpa(min)	240Mpa(min)
Tensile Strength	330Mpa(min)	415Mpa(min)
Elongation%	As per ATSM A-53 table 4.1 4.2	

TECHNICAL DATA OF PIPES CONFORMING TO ASTM A252

Outside Diameter		Diameter Tolerance (mm) (inch)		Standard	Thickness	Weight		
(Inch)	(mm)	(Min)	(Max)			(mm)	(Inch)	(Kg/mtr)
8 3/4"	219.1	216.91 (8.539")	221.29 (8.712")	A252	4.37	0.172	23.13	15.54
					4.78	0.188	25.24	16.96
					5.16	0.203	27.20	18.28
					5.56	0.219	29.29	19.68
					6.35	0.250	33.31	22.38
					7.04	0.277	36.79	24.72
					7.92	0.312	41.27	27.73
					8.18	0.322	42.54	28.58
10 3/4"	273.0	270.27 (10.640")	275.73 (10.855")	A252	4.17	0.164	27.62	18.56
					4.37	0.172	28.94	19.45
					4.55	0.179	30.10	20.22
					4.78	0.188	31.59	21.22
					5.16	0.203	34.06	22.88
					5.56	0.219	36.69	24.65
					5.84	0.230	38.49	25.86
					6.35	0.250	41.75	28.06
					7.09	0.279	46.47	31.22
					7.80	0.307	51.00	34.27
					8.74	0.344	56.94	38.26
					9.27	0.365	60.29	40.51
12 3/4"	323.8	320.56 (12.620")	327.04 (12.875")	A252	4.78	0.188	37.57	25.24
					5.16	0.203	40.52	27.22
					5.56	0.219	43.65	29.33
					6.35	0.250	49.71	33.40
					7.14	0.281	55.74	37.45
					7.92	0.312	61.73	41.48
					8.38	0.330	65.20	43.81
					8.74	0.344	67.89	45.61
					9.52	0.375	73.78	49.61
					10.31	0.406	79.73	53.52
14"	355.6	352.04 (13.859")	359.156 (14.140")	A252	4.78	0.188	41.31	27.76
					5.16	0.203	44.56	29.94
					5.56	0.219	48.20	32.26
					5.84	0.230	50.39	33.86
					6.35	0.250	54.69	36.75
					7.14	0.281	61.33	41.21
					7.92	0.312	67.94	45.65
					8.74	0.344	74.74	50.22
					9.52	0.375	81.25	54.62

Chemical Properties: Phosphorus = 0.050% (Max.)

MECHANICAL PROPERTIES

	GRADE 1	GRADE 2	GRADE 3
Tensile Strength (Mpa)	345	415	455
Yield Strength (Mpa)	205	240	310
% Elongation in (50mm)	30	25	20
*Deduction	1.50	1.25	1.00

TECHNICAL DETAILS

Characteristics	Tolerances & Technical details
Outside Diameter (OD)	For Round Pipes ± 1 % of OD
Thickness	-12.5% of specific wall thickness.
Weight	For each tube 5 % & +15% of standard weight (Calculated Weight)
Length	Pipe shall be furnished in single random length, double random length or in uniform length as per the customer requirement.
Straightness	The finished pipe shall be reasonably straight.
End	Pipe shall be finished with Square cut (plain End) or Bevel End (30° - 0/+5°)
Surface Protection	Black & Galvanized coating as per Customer requirement
Marking (Stencilling)	JTL Ultra, Specification designation, Grade, Outside diameter, Thickness, Process of manufacturing & Heat No. on pipe & any thin specific as per the customer requirement.

ASTM A-795* (BLACK & GALVANISED STEEL PIPES FOR FIRE PROTECTION)

Nominal Bore	Outside Diameter	SCH-10				No. of piece per Bundle	SCH 40/30*				No. of piece per Bundle		
		Wall Thickness		Weight Plain End			Wall Thickness		Weight Plain End				
Mm	Inch	Mm	Inch	Mm	Inch	Mm	Inch	Mm	Inch	Mm	Inch	Mm	Inch
20	3/4	26.7	1.050	2.11	0.083	1.28	0.96	90	2.87	0.113	1.69	1.13	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	90	3.38	0.133	2.50	1.68	60
32	1 1/4	42.2	1.660	2.77	0.109	2.69	1.81	61	3.56	0.14	3.39	2.27	42
40	1 1/2	48.3	1.900	2.77	0.109	3.11	2.09	61	3.68	0.145	4.05	2.72	36
50	2	60.3	2.375	2.77	0.109	3.93	2.64	37	3.91	0.154	5.45	3.66	26
65	2 1/2	73.0	2.875	3.05	0.120	5.26	3.53	29	5.16	0.205	8.68	5.80	18
80	3	88.9	3.500	3.05	0.120	6.46	4.34	24	6.49	0.216	11.29	7.58	14
90	3 1/2	101.6	4.000	3.05	0.120	7.41	4.98	21	5.74	0.226	13.58	9.12	12
100	4	114.3	4.500	3.05	0.120	8.37	5.62	19	6.02	0.237	16.09	10.8	10
125	5	141.3	5.563	3.40	0.134	11.58	7.78	10	6.55	0.258	21.79	14.63	8
150	6	168.3	6.625	3.40	0.134	13.85	9.30	10	7.11	0.280	28.29	18.99	7
200	8	219.1	8.625	4.78	0.188	25.26	16.96	5	7.04*	0.277	36.82	24.72	5

*The specification conforms to UL conferred by underwriters laboratories USA

ASTM A-135 GRADE A&B (BLACK & GALVANISED STEEL PIPE)

Nominal Bore		Outside Diameter		SCH-10				No. of piece per Bundle
				Wall Thickness		Weight Plain End		
Mm	Inch	Mm	Inch	Mm	Inch	Mm	Inch	
20	3/4	26.7	1.050	2.11	0.083	1.28	0.96	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	90
32	1 1/4	42.2	1.66	2.77	0.109	2.69	1.81	61
40	1 1/2	48.3	1.900	2.77	0.109	3.11	2.09	61
50	2	60.3	2.375	2.77	0.109	3.93	2.64	37
65	2 1/2	73.0	2.875	3.05	0.120	5.26	3.53	29
80	3	88.9	3.500	3.05	0.120	6.46	4.34	24
90	3 1/2	101.6	4.000	3.05	0.120	7.41	4.98	21
100	4	114.3	4.500	3.05	0.120	8.37	5.62	19
125	5	141.3	5.563	3.40	0.134	11.58	7.78	14

TOLERANCE

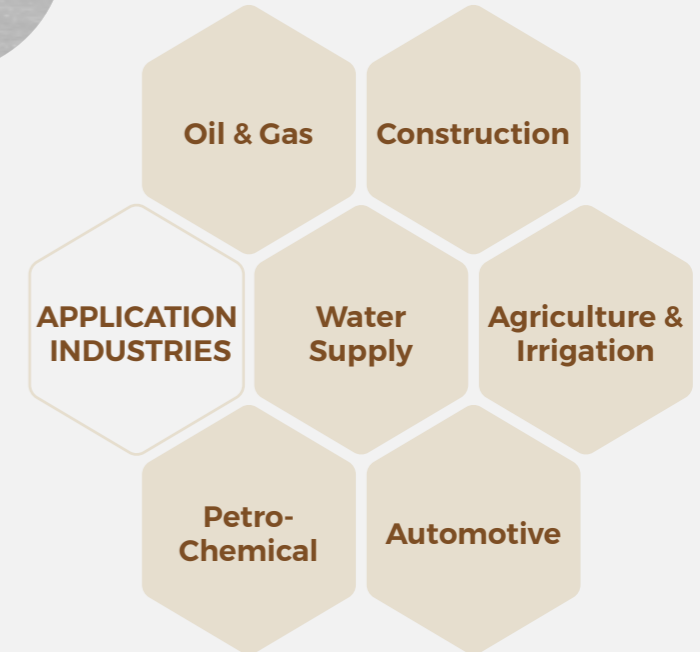
Outside Diameter (OD)	Pipe Size upto & including Dn40 Pipe Size DN 50 or longer	+1-0.4mm +1=1% Thickness -12.5(max) Weight +10%
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MECHANICAL PROPERTIES

	Grade A	Grade B	Carbon	Manganese	Phosphorus	Sulphur
Yield Strength	205Mpa(min)	240Mpa(min)	Grade A	0.25	0.05	0.035
Tensile Strength	330Mpa(min)	415Mpa(min)	Grade B	0.30	1.20	0.35
Elongation %	35	30				

Galvanising

Minimum	0.49 0kg/Sq Mtr
Average	0.550kg/Sq Mtr



Application Industries

Oil & Gas Industry:

ERW pipes from JTL Industries are indispensable in the oil & gas sector for their robustness & durability, enabling the efficient transmission of Crude Oil, Natural Gas & Refined Petroleum Products over long distances.

Construction Sector:

Widely utilized in construction, JTL ERW pipes serve various purposes including Structural Frameworks, Scaffolding & Fluid

Transmission. Their anti-corrosive coating & longitudinal weld seam ensure smooth integration & reliability in construction projects, even in harsh environments.

Water Supply Systems:

JTL pipes are extensively used in Water Supply Systems due to their corrosion resistance, high pressure tolerance & efficient flow. They are the preferred choice for water distribution in Residential, Commercial & Buildings.

Agriculture & Irrigation:

In agriculture, JTL pipes & tubes play a crucial role in Irrigation Systems, enduring harsh conditions with their high strength & resistance to external forces. Their affordability & low maintenance make them ideal for Agricultural & Irrigation Applications.

Petrochemical Industry:

JTL pipes are extensively utilized in the Petrochemical Industry for transmission of Chemicals, Gases & Petroleum Products. Their dimensional accuracy &

compatibility with various fittings make them suitable for complex piping systems in petrochemical plants.

Automotive Sector:

With their high strength & excellent weldability, JTL structural pipes & tubes are ideal for the Automotive Sector. They offer a cost-effective solution without compromising on quality & can be customized for various fabrication processes, enabling the creation of Innovative Vehicle Features.



Reshaping Manufacturing: Unleashing Excellence

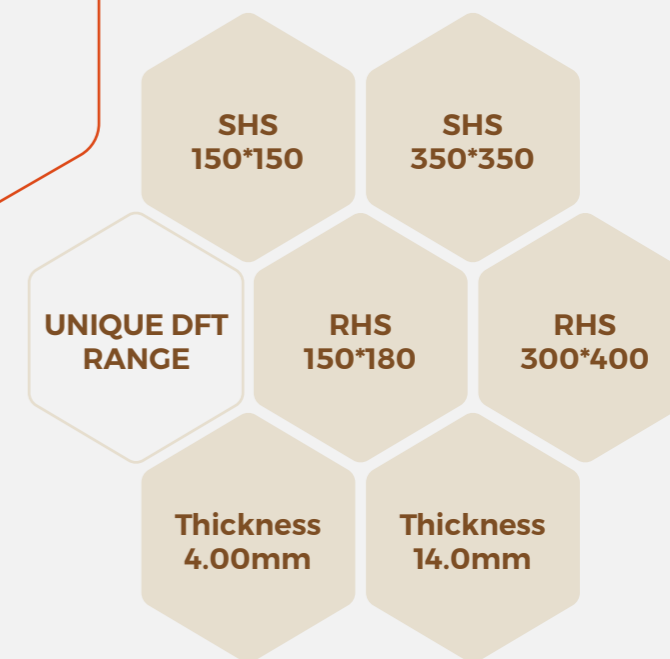
To catch the wind, JTL is on an investment journey to revamp their Maharashtra plant, aiming to transform it into state-of-the-art facility within the western region of India.

JTL Industries, powered by the latest Direct Forming Technology, harnesses high-speed welding to efficiently manufacture square & rectangular section tubes. Direct Forming Technology (DFT) represents a groundbreaking advancement in

tube production, specifically for square & rectangular sections. It eliminates the need for traditional roll changes & labor-intensive processes, seamlessly integrating into existing mill ranges. It has enhanced production speeds, the overall production

time is significantly reduced, enabling on time delivery of premium materials to customers.

JTL empowers manufacturers to efficiently meet the most demanding range of customer requirements through its adaptable product range with a commitment to delivering high-quality products. At the outset, **JTL introduces its most sought-after range, featuring**



Square Hollow Sections (SHS) measuring 150*150 to 350*350; Rectangular Hollow Sections (RHS) measuring 150*180 to 300*400. These sections are offered in thicknesses ranging from 4.0mm to 14.0mm, ensuring suitability for diverse applications & structural needs. JTL's unwavering dedication to excellence guarantees that customers receive superior products tailored to their specific demands.

SQUARE HOLLOW SECTIONS (SHS) SIZE CHART

Size	1.6	1.8	2	2.3	2.6	2.9	3.2	3.6	4	4.5	5	6	7	8	9	10	12
20 x 20																	
25 x 25																	
30 x 30																	
32 x 32																	
35 x 35																	
38 x 38																	
40 x 40																	
50 x 50																	
60 x 60																	
72 x 72																	
80 x 80																	
91 x 91																	
100 x 100																	
113 x 113																	
120 x 120																	
150 x 150																	
175 x 175																	
180 x 180																	
200 x 200																	
220 x 220																	
225 x 225																	
250 x 250																	
275 x 275																	
300 x 300																	
320 x 320																	
330 x 330																	
350 x 350																	

RECTANGULAR HOLLOW SECTION (RHS) SIZE CHART

Size/Thk	1.6	1.8	2	2.3	2.6	2.9	3.2	3.6	4	4.5	5	5.5	6	7	8	9	10	12
40X20																		
50X25																		
66X33																		
60X40																		
75X25																		
80X40																		
96X48																		
100X50																		
122X61																		
145X82																		
150X100																		
172X92																		
200X100																		
200X150																		
220X140																		
240X120																		
250X100																		
250X150																		
280x250																		
300X100																		
300X150																		
300X200																		
300x250																		
350X250																		
350x300																		
400X200																		
400x300																		

SQUARE HOLLOW SECTION (SHS) IS : 4923 : 1997/EN 10219-1 : 2006*/ASTM A-500

Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
20X20X1.6	0.87	1.11	0.61	0.61	0.74	0.74	0.61	0.61	0.75	0.75	0.95	0.84
20X20X1.8	0.97	1.23	0.65	0.65	0.73	0.73	0.65	0.65	0.82	0.82	0.99	0.88
20X20X2.0	1.05	1.34	0.69	0.69	0.72	0.72	0.69	0.69	0.88	0.88	1.01	0.9
20X20X2.2	1.13	1.44	0.73	0.73	0.71	0.71	0.73	0.73	0.93	0.93	1	0.9
20X20X2.6	1.29	1.64	0.78	0.78	0.69	0.69	0.78	0.78	1.02	1.02	0.92	0.85
25X25X1.6	1.12	1.43	1.28	1.28	0.95	0.95	1.03	1.03	1.24	1.24	2.05	1.46
25X25X1.8	1.25	1.59	1.38	1.38	0.93	0.93	1.11	1.11	1.35	1.35	2.2	1.56
25X25X2.0	1.37	1.74	1.48	1.48	0.92	0.92	1.19	1.19	1.47	1.47	2.32	1.64
25X25X2.2	1.48	1.88	1.57	1.57	0.91	0.91	1.26	1.26	1.57	1.57	2.4	1.7
25X25X2.6	1.7	2.16	1.72	1.72	0.89	0.89	1.38	1.38	1.76	1.76	2.47	1.76
25X25X2.9	1.84	2.35	1.81	1.81	0.88	0.88	1.45	1.45	1.88	1.88	2.41	1.75
30X30X1.6	1.37	1.75	2.31	2.31	1.15	1.15	1.54	1.54	1.84	1.84	3.73	2.24
30X30X1.8	1.53	1.95	2.52	2.52	1.14	1.14	1.68	1.68	2.03	2.03	4.06	2.42
30X30X2.0	1.68	2.14	2.72	2.72	1.13	1.13	1.82	1.82	2.21	2.21	4.35	2.59
30X30X2.2	1.82	2.32	2.91	2.91	1.12	1.12	1.94	1.94	2.37	2.37	4.6	2.72
30X30X2.6	2.1	2.68	3.23	3.23	1.1	1.1	2.16	2.16	2.68	2.68	4.96	2.93
30X30X2.9	2.3	2.93	3.44	3.44	1.08	1.08	2.3	2.3	2.89	2.89	5.09	3.02
30X30X3.2	2.49	3.17	3.62	3.62	1.07	1.07	2.42	2.42	3.08	3.08	5.1	3.05
32X32X1.6	1.48	1.88	2.84	2.84	1.23	1.23	1.78	1.78	2.12	2.12	4.59	2.6
32X32X1.8	1.64	2.09	3.11	3.11	1.22	1.22	1.95	1.95	2.33	2.33	5.02	2.82
32X32X2.0	1.81	2.3	3.36	3.36	1.21	1.21	2.1	2.1	2.54	2.54	5.4	3.02
32X32X2.2	1.96	2.5	3.6	3.6	1.2	1.2	2.25	2.25	2.74	2.74	5.74	3.19
32X32X2.6	2.26	2.88	4.02	4.02	1.18	1.18	2.52	2.52	3.11	3.11	6.26	3.47
32X32X2.9	2.48	3.16	4.3	4.3	1.17	1.17	2.69	2.69	3.36	3.36	6.51	3.6
32X32X3.2	2.68	3.42	4.54	4.54	1.15	1.15	2.84	2.84	3.59	3.59	6.62	3.68
38X38X1.6	1.77	2.26	4.92	4.92	1.48	1.48	2.59	2.59	3.06	3.06	7.93	3.82
38X38X2.0	2.18	2.78	5.88	5.88	1.45	1.45	3.1	3.1	3.7	3.7	9.49	4.51
38X38X2.2	2.38	3.03	6.32	6.32	1.44	1.44	3.33	3.33	4	4	10.19	4.81
38X38X2.6	2.76	3.51	7.14	7.14	1.43	1.43	3.76	3.76	4.57	4.57	11.39	5.33
38X38X2.9	3.03	3.86	7.68	7.68	1.41	1.41	4.05	4.05	4.97	4.97	12.1	5.65
38X38X3.2	3.29	4.19	8.18	8.18	1.4	1.4	4.31	4.31	5.34	5.34	12.64	5.89
38X38X3.6	3.63	4.62	8.76	8.76	1.38	1.38	4.62	4.62	5.8	5.8	13.07	6.1
40X40X1.6	1.88	2.39	5.79	5.79	1.56	1.56	2.9	2.9	3.41	3.41	9.32	4.28
40X40X2.0	2.31	2.94	6.94	6.94	1.54	1.54	3.47	3.47	4.13	4.13	11.2	5.07
40X40X2.2	2.51	3.2	7.47	7.47	1.53	1.53	3.74	3.74	4.48	4.48	12.05	5.42
40X40X2.6	2.92	3.72	8.45	8.45	1.51	1.51	4.23	4.23	5.12	5.12	13.54	6.04
40X40X2.9	3.21	4.09	9.11	9.11	1.49	1.49	4.56	4.56	5.58	5.58	14.46	6.42
40X40X3.2	3.49	4.45	9.72	9.72	1.48	1.48	4.86	4.86	6.01	6.01	15.19	6.73
40X40X3.6	3.85	4.91	10.45	10.45	1.46	1.46	5.23	5.23	6.53	6.53	15.86	7.02
40X40X4.0	4.2	5.35	11.07	11.07	1.44	1.44	5.54	5.54	7.01	7.01	16.15	7.19

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Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
50X50X1.6	2.38	3.03	11.71	11.71	1.97	1.97	4.69	4.69	5.46	5.46	18.68	6.95
50X50X1.8	2.66	3.39	12.95	12.95	1.95	1.95	5.18	5.18	6.07	6.07	20.76	7.67
50X50X2.0	2.94	3.74	14.15	14.15	1.95	1.95	5.66	5.66	6.66	6.66	22.75	8.35
50X50X2.2	3.2	4.08	15.3	15.3	1.94	1.94	6.12	6.12	7.24	7.24	24.66	9
50X50X2.6	3.74	4.76	17.47	17.47	1.92	1.92	6.99	6.99	8.34	8.34	28.19	10.18
50X50X2.9	4.12	5.25	18.98	18.98	1.9	1.9	7.6	7.6	9.13	9.13	30.58	10.98
50X50X3.2	4.5	5.73	20.4	20.4	1.89	1.89	8.16	8.16	9.89	9.89	32.72	11.68
50X50X3.6	4.98	6.35	22.15	22.15	1.87	1.87	8.86	8.86	10.84	10.84	35.16	12.49
50X50X4.0	5.46	6.95	23.74	23.74	1.85	1.85	9.5	9.5	11.73	11.73	37.09	13.14
50X50X4.5	6.02	7.67	25.5	25.5	1.82	1.82	10.2	10.2	12.76	12.76	38.72	13.72
50X50X5.0	6.56	8.36	27.04	27.04	1.8	1.8	10.82	10.82	13.7	13.7	39.43	14.04
60X60X2.0	3.56	4.54	25.14	25.14	2.35	2.35	8.38	8.38	9.79	9.79	40.19	12.44
60X60X2.2	3.89	4.96	27.27	27.27	2.34	2.34	9.09	9.09	10.66	10.66	43.74	13.46
60X60X2.6	4.55	5.8	31.33	31.33	2.32	2.32	10.45	10.45	12.34	12.34	50.48	15.37
60X60X2.9	5.03	6.41	34.21	34.21	2.31	2.31	11.41	11.41	13.56	13.56	55.2	16.69
60X60X3.2	5.5	7.01	36.94	36.94	2.3	2.3	12.32	12.32	14.73	14.73	59.61	17.92
60X60X3.6	6.12	7.79	40.37	40.37	2.28	2.28	13.46	13.46	16.22	16.22	64.96	19.39
60X60X4.0	6.71	8.55	43.55	43.55	2.26	2.26	14.52	14.52	17.64	17.64	69.66	20.68
60X60X4.5	7.43	9.47	47.2	47.2	2.23	2.23	15.74	15.74	19.32	19.32	74.54	22.04
60X60X5.0	8.13	10.36	50.49	50.49	2.21	2.21	16.83	16.83	20.88	20.88	78.24	23.09
60X60X6.0	9.44	12.03	56.07	56.07	2.16	2.16	18.69	18.69	23.68	23.68	81.77	24.26
72X72X2.0	4.32	5.5	44.46	44.46	2.84	2.84	12.35	12.35	14.34	14.34	70.6	18.39
72X72X2.2	4.73	6.02	48.35	48.35	2.83	2.83	13.44	13.44	15.64	15.64	77.05	19.96
72X72X2.6	5.53	7.04	55.82	55.82	2.82	2.82	15.51	15.51	18.17	18.17	89.49	22.96
72X72X2.9	6.12	7.8	61.18	61.18	2.8	2.8	17	17	20.01	20.01	98.39	25.08
72X72X3.2	6.7	8.54	66.32	66.32	2.79	2.79	18.43	18.43	21.8	21.8	106.9	27.08
72X72X3.6	7.47	9.52	72.86	72.86	2.77	2.77	20.24	20.24	24.11	24.11	117.58	29.57
72X72X4.0	8.22	10.47	79.03	79.03	2.75	2.75	21.96	21.96	26.32	26.32	127.44	31.84
72X72X4.5	9.13	11.63	86.24	86.24	2.72	2.72	23.96	23.96	28.97	28.97	138.51	34.38
72X72X5.0	10.02	12.76	92.91	92.91	2.7	2.7	25.81	25.81	31.47	31.47	148.08	36.58
72X72X6.0	11.7	14.91	104.71	104.71	2.65	2.65	29.09	29.09	36.08	36.08	162.23	39.9
75X75X2.6	5.78	7.36	63.48	63.48	2.94	2.94	16.93	16.93	19.81	19.81	101.62	25.09
75X75X2.9	6.4	8.15	69.62	69.62	2.92	2.92	18.57	18.57	21.82	21.82	111.84	27.44
75X75X3.2	7.01	8.93	75.53	75.53	2.91	2.91	20.15	20.15	23.79	23.79	121.65	29.66
75X75X3.6	7.81	9.95	83.06	83.06	2.89	2.89	22.15	22.15	26.32	26.32	134.02	32.44
75X75X4.0	8.6	10.95	90.19	90.19	2.87	2.87	24.06	24.06	28.76	28.76	145.52	34.99
75X75X4.5	9.55	12.17	98.55	98.55	2.85	2.85	26.28	26.28	31.68	31.68	158.59	37.87
75X75X5.0	10.49	13.36	106.33	106.33	2.82	2.82	28.36	28.36	34.46	34.46	170.06	40.4
75X75X6.0	12.27	15.63	120.16	120.16	2.77	2.77	32.05	32.05	39.58	39.58	187.76	44.34

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Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
80X80X2.0	4.82	6.14	61.7	61.7	3.17	3.17	15.43	15.43	17.85	17.85	97.58	23
80X80X2.6	6.19	7.88	77.75	77.75	3.14	3.14	19.44	19.44	22.68	22.68	124.17	28.86
80X80X2.9	6.85	8.73	85.36	85.36	3.13	3.13	21.34	21.34	25.02	25.02	136.85	31.6
80X80X3.2	7.51	9.57	92.71	92.71	3.11	3.11	23.18	23.18	27.29	27.29	149.08	34.21
80X80X3.6	8.38	10.67	102.11	102.11	3.09	3.09	25.53	25.53	30.23	30.23	164.62	37.5
80X80X4.0	9.22	11.75	111.04	111.04	3.07	3.07	27.76	27.76	33.07	33.07	179.21	40.56
80X80X4.5	10.26	13.07	121.58	121.58	3.05	3.05	30.4	30.4	36.48	36.48	196.03	44.05
80X80X5.0	11.27	14.36	131.44	131.44	3.03	3.03	32.86	32.86	39.74	39.74	211.11	47.16
80X80X6.0	13.21	16.83	149.18	149.18	2.98	2.98	37.3	37.3	45.79	45.79	235.58	52.23
91X91X2.0	5.51	7.02	91.95	91.95	3.62	3.62	20.21	20.21	23.3	23.3	144.72	30.17
91X91X2.6	7.08	9.02	116.32	116.32	3.59	3.59	25.57	25.57	29.7	29.7	184.89	38.05
91X91X2.9	7.85	10	127.97	127.97	3.58	3.58	28.13	28.13	32.8	32.8	204.24	41.77
91X91X3.6	9.62	12.25	153.8	153.8	3.54	3.54	33.81	33.81	39.78	39.78	247.23	49.92
91X91X4.0	10.61	13.51	167.73	167.73	3.52	3.52	36.87	36.87	43.6	43.6	270.29	54.21
91X91X4.5	11.81	15.05	184.3	184.3	3.5	3.5	40.51	40.51	48.22	48.22	297.43	59.22
91X91X5.0	13	16.56	199.97	199.97	3.47	3.47	43.95	43.95	52.66	52.66	322.54	63.81
100X100X2.0	6.08	7.74	123.01	123.01	3.99	3.99	24.61	24.61	28.3	28.3	192.95	36.76
100X100X2.6	7.82	9.96	156.01	156.01	3.96	3.96	31.21	31.21	36.15	36.15	247.1	46.5
100X100X2.9	8.67	11.05	171.86	171.86	3.94	3.94	34.38	34.38	39.95	39.95	273.33	51.14
100X100X3.2	9.52	12.13	187.28	187.28	3.93	3.93	37.46	37.46	43.69	43.69	298.95	55.63
100X100X3.6	10.64	13.55	207.19	207.19	3.91	3.91	41.44	41.44	48.56	48.56	332.08	61.37
100X100X4.0	11.74	14.95	226.35	226.35	3.89	3.89	45.27	45.27	53.3	53.3	363.96	66.82
100X100X4.5	13.09	16.67	249.29	249.29	3.87	3.87	49.86	49.86	59.04	59.04	401.89	73.25
100X100X5.0	14.41	18.36	271.1	271.1	3.84	3.84	54.22	54.22	64.59	64.59	437.53	79.22
100X100X6.0	16.98	21.63	311.47	311.47	3.79	3.79	62.3	62.3	75.1	75.1	501.21	89.77
100X100X8.0	21.82	27.79	379.77	379.77	3.7	3.7	75.96	75.96	93.83	93.83	593.41	105.11
120X120X2.9	10.5	13.37	302.98	302.98	4.76	4.76	50.5	50.5	58.37	58.37	478.54	75.32
120X120X3.6	12.9	16.43	367.12	367.12	4.73	4.73	61.19	61.19	71.21	71.21	584.63	90.98
120X120X4.0	14.25	18.15	402.28	402.28	4.71	4.71	67.05	67.05	78.33	78.33	643.08	99.48
120X120X4.5	15.91	20.27	444.7	444.7	4.68	4.68	74.12	74.12	87.01	87.01	713.71	109.63
120X120X5.0	17.55	22.36	485.47	485.47	4.66	4.66	80.92	80.92	95.45	95.45	781.43	119.26
120X120X6.0	20.75	26.43	562.16	562.16	4.61	4.61	93.7	93.7	111.61	111.61	907.27	136.89
150X150X2.9	13.23	16.85	603.62	603.62	5.99	5.99	80.49	80.49	92.53	92.53	945.7	120.29
150X150X3.6	16.29	20.75	735.09	735.09	5.95	5.95	98.02	98.02	113.28	113.28	1160.76	146.21
150X150X4.0	18.02	22.95	807.82	807.82	5.93	5.93	107.71	107.71	124.87	124.87	1280.69	160.46
150X150X4.5	20.15	25.67	896.3	896.3	5.91	5.91	119.51	119.51	139.08	139.08	1427.31	177.7
150X150X5.0	22.26	28.36	982.12	982.12	5.88	5.88	130.95	130.95	152.98	152.98	1570.02	194.3
150X150X6.0	26.4	33.63	1145.91	1145.91	5.84	5.84	152.79	152.79	179.88	179.88	1842.55	225.53
150X150X8.0	34.38	43.79	1443	1443	5.74	5.74	192.4	192.4	230.11	230.11	2328.39	279.93
150X150X10.0	41.93	53.42	1701.21	1701.21	5.64	5.64	226.83	226.83	275.67	275.67	2720.95	323.18

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Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
180X180X4.0	21.78	27.75	1421.74	1421.74	7.16	7.16	157.98	157.98	182.21	182.21	2238.61	235.83
180X180X5.0	26.97	34.36	1736.87	1736.87	7.11	7.11	192.99	192.99	224.02	224.02	2757.85	287.33
180X180X6.0	32.05	40.83	2036.52	2036.52	7.06	7.06	226.28	226.28	264.35	264.35	3255.59	335.75
180X180X8.0	41.91	53.39	2590.73	2590.73	6.97	6.97	287.86	287.86	340.68	340.68	4175.84	423.14
180X180X10.0	51.35	65.42	3086.93	3086.93	6.87	6.87	343	343	411.31	411.31	4978.18	497.54
200X200X4.0	24.3	30.95	1968.13	1968.13	7.97	7.97	196.82	196.82	226.44	226.44	3087.18	294.08
200X200X5.0	30.11	38.36	2410.09	2410.09	7.93	7.93	241.01	241.01	278.87	278.87	3811.54	359.35
200X200X6.0	35.82	45.63	2832.75	2832.75	7.88	7.88	283.28	283.28	329.67	329.67	4511.01	421.22
200X200X8.0	46.94	59.79	3621.63	3621.63	7.78	7.78	362.17	362.17	426.39	426.39	5823.37	534.59
200X200X10.0	57.63	73.42	4337.63	4337.63	7.69	7.69	433.77	433.77	516.73	516.73	7000.54	633.74
220X220X5.0	33.25	42.36	3238.02	3238.02	8.74	8.74	294.37	294.37	339.73	339.73	5102.67	439.36
220X220X6.0	39.59	50.43	3813.36	3813.36	8.7	8.7	346.67	346.67	402.18	402.18	6050.76	516.29
220X220X8.0	51.96	66.19	4894.99	4894.99	8.6	8.6	445	445	521.7	521.7	7848.38	658.83
220X220X10.0	63.91	81.42	5887.19	5887.19	8.5	8.5	535.2	535.2	634.16	634.16	9492.81	785.91
220X220X12.0	75.46	96.13	6793.08	6793.08	8.41	8.41	617.56	617.56	739.66	739.66	10958.24	897.07
250X250X5.0	37.96	48.36	4805.01	4805.01	9.97	9.97	384.41	384.41	442.26	442.26	7537.06	574.38
250X250X6.0	45.24	57.63	5672	5672	9.92	9.92	453.76	453.76	524.45	524.45	8956.46	676.88
250X250X8.0	59.5	75.79	7315.65	7315.65	9.82	9.82	585.26	585.26	682.67	682.67	11677.65	869.16
250X250X10.0	73.33	93.42	8841.86	8841.86	9.73	9.73	707.35	707.35	832.79	832.79	14217.2	1044.13
250X250X12.0	86.77	110.53	10254.21	10254.21	9.63	9.63	820.34	820.34	974.94	974.94	16545.51	1201.32
275X275X5.0	41.89	53.36	6443.2	6443.2	10.99	10.99	468.6	468.6	538.02	538.02	10073.49	700.64
275X275X6.0	49.95	63.63	7617.53	7617.53	10.94	10.94	554.01	554.01	638.71	638.71	11986.16	827.2
275X275X8.0	65.78	83.79	9855.94	9855.94	10.85	10.85	716.8	716.8	833.31	833.31	15676.96	1066.43
275X275X10.0	81.18	103.42	11950.66	11950.66	10.75	10.75	869.14	869.14	1018.95	1018.95	19161.08	1286.77
275X275X12.0	96.19	122.53	13905.64	13905.64	10.65	10.65	1011.32	1011.32	1195.75	1195.75	22405.82	1487.8
280X280X6.0	50.89	64.83	8053.51	8053.51	11.15	11.15	575.26	575.26	662.92	662.92	12663.86	859.07
280X280X8.0	67.03	85.39	10425.86	10425.86	11.05	11.05	744.71	744.71	865.24	865.24	16572.19	1108.28
280X280X10.0	82.75	105.42	12648.95	12648.95	10.95	10.95	903.5	903.5	1058.43	1058.43	20268.69	1338.3
280X280X12.0	98.07	124.93	14726.82	14726.82	10.86	10.86	1051.92	1051.92	1242.62	1242.62	23720.04	1548.69
300X300X6.0	54.66	69.63	9963.67	9963.67	11.96	11.96	664.25	664.25	764.23	764.23	15628.84	992.52
300X300X8.0	72.06	91.79	12925.07	12925.07	11.87	11.87	861.68	861.68	998.95	998.95	20491.03	1283.68
300X300X10.0	89.03	113.42	15713.9	15713.9	11.77	11.77	1047.6	1047.6	1223.86	1223.86	25120.26	1554.4
300X300X12.0	105.61	134.53	18334.49	18334.49	11.67	11.67	1222.3	1222.3	1439.07	1439.07	29480.79	1804.25
320X320X 6.0	58.4	74.4	12158.7	12158.7	12.78	12.78	760	760	873	873	18789	1140
320X320X 8.0	77.1	98.2	15805.4	15805.4	12.69	12.69	988	988	1142	1142	24663	1482
320X320X10	95.3	121.4	19258.4	19258.4	12.59	12.59	1204	1204	1401	1401	30341	1806
320X320X12	113.1	144.1	22523.2	22523.2	12.5	12.5	1408	1408	1650	1650	35822	2113
350x350x6.0	64.10	81.60	19447.00	12396.00	15.40	12.30	972.00	826.00	1142.00</			

RECTANGULAR HOLLOW SECTION (RHS) IS : 4923 : 1997/EN 10219-1 : 2006*/ASTM A-500

Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
40X20X1.6	1.37	1.75	3.43	1.15	1.4	0.81	1.72	1.15	2.18	1.34	2.83	1.92
40X20X1.8	1.53	1.95	3.75	1.25	1.39	0.8	1.88	1.25	2.4	1.47	3.06	2.07
40X20X2.0	1.68	2.14	4.05	1.34	1.38	0.79	2.03	1.34	2.61	1.6	3.25	2.19
40X20X2.5	2.03	2.59	4.69	1.54	1.35	0.77	2.35	1.54	3.09	1.88	3.55	2.4
50X25X1.6	1.75	2.23	7.02	2.37	1.77	1.03	2.81	1.9	3.53	2.17	5.83	3.21
50X25X2.0	2.15	2.74	8.38	2.81	1.75	1.01	3.36	2.25	4.26	2.62	6.9	3.76
50X25X2.5	2.62	3.34	9.89	3.28	1.72	0.99	3.96	2.63	5.11	3.12	7.93	4.29
50X25X2.9	2.98	3.8	10.93	3.6	1.7	0.97	4.38	2.88	5.72	3.48	8.48	4.58
50X25X3.2	3.24	4.13	11.63	3.8	1.68	0.96	4.66	3.04	6.14	3.73	8.72	4.72
50X30X1.6	1.88	2.39	7.96	3.6	1.82	1.23	3.19	2.4	3.91	2.75	8.07	3.96
50X30X2.0	2.31	2.94	9.54	4.29	1.8	1.21	3.82	2.86	4.74	3.33	9.65	4.67
50X30X2.5	2.82	3.59	11.3	5.05	1.77	1.19	4.52	3.37	5.7	3.98	11.28	5.4
50X30X2.9	3.21	4.09	12.54	5.58	1.75	1.17	5.02	3.72	6.4	4.47	12.27	5.85
50X30X3.2	3.49	4.45	13.38	5.93	1.73	1.15	5.36	3.96	6.89	4.8	12.81	6.11
60X40X1.6	2.38	3.03	15.22	8.16	2.24	1.64	5.08	4.08	6.12	4.64	17.1	6.63
60X40X2.0	2.94	3.74	18.41	9.83	2.22	1.62	6.14	4.92	7.47	5.65	20.77	7.96
60X40X2.5	3.6	4.59	22.07	11.74	2.19	1.6	7.36	5.87	9.06	6.84	24.89	9.41
60X40X2.9	4.12	5.25	24.74	13.11	2.17	1.58	8.25	6.56	10.25	7.73	27.76	10.41
60X40X3.2	4.5	5.73	26.61	14.07	2.15	1.57	8.87	7.04	11.09	8.36	29.63	11.05
60X40X3.6	4.98	6.35	28.9	15.23	2.13	1.55	9.64	7.62	12.16	9.15	31.72	11.79
66X33X1.6	2.36	3	16.85	5.74	2.37	1.38	5.11	3.48	6.34	3.92	14.01	5.94
66X33X2.0	2.9	3.7	20.37	6.9	2.35	1.37	6.18	4.19	7.73	4.77	16.94	7.09
66X33X2.5	3.56	4.54	24.4	8.19	2.32	1.34	7.4	4.97	9.37	5.75	20.14	8.33
66X33X2.9	4.07	5.19	27.33	9.12	2.29	1.33	8.29	5.53	10.59	6.49	22.31	9.17
66X33X3.2	4.44	5.66	29.37	9.75	2.28	1.31	8.9	5.91	11.46	7.01	23.67	9.7
75X25X1.6	2.38	3.03	19.74	3.47	2.55	1.07	5.27	2.78	6.81	3.11	9.94	4.97
75X25X2.0	2.94	3.74	23.84	4.14	2.52	1.05	6.36	3.32	8.31	3.77	11.88	5.88
75X25X2.5	3.6	4.59	28.52	4.87	2.49	1.03	7.61	3.9	10.06	4.53	13.91	6.82
75X25X2.9	4.12	5.25	31.91	5.38	2.47	1.01	8.51	4.31	11.37	5.08	15.17	7.42
75X25X3.2	4.5	5.73	34.26	5.72	2.45	1	9.14	4.58	12.3	5.47	15.9	7.78
80X40X1.6	2.88	3.67	30.71	10.52	2.89	1.69	7.68	5.26	9.47	5.87	25.48	8.99
80X40X1.8	3.23	4.11	34.08	11.64	2.88	1.68	8.52	5.82	10.55	6.53	28.33	9.94
80X40X2.0	3.56	4.54	37.36	12.72	2.87	1.67	9.34	6.36	11.61	7.17	31.08	10.84
80X40X2.5	4.39	5.59	45.11	15.26	2.84	1.65	11.28	7.63	14.15	8.72	37.49	12.92
80X40X2.9	5.03	6.41	50.87	17.11	2.82	1.63	12.72	8.56	16.07	9.88	42.09	14.4
80X40X3.2	5.5	7.01	54.94	18.41	2.8	1.62	13.74	9.21	17.46	10.72	45.21	15.39
80X40X3.6	6.12	7.79	60.05	20.02	2.78	1.6	15.02	10.01	19.23	11.77	48.88	16.56
80X40X4.0	6.71	8.55	64.79	21.49	2.75	1.59	16.2	10.75	20.91	12.77	51.97	17.55
80X40X5.0	8.13	10.36	75.11	24.59	2.69	1.54	18.78	12.3	24.74	15.02	56.85	19.22

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Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
96X48X1.6	3.49	4.44	54.03	18.57	3.49	2.05	11.26	7.74	13.82	8.58	44.69	13.26
96X48X2.0	4.32	5.5	66.04	22.59	3.47	2.03	13.76	9.42	17	10.52	54.83	16.09
96X48X2.5	5.33	6.79	80.23	27.29	3.44	2	16.72	11.38	20.81	12.85	66.75	19.37
96X48X2.9	6.12	7.8	90.94	30.79	3.41	1.99	18.95	12.83	23.73	14.63	75.62	21.77
96X48X3.6	7.47	9.52	108.35	36.4	3.37	1.96	22.58	15.17	28.58	17.56	89.5	25.47
96X48X4.0	8.22	10.47	117.54	39.32	3.35	1.94	24.49	16.39	31.21	19.14	96.41	27.3
96X48X5.0	10.02	12.76	138.23	45.74	3.29	1.89	28.8	19.06	37.3	22.77	110.04	30.95
100X50X2.0	4.51	5.74	74.98	25.67	3.61	2.11	15	10.27	18.5	11.46	62.21	17.57
100X50X2.5	5.57	7.09	91.2	31.06	3.59	2.09	18.24	12.43	22.67	14.01	75.87	21.18
100X50X2.9	6.4	8.15	103.48	35.09	3.56	2.07	20.7	14.04	25.88	15.96	86.08	23.84
100X50X3.6	7.81	9.95	123.51	41.56	3.52	2.04	24.71	16.63	31.21	19.19	102.23	27.99
100X50X4.0	8.6	10.95	134.14	44.95	3.5	2.03	26.83	17.98	34.1	20.93	110.37	30.06
100X50X5.0	10.49	13.36	158.19	52.45	3.44	1.98	31.64	20.98	40.84	24.95	126.87	34.28
122X61X2.0	5.45	6.94	131.92	45.33	4.36	2.56	21.99	15.11	27	16.75	109.1	25.89
122X61X2.5	6.74	8.59	161.23	55.15	4.33	2.53	26.88	18.39	33.2	20.56	133.86	31.43
122X61X2.9	7.76	9.89	183.65	62.6	4.31	2.52	30.61	20.87	38	23.49	152.74	35.6
122X61X3.6	9.51	12.11	220.75	74.77	4.27	2.48	36.8	24.93	46.07	28.4	183.57	42.29
122X61X4.0	10.48	13.35	240.74	81.25	4.25	2.47	40.13	27.09	50.49	31.08	199.79	45.76
122X61X5.0	12.84	16.36	286.97	95.99	4.19	2.42	47.83	32	60.95	37.38	235.39	53.33
150X100X2.9	10.95	13.95	446.72	240.24	5.66	4.15	59.57	48.05	71.2	54.03	105.19	26.79
150X100X3.6	13.46	17.15	542.16	290.86	5.62	4.12	72.29	58.18	86.93	65.91	133.18	33.55
150X100X4.0	14.88	18.95	594.6	318.57	5.6	4.1	79.28	63.72	95.67	72.5	146.42	36.72
150X100X5.0	18.34	23.36	719.2	384.02	5.55	4.05	95.9	76.81	116.73	88.34	159.12	39.73
150X100X6.0	21.69	27.63	834.69	444.19	5.5	4.01	111.3	88.84	136.68	103.3	175.17	43.51
150X100X8.0	28.1	35.79	1039.29	549.48	5.39	3.92	138.58	109.9	173.31	130.63	190.15	47.02
200X100X2.9	13.23	16.85	895.91	308.61	7.29	4.28	89.6	61.73	109.69	68.11	207.28	51.02
200X100X3.6	16.29	20.75	1091.47	374.54	7.25	4.25	109.15	74.91	134.3	83.26	266.35	50.56
200X100X4.0	18.02	22.95	1199.71	410.78	7.23	4.23	119.98	82.16	148.04	91.7	305.38	57.58
200X100X5.0	22.26	28.36	1459.25	496.94	7.17	4.19	145.93	99.39	181.37	112.09	333.85	62.65
200X100X6.0	26.4	33.63	1703.31	576.91	7.12	4.14	170.34	115.39	213.27	131.5	370.65	69.13
200X100X8.0	34.38	43.79	2146.21	719.19	7	4.05	214.63	143.84	272.79	167.43	487.77	89.38
240X120X4.0	21.78	27.75	2110.72	725.35	8.72	5.11	175.9	120.9	216.01	134.01	558.76	101.46
240X120X5.0	26.97	34.36	2579.67	882.47	8.66	5.07	214.98	147.08	265.58	164.45	497.4	78.47
240X120X6.0	32.05	40.83	3025.91	1030.45	8.61	5.02	252.16	171.75	313.41	193.69	545.15	85.6
240X120X8.0	41.91	53.39	3851.84	1299.95	8.49	4.93	320.99	216.66	403.89	248.66	3196.64	366.11
250X150X4.0	24.3	30.95	2696.87	1234.24	9.33	6.31	215.75	164.57	259.61	183.27	2696.49	274.12
250X150X5.0	30.11	38.36	3304.18	1507.95	9.28	6.27	264.34	201.06	319.76	225.48	3322.96	334.43
250X150X6.0	35.82	45.63	3885.56	1768.35	9.23	6.23	310.85	235.78	378.05	266.28	3924.87	391.36
250X150X8.0	46.94	59.79	4972.24	2250.41	9.12	6.14	397.78	300.06	489.07	343.71	5043.97	494.9
250X150X10.0	57.63	73.42	5960.2	2682.88	9.01	6.04	476.82	357.72	592.79	415.67	6032.07	584.33

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Dimension	Weight	Area	Moment of Inertia		Radius of Gyration		Elastic Modulus		Plastic Modulus		Torsional Constants	
			I _{xx}	I _{yy}	R _{xx}	R _{yy}	Z _{xx}	Z _{yy}	S _{xx}	S _{yy}	J	C
mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³
250X200X5.0	34.00	43.40	4055.00	2850.00	9.70	8.10	324.00	285.00	381.00	326.00	5257.00	457.00
250X200X6.0	40.50	51.60	4779.00	3346.00	9.60	8.00	382.00	335.00	451.00	386.00	6237.00	538.00
250X200X8.0	53.20	67.80	6144.00	4268.00	9.50	7.90	492.00	427.00	586.00	499.00	8124.00	692.00
250X200X10.0	65.50	83.40	7401.00	5099.00	9.40	7.80	592.00	510.00	713.00	605.00	9914.00	834.00
250X200X12.0	77.30	98.50	8553.00	5841.00	9.30	7.70	684.00	584.00	832.00	704.00	11606.00	965.00
280X100X4.0	23.04	29.35	2785.31	558.32	9.74	4.36	198.96	111.67	252.63	122.42	1543.27	199.54
280X100X5.0	28.54	36.36	3406.60	677.60	9.68	4.32	243.33	135.52	310.80	150.09	1886.82	241.68
280X100X6.0	33.94	43.23	3998.76	789.27	9.62	4.27	285.63	157.86	367.00	176.62	2209.32	280.67
280X100X8.0	44.42	56.59	5097.47	990.72	9.49	4.18	364.11	198.15	473.56	226.31	2783.20	349.01
300X150X4.0	27.44	34.95	4196.67	1447.46	10.96	6.44	279.78	193.00	341.98	212.47	3455.16	330.97
300X150X5.0	34.04	43.36	5153.13	1770.87	10.90	6.39	343.55	236.12	421.90	261.73	4261.58	404.51
300X150X6.0	40.53	51.63	6073.51	2079.57	10.85	6.35	404.91	277.28	499.63	309.48	5039.24	474.31
300X150X8.0	53.22	67.79	7807.95	2654.12	10.73	6.26	520.53	353.89	648.55	400.51	6496.60	602.47
300X150X10.0	65.48	83.42	9403.90	3173.71	10.62	6.17	626.93	423.17	788.86	485.67	7804.31	715.07
300X200X5.0	37.96	48.36	6241.05	3360.92	11.36	8.34	416.07	336.10	495.65	376.37	6919.17	549.43
300X200X6.0	45.24	57.63	7370.23	3962.19	11.31	8.29	491.35	396.22	587.83	446.07	8214.59	646.97
300X200X8.0	59.50	75.79	9513.66	5097.04	11.20	8.20	634.25	509.71	765.35	579.99	10688.71	829.36
300X200X10.0	73.33	93.42	11507.24	6144.30	11.10	8.11	767.15	614.43	933.86	706.73	12983.61	994.50
300X200X12.0	86.77	110.53	13354.97	7107.11	10.99	8.02	890.34	710.72	1093.47	826.41	15071.27	1141.95
350X200X6.0	50.00	63.60	10682.00	4337.00	13.00	8.30	610.00	434.00	739.00	497.00	10065.00	764.00
350X200X8.0	65.80	83.80	13831.00	5499.00	12.80	8.10	790.00	550.00	965.00	644.00	13142.00	987.00
350X200X10.0	81.20	103.40	16781.00	6524.00	12.70	7.90	959.00	652.00	1180.00	782.00	16078.00	1195.00
350X200X12.0	96.20	122.50	19538.00	7417.00	12.60	7.80	1116.00	742.00	1385.00	911.00	18874.00	1389.00
350X250X5.0	45.81	58.36	10519.88	6305.84	13.43	10.39	601.14	504.47	709.04	564.76	12375.85	814.43
350X250X6.0	54.66	69.63	12457.31	7458.44	13.43	10.35	711.85	596.68	842.61	670.85	14733.26	962.58
350X250X8.0	72.06	91.79	16170.48	9659.06	13.27	10.26	924.03	772.73	1101.63	876.27	19295.99	1243.82
350X250X10.0	89.03	113.42	19672.08	11723.53	13.17	10.17	1124.12	937.89	1349.92	1072.79	23627.09	1504.66
350X250X12.0	105.61	134.53	22966.89	13655.73	13.07	10.08	1312.40	1092.46	1587.60	1260.54	27692.08	1744.69
350X300X6.0	59.40	75.60	14233.00	11186.00	13.70	12.20	813.00	746.00	946.00	850.00	19457.00	1170.00
350X300X8.0	78.30	99.80	18510.00	14498.00	13.60	12.10	1058.00	967.00	1238.00	1112.00	25542.00	1521.00
350X300X10.0	96.90	123.40	22563.00	17610.00	13.50	11.90	1289.00	1174.00	1520.00	1362.00	31425.00	1854.00
350X300X12.0	115.00	146.50	26396.00	20527.00	13.40	11.80	1508.00	1368.00	1790.00	1603.00	37106.00	2170.00
400X200X6.0	54.66	69.63	14789.35	5091.63	14.57	8.55	739.47	509.17	905.99	562.47	12205.15	872.78
400X200X8.0	72.06	91.79	19195.28	6572.45	14.46	8.46	959.77	657.25	1184.31	733.59	15926.47	1124.29
400X200X10.0	89.03	113.42	23348.08	7950.97	14.35	8.37	1167.41	795.10	1450.98	896.73	19422.50	1355.55
400X200X12.0	105.61	134.53	27252.93	9230.63	14.23	8.28	1362.65	923.07	1706.13	1052.01	22662.53	1566.20
400X300X6.0	64.10	81.60	19447.00	12396.00	15.40	12.30	972.00	826.00	1142.00	936.00	23651.00	1342.00
400X300X8.0	84.60	107.80	25343.00	16051.00	15.30	12.20	1267.00	1070.00	1498.00	1224.00	31072.00	1748.00
400X300X10.0	104.70	133.40	30955.00	19475.00	15.20	12.10	1548.00	1298.00	1841.00	1501.00	38262.00	2135.00
400X300X12.0	124.40	158.50	36288.00	22673.00	15.10	12.00	1814.00	1512.00	2172.00	1766.00	45219.00	2502.00

UNIQUE BRANDS

Products	Description	Application
ITL ULTRA	High Strength And Low Weight Hollow Section Pipes Which Are Manufactured In Various Shapes And Sizes Such As Square, Rectangle And Circle.	Manufacturing Machinery Equipment, Agricultural purposes, Aesthetic purposes, Building frames & construction, Replacement of wood.
JIL HULK	Large Sized Black Galvanized Iron Pipes.	Construction of Factories, Malls, Houses, Buildings, Furniture, Industrial & Agricultural equipment's & Bridges.
JTL HARVEST	Black Galvanized Coated Pipes.	Casing Pipes For Borewell And Rain Water Harvesting
JTL AQUA	Galvanised Iron Pipes With Smooth Inner Surface.	Water Supply And distribution, Irrigation And Drainage, Plumbing And Sanitization.
JTL GALV-COAT	A Pre Galvanized Product.	Furniture & Fencing, Construction, Automotive, Rooftop Sheds, Solar Mounting, Green houses Scaffolding.
ITL AGNIRODHI	Trusted MS GI pipes used in fire protection system	Firefighting
JTL SOLARIUM	Uses steel structures to mount the solar panels, which are connected to a grid-tie inverter. Through this the power generated can be used for both administrative & manufacturing purposes, reducing the dependence on the common grid.	Solar Panel Mounting
JTL GUARD	The perfect barrier for you safety & peace of mind.	Roadside Hazard protection, Traffic flow separation, Pedestrian & worker safety, Crash Barrier, Hand Rails, Fencing & Gates
JTL UNIO	Unique oval shaped pipes giving a touch of class & elegance.	Gym equipment, Parapet.
JTL PETROGAS	Galvanized Coated Pipes	PNG Pipeline, Low pressure gasses.





JTL: Engineering Excellence, Globally Exported

The global pipes & tubes market, valued at \$90 billion, is projected to grow steadily at a CAGR of 4% over the next 3 years, driven by escalating energy demands. In this landscape, the steel pipes industry, including ERW pipes, plays a pivotal role.

JTL, since its inception, has prioritized both its export business & serving the domestic steel tube market with equal focus. **JTL's dedication to its Export Business has been instrumental in driving its Global Expansion. By nurturing strong & enduring customer delight & establishing itself as a consistent supplier in International Markets, JTL has capitalized on opportunities for both**

growth & diversification. This constant attention on quality & competitiveness serves as the cornerstone of JTL's strategy, aiming to unlock its full market potential & deliver lasting value to customers worldwide. JTL's versatile products range find application in various sectors such as Structural Frameworks, Automotive Components, Water Pipelines & Irrigation.

JTL's export portfolio comprises mainly value-added products, constituting about 90% of its export sales volume. The company's top five international destinations for supply, reflecting significant demand, encompass Germany, Australia, France, the UAE & the UK.



The company has a dedicated export team focused on enhancing its international presence & driving business growth. This team works tirelessly, conducting comprehensive market research across various industry applications, acquiring new orders & customers, maintaining relationships with existing clients & ensuring timely & hassle-free deliveries. With the support of these endeavours, the export revenue significantly contributes to the company's overall revenue.

With a firm commitment to international quality standards & compliance with safety & environmental regulations, JTL proudly holds certifications like ISO, CE, EN 10229, EN 10255, EN 39 etc. JTL strives to substantially increase its export contribution to the total sales volume by FY 2024-25.

Strategically located near Mumbai, its manufacturing facility supports export initiatives, while investments in technology enhance its product range for diverse industrial applications.



JTL: Energizing the Global Transition

Renewable energy from solar & wind currently only accounts for a small percentage of the global energy used, but it is expected experience rapid growth in the next few decades. JTL supports this growth with steel tube customized **Solar Mounting Structure**.

JTL provides a versatile range of Solar

Module Mounting Structures, tailored to client specifications. The company offers turnkey solutions cover design, installation & electrical work for Ground Mounting, Roof Mounting & Custom Structures. Lightweight & Durable, the designs are perfect for rural areas, adaptable to rough terrain & suitable for all regions.



JTL Steel Tubular Poles: Exceeding expectations, Ensuring lasting solutions



JTL manufactures **Tubular Poles** (confirming IS-2713/80, Part - 3 standard), ensuring top notch **Quality & Durability**.

JTL steel tubular poles are engineered to offer strength & stability, capable of withstanding torsional stress & enduring external forces such as shocks, cyclones &

thrust line breakages.

With minimal wind resistance & excellent elasticity, JTL poles provide reliable solutions across various applications including power distribution, illumination, signage & more.

JTL Road Crash Barrier: Enhancing Road Safety

JTL offers a wide range of **Road Crash Barriers**, including design & installation services. JTL Road Crash Barriers are mostly used in National & State Highways, Bridges & Flyovers, Motor Racing, Mines & Collieries, Crash Test sites, Airport Traffic Safety, High Density City Traffic Areas, Factory Areas, Multi Story Parking Lots.

Key utility areas

Collision Prevention:

Road crash barriers prevent head-on

collisions & shield against roadside hazards.

Bridge Protection:

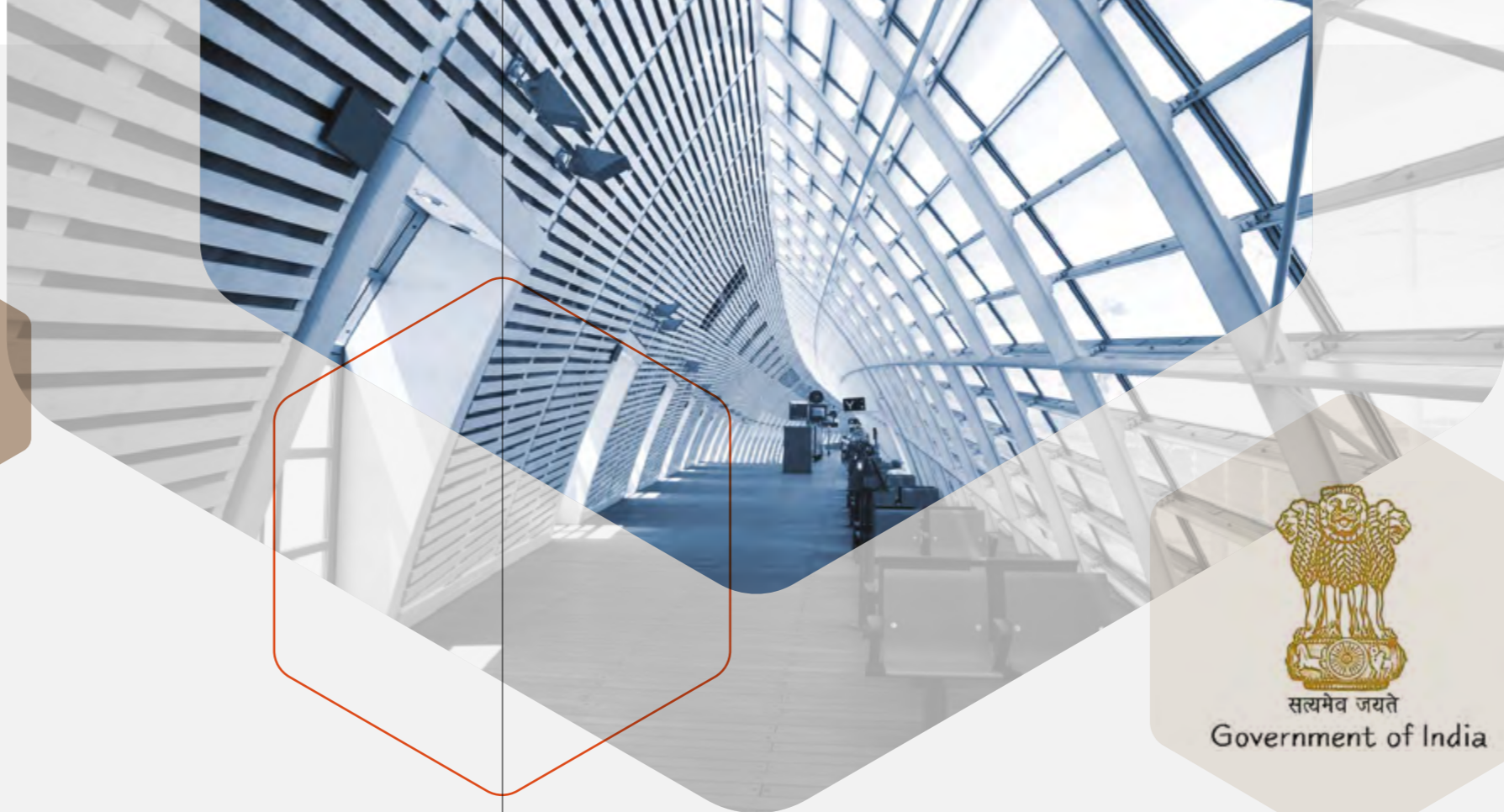
Safeguards against vehicle rollovers on bridges, reducing accident risks.

Impact Mitigation:

Redirects vehicles during collisions, minimizing damage.

Traffic Control:

Reduces lane changes & unauthorized lane usage, streamlining traffic.



Transforming Steel: Durability Meets Enchantment

STEEL HAS ALWAYS BEEN DURABLE. WE HAVE MADE IT ENCHANTING.

Structural steel pipes are highly favored in construction due to their flexibility, ease of modification & aesthetic appeal. They come in various sizes & grades, offering versatility for different structural applications.

JTL Galvanized steel pipes & Tubes, renowned for their strength, uniformity & lightweight nature, are extensively utilized in construction projects worldwide. Steel frames dominate industrial & commercial buildings due to their durability & anti-

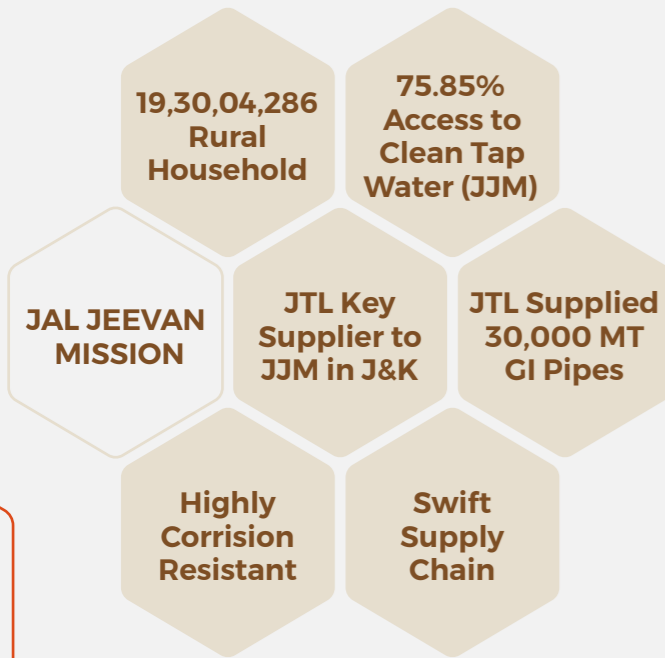
corrosion attributes, significantly boosting JTL's export business.

The widespread adoption of steel frames not only shapes modern construction practices globally but also leaves a significant impact on India's construction landscape. JTL emerges as a key supplier of ERW Pipes & Tubes in the domestic construction market.

JTL Industries: The Trusted Partner for Government Departments & Prestigious Projects Nation Wide

JTL Industries has established itself as a trusted supplier to various Government Departments & Prestigious Projects across different regions. Some of the notable clients & projects include:

-  • Directors General of Suppliers & Disposals, New Delhi
-  • Uttar Pradesh Jal Nigam
-  • Director Supplies & Disposal, Haryana
-  • Public Health Engineering Department, Jammu (J&K)
-  • Public Health Engineering Department, Srinagar (J&K)
-  • Himachal Pradesh Civil Supply Corporation
-  • Bharat Heavy Electricals Limited



Empowering Dreams, Enriching Lives

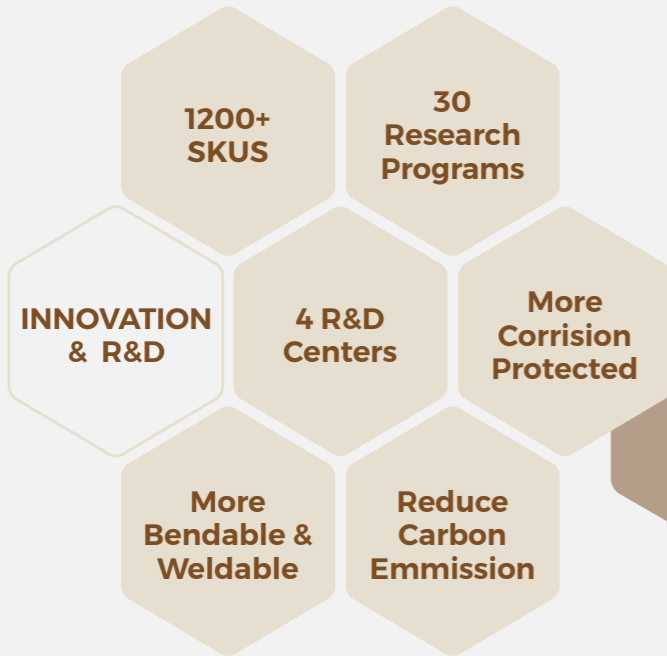
Flowing with Quality: JTL pipes integral support for Jal Jeevan Mission Scheme

The Jal Jeevan Mission aims to provide adequate & safe drinking water to every rural household in India through individual household tap connections by 2024 & JTL Industries consistently contributes to fulfilling this commitment. Out of 19,30,04,286 rural households in India, 14,63,34,401 now have access to clean tap water, marking a significant achievement.

JTL as the largest supplier of ERW pipes & tubes in North India & with their plant

located in Derabassi (Punjab), close to Jammu & Kashmir, **JTL Industries swiftly supplied a substantial quantity of 30,000 MT of ERW Pipes within a very short time frame in J&K through the Jal Shakti Abhiyan.** JTL has been selected as the preferred supplier for this critical project due to its remarkable attributes, including corrosion resistance, high pressure tolerance & smoother flow.





Innovate to Redefine

JTL Industries is not just aiming to compete but to redefine industry standards through prioritizing innovation. Their relentless research & development endeavors are poised to revolutionize the structural steel tube market in India & Globally, thereby reshaping infrastructure development. By introducing innovative products that **replaced conventional materials** such as wood, aluminium, concrete & steel angles, they are poised to transform building practices.

JTL has embarked on an extensive initiative, developing over 1200 SKUs & executing more than 30 Research Programs to meet specific property requirements.

With a wide range of SKUs & the execution of numerous research programs. Prioritizing factors such as Corrosion Protection, Resistibility, Bendability, Weldability & Fatigue Resistance, JTL aims to provide solutions that surpass expectations & enhance Product Performance & Longevity in the market.

Operating 4 state-of-the-art facilities, **each equipped with cutting-edge technology & supported by innovation-driven R&D centers**, JTL remains as the prime player of the industry. These hubs drive advanced manufacturing processes & product development, ensuring **JTL maintains its leadership position.**

Staffed with skilled professionals constantly pushing boundaries, the innovation-focused R&D centers reaffirm JTL's commitment to excellence.



In light of the crucial role that technological advancements & innovation play in swiftly implementing sustainable practices to achieve the 17 Sustainable Development Goals (SDGs) set by the United Nations, JTL is dedicated to adopting more environmentally friendly manufacturing processes. These processes aim to minimize waste, utilize resources efficiently & reduce carbon emissions significantly.

Key Strategies to Humanize the Brand:

The steel tube industry is experiencing mounting pressure to reduce its carbon footprint & enhance sustainability in manufacturing processes. In response, JTL Industries, is increasingly adopting eco-friendly practices.

These initiatives involve

- **Incorporation of Recycled Materials**
- **Optimization of Energy Efficiency in production processes.**
- **Setting up vast Water Conservation units in every Facility**
- **Active Waste Management System in every Plant**





Our Esteemed Clients



List of Approvals

- Maharashtra Jeevan Pradhikaran
- Maharashtra Housing & Area Development Authority
- City & Industrial Development Corporation (CIDCO)
- Engineer India LTD(EIL)
- Director General of Supplies & Disposals in New Delhi
- Uttar Pradesh Jal Nigam
- Director General of Supplies & Disposals in Haryana
- IPH Irrigation & Public Health Department
- Public Health Engineering Department in Jammu & Srinagar (J&K)
- Bharat Heavy Electricals Limited (BHEL)
- Larsen & Turbo
- Delhi Metro Rail Corporation Ltd.
- Central Public Works Department
- Govt. of Himachal Pradesh
- National Thermal Power Corporation Limited

Awards & Accolades

JTL Industries Ltd. has been the recipient of numerous prestigious awards & accolades throughout its journey towards excellence. Its steadfast commitment to improvement has solidified its position as one of the foremost manufacturers of ERW Pipes & Tubes in the industry. However, this is merely a milestone in their journey.

JTL continues to push the limits is dedicated to reaching new heights in the industry for the betterment of all stakeholders involved. With relentless determination, JTL Industries Ltd. is paving the way for innovation & excellence in the ERW Pipes & Tubes sector, ensuring a brighter future for itself & the industry as a whole.





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Punjab Plant - II

Jagan Road, Behind
Aggarwal Bhavan
Sirhind Side
Mandi Gobindgarh
Punjab 147301
(India)

Maharashtra Plant - III

Village Koste-Budruk
Post Nizampur
Taluka - Mangaon
Raigarh
Maharashtra 402120
(India)

Chhattishgarh Plant - IV

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Urla Industrial Complex
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