

UTKARSH INDIA LIMITED

(Formerly Utkarsh Tubes & Pipes Limited)

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TURN OVER TO AIR AND WATER



Steel Tubes, Pipes & Poles | Polymer Products | High Mast, Polygonal/ Conical Poles & Steel Tubular Poles |
Metal Beam Crash Barrier | Railway Electrification Structures | Transmission Line Towers & Substation Structures

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Expanding to Global Expectations

Born in India, Utkarsh India Ltd. is a front-running enterprise that spreads aspiring wings to respond to the global demands of life. The company is now operating in six verticals, namely:

- **Steel Tubes, Pipes & Poles**
- **Polymer Products**
- **Metal Beam Crash Barrier**
- **High Mast, Polygonal/Conical Poles & Steel Tubular Poles**
- **Railway Electrification Structures**
- **Transmission Line Towers & Substation Structures**

Deeply imbibing the Indian philosophy where **'customer is the king'**, it's all set to mortgage itself to conquer the confidence of global customers, thus making its dream of emerging as a major global company come true.

Lifeline to modern living...

Utkarsh India Limited (UIL), an ISO 9001:2015 company, is forging ahead manufacturing all diameters of Steel Tubes and GI Pipes for applications in the fields of air & water line, structural & fencing, fire sprinkler, borewell, hollow section, idlers & belt conveyors, lancing pipe, boiler & heat exchanger and general engineering. Its unparalleled range of products conforms to national and international standards like ISO, BS, ASTM A, ASTM D, EN, AS & SLS and is duly approved by all National/International Inspecting & Certifying Authorities like SGS, CE, DNV, BVQI, TUV and many more. Our experience of over 3 decades along with appropriate technologies, economies of scale, optimum capacity utilization and cost-effective manufacturing processes has made us into the lifeline of the nation.

Mission

To deliver world class products at competitive prices, on demand as well as provide superior service to customers by developing leading-edge solutions in technology and processes, providing opportunities for inclusive growth for our employees, by nurturing human resource, so that all our partners can share the pride of success.

Vision

To be an industry benchmark across all verticals, while becoming the supplier of choice, delivering premium products and services, creating value with our customers and demonstrating high ethical standards.

The Identity

Utkarsh, as the name suggests, is a responsive business house serving the basic demands of life and committed to bettering the quality of living. The brand statement 'Life demands, We deliver' confers its corporate identity an exalted image reflecting dynamism, capability, commitment, empathy, consistency and continuity. The embedded philosophy is the responsiveness to the ever-changing demands of life.

The new logo of Utkarsh, with a bold font represents strength and growth. The dynamic vision of growth with which we have been striding ahead towards the challenges of life is captured in the swoosh. It reflects a more youthful and futuristic image of ours and our strong, sturdy and bold attitude in delivering the best. The green represents 'life and its newer demands,' and the blue reflects technology and corporate commitment. The coming together of these two elements is symbolic of the effective way in which we have been responding to the several requirements of life of with an arsenal of technology and collective corporate dedication.





MD Speaks

We have reached out with Brand Offerings to global markets, a major step in strengthening leadership status, PAN India.

Dear Friends,

“Growth is the only evidence of life”- a quote by John Henry Newman is something our ideals completely correspond with. Hence, we have transitioned into becoming Utkarsh India Limited from Utkarsh Tubes and Pipes Ltd., widening our horizons into providing infrastructural solutions. And I firmly believe that a nation grows when its infrastructures grow, hence it is a humble step in that direction.

We have been making our way into more lives by providing our services and products at good value. We, at Utkarsh have branched out to different infrastructural arenas like telecom towers, transmission line towers, substation structures, poles and masts for lighting and distribution, road crash barriers, railway electrification structures and polymer products. Empowered with this diversification, Utkarsh India Limited has taken a step further and gone global, aiding in infrastructural development across several countries. This is a distinctly proud step for us as our expertise is helping not only add pace to the infrastructural enhancement of the country, but also contributing to the growth of foreign nations.

In the 40 years of our presence, Utkarsh has been scaling the mountains of success which could not have been achieved without a team of the excellent trekkers, who are our employees. This group of innovative, talented

and passionate young people has brought a modern vision into the organization. A strong, experienced management ensures a smooth flow of the inner-workings quite like our pipes do for our customers. This perfect balance between management and co-workers is what gives Utkarsh its efficiency.

Sticking to our corporate ethos- ‘Life demands, We deliver,’ we bring the strong promise of consistency and reliability ensuring optimum consumer satisfaction. ‘Consumer first’ is the motto that drives us to bring you quality.

We could have never reached out to the world with our products without the worthy associations of our suppliers, distributors and dealers and my gratitude extends to all of them. I firmly believe that Utkarsh, along with all its associates will emerge as the finest infrastructural brand in the recent future.

Regards,

Sunil Bansal
CMD

Captive Plant

- 5 Tube Mills
- 2 Slitting Lines
- Galvanizing up to 12.50 metres of length (Three nos.)
- CNC Profile Cutting
- High-Speed Tube Mill- 100 mtr/min
- Tube Mill for larger dia pipes
- In-house Spectrometer
- In-house CNC coupler manufacturing plant
- Cold Saw Cutting Tube Mill
- In-house testing facilities
- Online NDT

Manufacturing Capabilities Fundamental Equipment

Slitting Lines | ERW, HF | W Tube Mills | Hot Dip Galvanizing Plant |
Threading Machine | End Facing & End Forming Plain End &
Bevelled End Machine | Pipe Straightening Machine Hydro
Testing Machine | Online NDT/Eddy Current Equipment |
Auto Start DG Set Mechanical (UTM 20 MT & 60 MT) & Chemical
Testing Equipment

Air & Water Applications

Specification
IS 1239; IS 3589, BS 1387, IS 4270
EN 10255
ASTM A 53
ISO 65
AS 1074

Structural Applications

Specification
IS 1161; IS 4923
EN 10219; EN 39
ASTM A 500
AS 1163

Firefighting & HVAC Applications

Specification
IS 1239; IS 3589
ASTM A 53
ASTM A 795; ASTM A 135 - Grooved Pipes

General Engineering Applications

Specification
IS 3601
IS 9295, AS 1143- Idlers and Belt Conveyors

Steel Tubular Pole

Specification
IS 2713

Air & Water Applications

EN 10255-BS1387

TECHNICAL DATA OF TUBES AS PER BS : 1387 / 1985
(Designated as BS EN 10255 : 2004)

	Nominal Size (DN)	Designation of Thread (Inch)	Outside (Max.)	Diameter (Min.)	Thickness (mm)	Mass of Black Tube (kg/mtr)		Socket (Min.) (Max.)	
						Plain End Socketed	Screwed & End	OD (mm)	Length (mm)
LIGHT	15	½	21.4	21.0	2.0	0.947	0.956	27.0	37.0
	20	¾	26.9	26.4	2.3	1.380	1.390	32.5	39.0
	25	1	33.8	33.2	2.6	1.980	2.000	39.5	46.0
	32	1 ¼	42.5	41.9	2.6	2.540	2.570	49.0	51.0
	40	1 ½	48.4	47.8	2.9	3.230	3.270	56.0	51.0
	50	2	60.2	59.6	2.9	4.080	4.150	68.0	60.0
	65	2 ½	76.0	75.2	3.2	5.710	5.830	84.0	69.0
	80	3	88.7	87.9	3.2	6.720	6.890	98.0	75.0
	100	4	113.9	113.0	3.6	9.750	10.000	124.0	87.0
MEDIUM	15	½	21.8	21.0	2.6	1.210	1.220	27.0	37.0
	20	¾	27.3	26.5	2.6	1.560	1.570	32.5	39.0
	25	1	34.2	33.3	3.2	2.410	2.430	39.5	46.0
	32	1 ¼	42.9	42.0	3.2	3.100	3.130	49.0	51.0
	40	1 ½	48.8	47.9	3.2	3.560	3.600	56.0	51.0
	50	2	60.8	59.7	3.6	5.030	5.100	68.0	60.0
	65	2 ½	76.6	75.3	3.6	6.420	6.540	84.0	69.0
	80	3	89.5	88.0	4.0	8.360	8.530	98.0	75.0
	100	4	115.0	113.1	4.5	12.200	12.500	124.0	87.0
	125	5	140.8	138.5	5.0	16.600	17.100	151.0	96.0
	150	6	166.5	163.9	5.0	19.800	20.400	178.0	96.0
HEAVY	15	½	21.8	21.0	3.2	1.440	1.450	27.0	37.0
	20	¾	27.3	26.5	3.2	1.870	1.880	32.5	39.0
	25	1	34.2	33.3	4.0	2.930	2.950	39.5	46.0
	32	1 ¼	42.9	42.0	4.0	3.790	3.820	49.0	51.0
	40	1 ½	48.8	47.9	4.0	4.370	4.410	56.0	51.0
	50	2	60.8	59.7	4.5	6.190	6.260	68.0	60.0
	65	2 ½	76.6	75.3	4.5	7.930	8.050	84.0	69.0
	80	3	89.5	88.0	5.0	10.300	10.500	98.0	75.0
	100	4	115.0	113.1	5.4	14.500	14.800	124.0	87.0
		125	5	140.8	138.5	5.4	17.900	18.400	151.0
	150	6	166.5	163.9	5.4	21.300	21.900	178.0	96.0

Tolerances:

Length : 6 Mtrs ± 0.05 Mtrs

Thickness : ± 10% for Medium, Heavy & - 8% for Light

Weight : Single Tube - Light - 8%, + 10% & Medium and Heavy ± 10%

± 7.5% on bundles of 10 MT or more for Medium, Heavy & Light Series

Note: This IS-1239 is also used for Firefighting Applications

Air & Water Applications





■ **Air & Water Applications**
IS-1239~ PART - I

	Nominal Bore		Outside Diameter (mm)		Wall Thickness (mm)	Nominal Mass of Steel Tubes				Socket	
						Plain End		Screwed & Socketed			
	(mm)	Inch	Minimum	Maximum		Kg/Mtr	Mtr/ton	Kg/Mtr	Mtr/ton	Minimum OD (mm)	Minimum Length (mm)
LIGHT	15	½	21	21.4	2	0.947	1056	0.946	1046	27	37
	20	¾	26.4	26.9	2.3	1.38	725	1.39	719	32.5	39
	25	1	33.2	33.8	2.6	1.98	505	2	500	39.5	46
	32	1¼	41.9	42.5	2.6	2.54	394	2.57	389	49	51
	40	1½	47.8	48.4	2.9	3.23	310	3.27	306	56	51
	50	2	59.6	60.2	2.9	4.08	245	4.15	241	68	60
	65	2½	75.2	76	3.2	5.71	175	5.83	172	84	69
	80	3	87.9	88.7	3.2	6.72	149	6.89	145	98	75
	100	4	113	113.9	3.6	9.75	103	10	100	124	87
MEDIUM	15	½	21	21.8	2.6	1.21	826	1.22	820	27	37
	20	¾	26.4	27.3	2.6	1.56	641	1.57	637	32.5	39
	25	1	33.3	34.2	3.2	2.41	415	2.43	412	39.5	46
	32	1¼	42	42.9	3.2	3.1	323	3.13	319	49	51
	40	1½	47.9	48.8	3.2	3.56	281	3.6	278	56	51
	50	2	59.7	60.8	3.6	5.03	199	5.1	196	68	60
	65	2½	75.3	76.6	3.6	6.42	156	6.54	153	84	69
	80	3	88	89.5	4	8.36	120	8.53	117	98	75
		100	4	113.1	115	4.5	12.2	82	12.5	80	124
	125	5	138.5	140.8	4.8	15.9	63	16.4	61	151	96
	150	6	163.9	166.5	4.8	18.9	53	19.5	51	178	96
HEAVY	15	½	21	21.8	3.20	1.44	694	1.45	690	27	37
	20	¾	26.4	27.3	3.20	1.87	535	1.88	532	32.5	39
	25	1	33.3	34.2	4.00	2.93	341	2.95	339	39.5	46
	32	1¼	42	42.9	4.00	3.79	264	3.82	262	49	51
	40	1½	47.9	48.8	4.00	4.37	229	4.41	227	56	51
	50	2	59.7	60.8	4.50	6.19	162	6.26	160	68	60
	65	2½	75.3	76.6	4.50	7.93	126	8.05	124	84	69
	80	3	88	89.5	4.80	9.9	101	10.4	96	98	75
		100	4	113.1	115	5.40	14.5	69	14.8	68	124
	125	5	138.5	140.8	5.40	17.9	56	18.4	54	151	96
	150	6	163.9	166.5	5.40	21.3	47	21.9	46	178	96

Tolerances:

Length : 6 Mtrs ± 0.05 Mtrs

Thickness : ± 10% for Medium, Heavy & - 8% for Light

Weight : Single Tube - Light - 8%, + 10% & Medium and Heavy ± 10%
± 7.5% on bundles of 10 MT or more for Medium, Heavy & Light Series

Air & Water Applications
ASTM A 53

ASTM A53 GRADE A & B (BLACK & GALVANIZED STEEL PIPES)

Nominal Bore		Outside Diameter		Schedule	Wall Thickness		Weight of Black Pipes Plain End			No of Pcs / Bundle
mm	Inch	mm	Inch		kg/Mtr	lbs / ft	ft / ton			
15	½	21.3	0.839	40	2.77	0.109	1.27	0.85	2592	120
20	¾	26.7	1.051	40	2.87	0.113	1.69	1.13	1945	90
25	1	33.4	1.315	40	3.38	0.133	2.50	1.68	1311	60
32	1 ¼	42.2	1.661	40	3.56	0.140	3.39	2.27	967	42
40	1 ½	48.3	1.902	40	3.68	0.145	4.05	2.72	810	36
50	2	60.3	2.374	40	3.91	0.154	5.44	3.66	603	26
65	2 ½	73.0	2.874	40	5.16	0.203	8.63	5.80	380	18
80	3	88.9	3.500	40	5.49	0.216	11.29	7.58	291	14
90	3 ½	101.6	4.000	40	5.74	0.226	13.57	9.12	242	12
100	4	114.3	4.500	40	6.02	0.237	16.07	10.80	204	10
125	5	141.3	5.563	40	6.55	0.258	21.77	14.63	151	8
150	6	168.3	6.626	40	7.11	0.280	28.26	18.99	116	7
200	8	219.1	8.626	20	6.35	0.250	33.31	22.36	98	-
				30	7.04	0.277	36.81	24.70	89	-
				40	8.18	0.322	42.55	28.56	77	-
250	10	273.0	10.74	20	6.35	0.250	41.75	28.02	79	-
				30	7.80	0.307	51.01	34.23	64	-
				40	9.27	0.365	60.29	40.46	54	-
300	12	323.9	12.75	20	6.35	0.250	49.73	33.38	66	-
				30	8.38	0.330	65.20	43.76	50	-
350	14	355.6	14.00	10	6.35	0.250	54.69	36.70	60	-
				20	7.92	0.312	67.90	45.57	48	-
400	16	406.4	16.02	10	6.35	0.250	62.72	42.09	52	-
				20	7.92	0.312	77.92	52.30	42	-
				30	9.52	0.375	93.29	62.61	35	-

Tolerances:

- Outside Diameter** : Upto 1 ½", ± 0.40 mm & Above 1 ½", ± 1%
- Thickness** : - 12.5% (Max)
- Weight** : ± 10%

Air & Water Applications
ISO 65

CARBON STEEL TUBE SUITABLE FOR SCREWING AS PER TO ISO : 65

DN	Designation of Thread	Outside Diameter D mm	Thickness (T) and masses per unit length (M) according to the series											
			Heavy Series			Medium Series			Light Series 1			Light Series 2		
			Thick-ness	Plain end	Screwed socketed	Thick-ness	Plain end	Screwed socketed	Thick-ness	Plain end	Screwed socketed	Thick-ness	Plain end	Screwed socketed
			tT mm	M kg/m	M kg/m	T mm	M kg/m	M kg/m	T mm	M kg/m	M kg/m	T mm	M kg/m	M kg/m
15	½	21.3	3.2	1.44	1.45	2.6	1.21	1.22	2.3	1.09	1.09	2.0	0.947	0.956
20	¾	26.9	3.2	1.87	1.88	2.6	1.56	1.57	2.3	1.39	1.40	2.3	1.38	1.39
25	1	33.7	4.0	2.93	2.95	3.2	2.41	2.43	2.9	2.20	2.22	2.6	1.98	2.00
32	1 ¼	42.4	4.0	3.97	3.82	3.2	3.10	3.13	2.9	2.82	2.85	2.6	2.54	2.57
40	1 ½	48.3	4.0	4.37	4.41	3.2	3.56	3.60	2.9	3.24	3.28	2.9	3.23	3.27
50	2	60.3	4.5	6.19	6.26	3.6	5.03	5.10	3.2	4.49	4.56	2.9	4.08	4.15
65	2 ½	76.1	4.5	7.93	8.05	3.6	6.42	6.54	3.2	5.73	5.85	3.2	5.71	5.83
80	3	88.9	5.0	10.3	10.5	4.0	8.36	8.53	3.6	7.55	7.72	3.2	6.72	6.89
100	4	114.3	5.4	14.5	14.8	4.5	12.2	12.5	4.0	10.8	11.1	3.6	9.75	10.0
125	5	139.7	5.4	17.9	18.4	5.0	16.6	17.1	-	-	-	-	-	-
150	6	165.12	5.4	21.3	21.9	5.0	19.8	20.4	-	-	-	-	-	-

Tolerances on Thickness as per above table

Light Series 1		Light Series 2	
+ Not Limited	- 12.5%	+ Not Limited	- 8%

Tolerances on Weight as per above table

Light Series 1		Light Series 2	
Single Tube ± 10%	10 Ton Load ± 7.5%	Single Tube + 10% - 8%	10 Ton Load ± 5%





Air & Water Applications

TECHNICAL DATA OF TUBES
AS PER AS1074: 1989

Nominal Size (DN)	Outside Diameter (mm)		Thickness (mm)	Mass of Black Tube (kg/m)		
	Min.	Max.		Plain End	Screwed & Socketed End	
LIGHT	15	21.0	21.4	2.0	0.947	0.956
	20	26.4	26.9	2.3	1.38	1.39
	25	33.2	33.8	2.6	1.98	2.00
	32	41.9	42.5	2.6	2.54	2.57
	40	47.8	48.4	2.9	3.23	3.27
	50	59.6	60.2	2.9	4.08	4.15
	65	75.2	76.0	3.2	5.71	5.83
	80	87.9	88.7	3.2	6.72	6.89
100	113.0	113.9	3.6	9.75	10.00	

Nominal Size (DN)	Outside Diameter (mm)		Thickness (mm)	Mass of Black Tube (kg/m)		
	Min.	Max.		Plain End	Screwed & Socketed End	
MEDIUM	15	21.1	21.7	2.6	1.21	1.22
	20	26.6	27.2	2.6	1.56	1.57
	25	33.4	34.2	3.2	2.41	2.43
	32	42.1	42.9	3.2	3.10	3.13
	40	48.0	48.8	3.2	3.57	3.61
	50	59.8	60.8	3.6	5.03	5.10
	65	75.4	76.6	3.6	6.43	6.55
	80	88.1	89.5	4.0	8.37	8.54
	100	113.3	114.9	4.5	12.2	12.50
	125	138.7	140.6	5.0	16.6	17.10
150	164.1	166.1	5.0	19.7	20.30	

Nominal Size (DN)	Outside Diameter (mm)		Thickness (mm)	Mass of Black Tube (kg/m)		
	Min.	Max.		Plain End	Screwed & Socketed End	
HEAVY	15	21.1	21.7	3.2	1.44	1.45
	20	26.6	27.2	3.2	1.87	1.88
	25	33.4	34.2	4.0	2.94	2.96
	32	42.1	42.9	4.0	3.80	3.83
	40	48.0	48.8	4.0	4.38	4.42
	50	59.8	60.8	4.5	6.19	6.26
	65	75.4	76.6	4.5	7.93	6.55
	80	88.1	89.5	5.0	10.3	10.50
	100	113.3	114.9	5.4	14.5	14.80
	125	138.7	140.6	5.4	17.9	18.40
150	164.1	166.1	5.4	21.3	21.90	

Thickness : Light welded tubes: + Unlimited / - 8 %

Medium & Heavy tubes : + Unlimited / - 10%

Weight : No single tubes shall deviate from standard mass by + 10 / - 8%

Air & Water Applications



STEEL TUBES FOR WATER WELLS (CASING PIPES) CONFORMING TO IS 4270 : 2001

N B of Pipe mm	Outside Diameter mm	Thickness mm	Nominal Weight Black Tubes Plain End	
			kg/m	m/ton
100	114.3	5.0	13.48	74
125	141.3	5.0	16.80	60
150	168.3	5.0	20.13	50
175	193.7	5.4	25.10	40
200	219.1	5.4	28.46	35
250	273.1	7.1	46.57	21
300	323.9	7.1	55.47	18
		8.0	68.57	15
350	355.6	10.0	85.22	12
		8.0	78.60	13
400	406.4	10.0	97.75	10

A. Physical Properties:

Grade	YS (Min) MPa (Kg / mm ²)	TS (Min) MPa (Kg / mm ²)	% Elongation (Min)
Fe 410	235	410	15
Fe 450	275	450	13

B. Tolerance:

1. Outside Diameter : ± 1%
2. Thickness Welded Tube Upto : + 15%
And including 406.4 MM : - 12.5%
Over 406.4 MM outside : + 15%
Diameter : - 10%
3. Weight : - 8%
Single Tube : + 10%

Air & Water Applications

Structural Applications IS 1161~AS1163~EN10219

STEEL TUBES FOR STRUCTURAL
PURPOSES CONFORMING TO IS 1161 : 2014

N B and Series	Outside Diameter (mm)	Thickness (mm)	Nominal Weight Black Tubes Plain End		Calculated Nominal Weight Galvanized Tubes Plain End		Grade	Y S (MIN) MPa (Kg/mm2)	T S (MIN) MPa (Kg/mm2)	% age Elongation
			(Kg/m)	(m/ton)	(Kg/m)	(m/ton)				
15	21.3	2.0	0.947	1058	1.00	1003	YST - 210	210 (21.42)	330 (33.66)	20
	-	2.6	1.21	826	1.26	794				
	-	3.2	1.44	694	1.49	671				
20	26.9	2.3	1.38	725	1.43	699	YST - 240	240 (24.48)	410 (41.82)	17
	-	2.6	1.56	641	1.61	621				
	-	3.2	1.87	535	1.92	521				
25	33.7	2.6	1.98	505	2.03	439	YST - 310	310 (31.62)	450 (45.9)	14
	-	3.2	2.41	415	2.46	407				
	-	4.0	2.93	341	2.98	336				
32	42.4	2.6	2.54	394	2.62	382				
	-	3.2	3.10	323	3.18	314				
	-	4.0	3.79	264	3.87	258				
40	48.3	2.9	3.23	310	3.34	299				
	-	3.2	3.56	281	3.67	272				
	-	4.0	4.37	229	4.48	223				
50	60.3	2.9	4.08	245	4.20	238				
	-	3.6	5.03	199	5.15	194				
	-	4.5	6.19	162	6.31	158				
65	76.1	3.2	5.71	175	5.86	171				
	-	3.6	6.42	156	6.57	152				
	-	4.5	7.93	126	8.10	123				
80	88.9	3.2	6.72	149	6.90	145				
	-	4.0	8.36	120	8.54	117				
	-	4.8	9.90	101	10.08	99				
90	101.6	3.6	8.70	115	8.97	111				
	-	4.0	9.63	144	7.20	139				
	-	4.8	11.50	87	11.77	85				
100	114.3	3.6	9.75	103	9.97	100				
	-	4.5	12.20	82	12.42	81				
	-	5.4	14.50	69	14.72	68				
110	127.0	4.5	13.60	74	13.90	72				
	-	4.8	14.50	69	14.80	68				
	-	5.4	16.20	62	14.80	61				
125	139.7	4.5	15.00	67	15.25	66				
	-	4.8	15.90	63	16.15	62				
	-	5.4	17.90	56	18.15	55				
150	165.1	4.5	17.80	56	18.20	55				
	-	4.8	18.90	52	19.80	51				
	-	5.4	21.30	47	21.70	46				
150	168.3	4.5	18.2	55	18.66	54				
	-	4.8	19.4	52	19.88	50				
	-	5.4	21.7	46	22.10	45				
175	193.7	6.3	25.2	40	41.00	24				
	-	4.8	22.40	45	22.94	44				
	-	5.4	25.10	40	25.64	39				
200	219.1	5.9	27.30	37	27.84	36				
	-	6.3	29.10	34	29.60	34				
	-	4.8	25.40	39	25.95	39				
250	273.0	5.6	29.50	34	30.05	33				
	-	5.9	31.00	32	31.60	32				
	-	8.0	41.60	24	42.20	24				
300	323.9	10.0	51.60	19	52.10	19				
	-	5.9	38.90	26	39.50	25				
	-	8.0	52.30	19	53.00	19				
350	355.6	10.0	64.90	15	65.50	15				
	-	6.3	49.30	20	50.10	20				
	-	8.0	62.30	16	63.10	16				
	-	10.0	77.40	13	78.20	13				
	-	8.0	68.60	15	69.58	14				
	-	10.0	85.20	12	86.10	12				

Tolerances:

Outside diameter upto & including
48.3 mm, + 0.4 mm/ - 0.8 mm,
Over 48.3 mm ± 1%

Thickness:

For all sizes welded tubes ± 10%

Length:

4 M to 7 M

Galvanizing:

Minimum zinc coating 360 gm/m²

Weight:

Single tube = ± 10%
10 Ton Lot = ± 7.5%

Structural Applications

Structural Applications
IS 4923~ASTM A 500~AS 1163

TECHNICAL DATA OF STEEL TUBES & PIPES
CONFORMING TO IS 4923 : 2001
COLD FOLDED SQUARE HOLLOW SECTION

Depth (mm)	Width (mm)	Thickness (mm)	Moment of Inertia (cm ⁴)		Elastic Modulus (cm ³)		Plastic Modulus (cm ³)		Radius of Gyration (cm)		Area (cm ²)	Weight (kg/m)	Mtrs/M.T
			X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis			
25.0	25.0	1.80	1.38	1.38	1.11	1.11	1.35	1.35	0.93	0.93	1.59	1.25	802.80
25.0	25.0	2.00	1.48	1.48	1.19	1.19	1.47	1.47	0.92	0.92	1.74	1.36	733.47
25.0	25.0	2.30	1.61	1.61	1.29	1.29	1.62	1.62	0.91	0.91	1.95	1.53	652.63
25.0	25.0	2.60	1.72	1.72	1.38	1.38	1.76	1.76	0.89	0.89	2.16	1.69	591.08
25.0	25.0	3.00	1.84	1.84	1.47	1.47	1.91	1.91	0.87	0.87	2.41	1.89	529.07
25.0	25.0	3.20	1.89	1.89	1.51	1.51	1.98	1.98	0.86	0.86	2.53	1.98	504.27
25.0	25.0	3.60	1.96	1.96	1.56	1.56	2.10	2.10	0.84	0.84	2.75	2.16	463.70
32.0	32.0	1.80	3.11	3.11	1.95	1.95	2.33	2.33	1.22	1.22	2.09	1.64	609.28
32.0	32.0	2.00	3.36	3.36	2.10	2.10	2.54	2.54	1.21	1.21	2.30	1.80	554.63
32.0	32.0	2.30	3.71	3.71	2.32	2.32	2.84	2.84	1.20	1.20	2.60	2.04	490.73
32.0	32.0	2.60	4.02	4.02	2.51	2.51	3.11	3.11	1.18	1.18	2.88	2.26	441.83
32.0	32.0	3.00	4.38	4.38	2.74	2.74	3.44	3.44	1.16	1.16	3.25	2.55	392.23
32.0	32.0	3.20	4.54	4.54	2.83	2.83	3.59	3.59	1.15	1.15	3.42	2.69	372.24
32.0	32.0	3.60	4.81	4.81	3.00	3.00	3.87	3.87	1.13	1.13	3.76	2.95	339.23
38.0	38.0	1.80	5.42	5.42	2.85	2.85	3.39	3.39	1.47	1.47	2.52	1.98	504.95
38.0	38.0	2.00	5.88	5.88	3.10	3.10	3.70	3.70	1.46	1.46	2.78	2.18	458.76
38.0	38.0	2.30	6.54	6.54	3.44	3.44	4.15	4.15	1.44	1.44	3.15	2.47	404.68
38.0	38.0	2.60	7.13	7.13	3.76	3.76	4.57	4.57	1.43	1.43	3.51	2.75	363.22
38.0	38.0	3.00	7.85	7.85	4.13	4.13	5.10	5.10	1.41	1.41	3.97	3.11	321.06
38.0	38.0	3.20	8.18	8.18	4.30	4.30	5.34	5.34	1.40	1.40	4.19	3.29	304.01
38.0	38.0	3.60	8.76	8.76	4.61	4.61	5.80	5.80	1.38	1.38	4.62	3.63	275.78
49.5	49.5	1.80	12.54	12.54	5.07	5.07	5.94	5.94	1.93	1.93	3.35	2.63	380.17
49.5	49.5	2.00	13.70	13.70	5.54	5.54	6.52	6.52	1.93	1.93	3.70	2.90	344.59
49.5	49.5	2.30	15.36	15.36	6.20	6.20	7.36	7.36	1.91	1.91	4.21	3.30	302.88
49.5	49.5	2.60	16.91	16.91	6.83	6.83	8.16	8.16	1.90	1.90	4.70	3.69	270.86
49.5	49.5	3.00	18.84	18.84	7.61	7.61	9.18	9.18	1.88	1.88	5.35	4.20	238.21
49.5	49.5	3.20	19.74	19.74	7.97	7.97	9.67	9.67	1.87	1.87	5.66	4.44	224.98
49.5	49.5	3.60	21.42	21.42	8.65	8.65	10.60	10.60	1.85	1.85	6.28	4.93	203.00
60.0	60.0	2.50	30.34	30.34	10.11	10.11	11.93	11.93	2.33	2.33	5.59	4.39	227.94
60.0	60.0	2.60	31.33	31.33	10.44	10.44	12.34	12.34	2.33	2.33	5.80	4.55	219.82
60.0	60.0	2.90	34.21	34.21	11.40	11.40	13.56	13.56	2.31	2.31	6.41	5.03	198.84
60.0	60.0	3.00	35.13	35.13	11.71	11.71	13.95	13.95	2.31	2.31	6.61	5.19	192.79
60.0	60.0	3.20	36.94	36.94	12.31	12.31	14.73	14.73	2.30	2.30	7.01	5.50	181.82
60.0	60.0	3.60	40.36	40.36	13.45	13.45	16.22	16.22	2.28	2.28	7.79	6.11	163.59
60.0	60.0	4.00	43.55	43.55	14.52	14.52	17.64	17.64	2.26	2.26	8.55	6.71	149.04
60.0	60.0	4.30	45.78	45.78	15.26	15.26	18.66	18.66	2.24	2.24	9.10	7.15	139.94
60.0	60.0	4.50	47.20	47.20	15.73	15.73	19.31	19.31	2.23	2.23	9.47	7.43	134.55
60.0	60.0	4.80	49.21	49.21	16.40	16.40	20.27	20.27	2.22	2.22	10.00	7.85	127.34
60.0	60.0	5.00	50.49	50.49	16.83	16.83	20.88	20.88	2.21	2.21	10.36	8.13	123.02
72.0	72.0	2.50	53.99	53.99	15.00	15.00	17.55	17.55	2.82	2.82	6.79	5.33	187.65
72.0	72.0	2.60	55.82	55.82	15.51	15.51	18.17	18.17	2.82	2.82	7.04	5.53	180.87
72.0	72.0	2.90	61.18	61.18	16.99	16.99	20.01	20.01	2.80	2.80	7.80	6.12	163.35
72.0	72.0	3.00	62.91	62.91	17.48	17.48	20.62	20.62	2.80	2.80	8.05	6.32	158.29
72.0	72.0	3.20	66.32	66.32	18.42	18.42	21.80	21.80	2.79	2.79	8.54	6.71	149.13
72.0	72.0	3.60	72.85	72.85	20.24	20.24	24.11	24.11	2.77	2.77	9.52	7.47	133.88
72.0	72.0	4.00	79.02	79.02	21.95	21.95	26.32	26.32	2.75	2.75	10.47	8.22	121.70
72.0	72.0	4.30	83.41	83.41	23.17	23.17	27.92	27.92	2.73	2.73	11.17	8.77	114.07
72.0	72.0	4.50	86.23	86.23	23.95	23.95	28.96	28.96	2.72	2.72	11.63	9.13	109.56
72.0	72.0	4.80	90.30	90.30	25.08	25.08	30.48	30.48	2.71	2.71	12.31	9.66	103.50
72.0	72.0	5.00	92.91	92.91	25.81	25.81	31.47	31.47	2.70	2.70	12.76	10.01	99.87
80.0	80.0	2.50	75.14	75.14	18.79	18.79	21.89	21.89	3.15	3.15	7.59	5.96	167.86
80.0	80.0	2.60	77.74	77.74	19.44	19.44	22.68	22.68	3.14	3.14	7.88	6.18	161.76
80.0	80.0	2.90	85.36	85.36	21.34	21.34	25.01	25.01	3.13	3.13	8.73	6.85	145.98
80.0	80.0	3.00	87.84	87.84	21.96	21.96	25.78	25.78	3.12	3.12	9.01	7.07	141.42
80.0	80.0	3.20	92.71	92.71	23.18	23.18	27.29	27.29	3.11	3.11	9.57	7.51	133.17
80.0	80.0	3.60	102.10	102.10	25.53	25.53	30.23	30.23	3.09	3.09	10.67	8.37	119.42
80.0	80.0	4.00	111.04	111.04	27.76	27.76	33.07	33.07	3.07	3.07	11.75	9.22	108.44
80.0	80.0	4.30	117.44	117.44	29.36	29.36	35.13	35.13	3.06	3.06	12.54	9.85	101.56
80.0	80.0	4.50	121.57	121.57	30.39	30.39	36.48	36.48	3.05	3.05	13.07	10.26	97.48
80.0	80.0	4.80	127.57	127.57	31.89	31.89	38.45	38.45	3.04	3.04	13.84	10.87	92.02
80.0	80.0	5.00	131.43	131.43	32.86	32.86	39.73	39.73	3.03	3.03	14.36	11.27	88.74

Structural Applications

TECHNICAL DATA OF STEEL TUBES & PIPES
CONFORMING TO IS 4923 : 2001
COLD FOLDED SQUARE HOLLOW SECTION

Depth (mm)	Width (mm)	Thickness (mm)	Moment of Inertia (cm ⁴)		Elastic Modulus (cm ³)		Plastic Modulus (cm ³)		Radius of Gyration (cm)		Area (cm ²)	Weight (kg/m)	Mtrs/M.T
			X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis			
91.5	91.5	2.50	114.28	114.28	24.98	24.98	28.98	28.98	3.62	3.62	8.74	6.86	145.77
91.5	91.5	2.60	118.32	118.32	25.86	25.86	30.04	30.04	3.61	3.61	9.07	7.12	140.43
91.5	91.5	2.90	130.18	130.18	28.45	28.45	33.18	33.18	3.60	3.60	10.06	7.90	126.62
91.5	91.5	3.00	134.05	134.05	29.30	29.30	34.21	34.21	3.59	3.59	10.39	8.15	122.63
91.5	91.5	3.20	141.68	141.68	30.97	30.97	36.25	36.25	3.58	3.58	11.04	8.66	115.41
91.5	91.5	3.60	156.48	156.48	34.20	34.20	40.24	40.24	3.56	3.56	12.32	9.67	103.37
91.5	91.5	4.00	170.67	170.67	37.31	37.31	44.11	44.11	3.54	3.54	13.59	10.67	93.76
91.5	91.5	4.30	180.92	180.92	39.54	39.54	46.94	46.94	3.53	3.53	14.52	11.40	87.72
91.5	91.5	4.50	187.56	187.56	41.00	41.00	48.79	48.79	3.52	3.52	15.14	11.88	84.15
91.5	91.5	4.80	197.25	197.25	43.12	43.12	51.51	51.51	3.51	3.51	16.05	12.60	79.36
91.5	91.5	5.00	203.53	203.53	44.49	44.49	53.29	53.29	3.50	3.50	16.66	13.07	76.49
113.5	113.5	3.00	262.72	262.72	46.29	46.29	53.66	53.66	4.49	4.49	13.03	10.23	97.78
113.5	113.5	3.20	278.19	278.19	49.02	49.02	56.93	56.93	4.48	4.48	13.85	10.88	91.95
113.5	113.5	3.60	308.41	308.41	54.34	54.34	63.37	63.37	4.46	4.46	15.49	12.16	82.23
113.5	113.5	4.00	337.65	337.65	59.50	59.50	69.66	69.66	4.44	4.44	17.11	13.43	74.46
113.5	113.5	4.30	358.95	358.95	63.25	63.25	74.29	74.29	4.43	4.43	18.31	14.37	69.59
113.5	113.5	4.50	372.86	372.86	65.70	65.70	77.32	77.32	4.42	4.42	19.10	14.99	66.70
113.5	113.5	4.80	393.28	393.28	69.30	69.30	81.81	81.81	4.40	4.40	20.28	15.92	62.83
113.5	113.5	5.00	406.60	406.60	71.65	71.65	84.76	84.76	4.39	4.39	21.06	16.53	60.50
132.0	132.0	3.60	494.19	494.19	74.88	74.88	86.87	86.87	5.22	5.22	18.16	14.25	70.17
132.0	132.0	4.00	542.22	542.22	82.16	82.16	95.64	95.64	5.20	5.20	20.07	15.75	63.48
132.0	132.0	4.30	577.39	577.39	87.48	87.48	102.11	102.11	5.18	5.18	21.49	16.87	59.29
132.0	132.0	4.50</											

Structural Applications
IS 4923~ASTM A 500~AS 1163

TECHNICAL DATA OF STEEL TUBES & PIPES
CONFORMING TO IS 4923 ; 2001
COLD FOLDED RECTANGULAR HOLLOW SECTION

Depth (mm)	Width (mm)	Thickness (mm)	Moment of Inertia (cm ⁴)		Elastic Modulus (cm ³)		Plastic Modulus (cm ³)		Radius of Gyration (cm)		Area (cm ²)	Weight (kg/m)	Mtrs/M.T
			X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis			
40.0	25.0	1.80	4.41	2.11	2.20	1.69	2.75	1.98	1.44	1.00	2.13	1.67	598.97
40.0	25.0	2.00	4.77	2.28	2.39	1.82	2.99	2.16	1.43	0.99	2.34	1.83	545.14
40.0	25.0	2.30	5.27	2.51	2.64	2.00	3.34	2.40	1.41	0.97	2.64	2.07	482.18
40.0	25.0	2.50	5.57	2.64	2.79	2.11	3.56	2.56	1.40	0.96	2.84	2.23	448.75
40.0	25.0	2.80	5.99	2.83	2.99	2.26	3.87	2.77	1.38	0.95	3.12	2.45	407.76
40.0	25.0	3.00	6.24	2.94	3.12	2.35	4.06	2.90	1.37	0.94	3.31	2.60	385.12
40.0	25.0	3.20	6.46	3.04	3.23	2.43	4.24	3.03	1.36	0.93	3.49	2.74	365.41
40.0	25.0	3.60	6.86	3.20	3.43	2.56	4.57	3.26	1.34	0.91	3.83	3.00	332.85
50.0	25.0	1.80	7.72	2.60	3.09	2.08	3.90	2.40	1.76	1.02	2.49	1.95	512.26
50.0	25.0	2.00	8.38	2.81	3.35	2.25	4.26	2.62	1.75	1.01	2.74	2.15	465.47
50.0	25.0	2.30	9.31	3.10	3.72	2.48	4.78	2.92	1.73	1.00	3.10	2.44	410.68
50.0	25.0	2.50	9.89	3.28	3.95	2.62	5.10	3.12	1.72	0.99	3.34	2.62	381.55
50.0	25.0	2.80	10.68	3.52	4.27	2.82	5.57	3.39	1.70	0.98	3.68	2.89	345.78
50.0	25.0	3.00	11.17	3.67	4.47	2.93	5.86	3.56	1.69	0.97	3.91	3.07	325.99
50.0	25.0	3.20	11.63	3.80	4.65	3.04	6.14	3.73	1.68	0.96	4.13	3.24	308.73
50.0	25.0	3.60	12.44	4.04	4.98	3.23	6.66	4.03	1.65	0.94	4.55	3.57	280.15
60.0	40.0	1.80	16.85	9.01	5.62	4.50	6.81	5.15	2.23	1.63	3.39	2.66	376.13
60.0	40.0	2.00	18.41	9.83	6.14	4.92	7.47	5.65	2.22	1.62	3.74	2.93	340.90
60.0	40.0	2.30	20.65	11.00	6.88	5.50	8.43	6.38	2.20	1.61	4.25	3.34	299.60
60.0	40.0	2.50	22.07	11.74	7.36	5.87	9.06	6.84	2.19	1.60	4.59	3.60	277.61
60.0	40.0	2.80	24.10	12.78	8.03	6.39	9.95	7.51	2.18	1.59	5.08	3.99	250.56
60.0	40.0	3.00	25.38	13.44	8.46	6.72	10.53	7.94	2.17	1.58	5.41	4.25	235.56
60.0	40.0	3.20	26.60	14.07	8.87	7.03	11.09	8.36	2.16	1.57	5.73	4.50	222.47
60.0	40.0	3.60	28.90	15.23	9.63	7.62	12.16	9.15	2.13	1.55	6.35	4.98	200.70
66.0	33.0	1.80	18.64	6.33	5.65	3.84	7.04	4.35	2.36	1.37	3.35	2.63	380.17
66.0	33.0	2.00	20.37	6.90	6.17	4.18	7.73	4.77	2.35	1.37	3.70	2.90	344.59
66.0	33.0	2.30	22.83	7.69	6.92	4.66	8.73	5.37	2.33	1.35	4.21	3.30	302.88
66.0	33.0	2.50	24.39	8.19	7.39	4.97	9.37	5.75	2.32	1.34	4.54	3.56	280.67
66.0	33.0	2.80	26.62	8.90	8.07	5.39	10.29	6.31	2.30	1.33	5.03	3.95	253.35
66.0	33.0	3.00	28.02	9.34	8.49	5.66	10.88	6.66	2.29	1.32	5.35	4.20	238.21
66.0	33.0	3.20	29.36	9.75	8.90	5.91	11.46	7.01	2.28	1.31	5.66	4.44	224.98
66.0	33.0	3.60	31.87	10.52	9.66	6.37	12.56	7.65	2.25	1.29	6.28	4.93	203.00
70.0	30.0	2.50	26.62	6.95	7.60	4.63	9.79	5.36	2.41	1.23	4.59	3.60	277.61
70.0	30.0	2.80	29.04	7.53	8.30	5.02	10.75	5.87	2.39	1.22	5.08	3.99	250.56
70.0	30.0	3.00	30.57	7.90	8.73	5.26	11.37	6.20	2.38	1.21	5.41	4.25	235.56
70.0	30.0	3.20	32.03	8.24	9.15	5.49	11.98	6.51	2.37	1.20	5.73	4.50	222.47
70.0	30.0	3.60	34.76	8.87	9.93	5.91	13.12	7.11	2.34	1.18	6.35	4.98	200.70
70.0	30.0	4.00	37.22	9.42	10.64	6.28	14.19	7.66	2.31	1.16	6.95	5.45	183.37
70.0	30.0	4.30	38.91	9.78	11.12	6.52	14.95	8.04	2.30	1.15	7.38	5.80	172.53
70.0	30.0	4.50	39.95	10.01	11.41	6.67	15.43	8.29	2.28	1.14	7.67	6.02	166.14
75.0	25.0	2.50	28.51	4.87	7.60	3.89	10.06	4.52	2.49	1.03	4.59	3.60	277.61
75.0	25.0	2.80	31.09	5.25	8.29	4.20	11.05	4.95	2.47	1.02	5.08	3.99	250.56
75.0	25.0	3.00	32.71	5.49	8.72	4.39	11.68	5.21	2.46	1.01	5.41	4.25	235.56
75.0	25.0	3.20	34.26	5.72	9.14	4.57	12.30	5.47	2.45	1.00	5.73	4.50	222.47
75.0	25.0	3.60	37.13	6.12	9.90	4.89	13.47	5.95	2.42	0.98	6.35	4.98	200.70
75.0	25.0	4.00	39.72	6.46	10.59	5.17	14.56	6.39	2.39	0.96	6.95	5.45	183.37
75.0	25.0	4.30	41.47	6.68	11.06	5.35	15.33	6.70	2.37	0.95	7.38	5.80	172.53
75.0	25.0	4.50	42.55	6.81	11.35	5.45	15.82	6.89	2.36	0.94	7.67	6.02	166.14
80.0	40.0	2.50	45.10	15.26	11.28	7.63	14.14	8.72	2.84	1.65	5.59	4.39	227.94
80.0	40.0	2.80	49.46	16.66	12.36	8.33	15.60	9.60	2.82	1.64	6.20	4.87	205.33
80.0	40.0	3.00	52.25	17.55	13.06	8.78	16.54	10.16	2.81	1.63	6.61	5.19	192.79
80.0	40.0	3.20	54.94	18.41	13.73	9.21	17.46	10.71	2.80	1.62	7.01	5.50	181.82
80.0	40.0	3.60	60.04	20.02	15.01	10.01	19.23	11.77	2.78	1.60	7.79	6.11	163.59
80.0	40.0	4.00	64.78	21.48	16.20	10.74	20.91	12.77	2.75	1.59	8.55	6.71	149.04
80.0	40.0	4.30	68.11	22.50	17.03	11.25	22.11	13.49	2.74	1.57	9.10	7.15	139.94
80.0	40.0	4.50	70.21	23.14	17.55	11.57	22.89	13.94	2.72	1.56	9.47	7.43	134.55

Structural Applications

TECHNICAL DATA OF STEEL TUBES & PIPES
CONFORMING TO IS 4923 ; 2001
COLD FOLDED RECTANGULAR HOLLOW SECTION

Depth (mm)	Width (mm)	Thickness (mm)	Moment of Inertia (cm ⁴)		Elastic Modulus (cm ³)		Plastic Modulus (cm ³)		Radius of Gyration (cm)		Area (cm ²)	Weight (kg/m)	Mtrs/M.T
			X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis	X-X Axis	Y-Y Axis			
96.0	48.0	3.20	98.60	33.28	20.54	13.87	25.85	15.91	3.40	1.97	8.54	6.71	149.13
96.0	48.0	3.60	108.34	36.40	22.57	15.17	28.58	17.56	3.37	1.96	9.52	7.47	133.88
96.0	48.0	4.00	117.53	39.32	24.49	16.38	31.20	19.14	3.35	1.94	10.47	8.22	121.70
96.0	48.0	4.30	124.08	41.37	25.85	17.24	33.10	20.27	3.33	1.92	11.17	8.77	114.07
96.0	48.0	4.50	128.28	42.68	26.73	17.78	34.33	21.01	3.32	1.92	11.63	9.13	109.56
100.0	50.0	3.50	120.75	40.68	24.15	16.27	30.46	18.74	3.53	2.05	9.69	7.61	131.41
100.0	50.0	3.60	123.50	41.56	24.70	16.63	31.20	19.19	3.52	2.04	9.95	7.81	128.06
100.0	50.0	4.00	134.12	44.95	26.82	17.98	34.10	20.93	3.50	2.03	10.95	8.59	116.37
100.0	50.0	4.30	141.71	47.34	28.34	18.94	36.19	22.18	3.48	2.01	11.68	9.17	109.03
100.0	50.0	4.50	146.59	48.87	29.32	19.55	37.55	23.00	3.47	2.00	12.17	9.55	104.70
122.0	61.0	3.50	227.16	77.05	37.24	25.26	46.54	28.71	4.35	2.53	12.00	9.42	106.12
122.0	61.0	3.60	232.59	78.82	38.13	25.84	47.71	29.42	4.34	2.53	12.32	9.67	103.37
122.0	61.0	4.00	253.74	85.69	41.60	28.09	52.30	32.21	4.32	2.51	13.59	10.67	93.76
122.0	61.0	4.30	269.01	90.61	44.10	29.71	55.65	34.23	4.30	2.50	14.52	11.40	87.72
122.0	61.0	4.50	278.91	93.78	45.72	30.75	57.84	35.55	4.29	2.49	15.14	11.88	84.15
122.0	61.0	3.50	227.16	77.05	37.24	25.26	46.54	28.71	4.35	2.53	12.00	9.42	106.12
122.0	61.0	3.60	232.59	78.82	38.13	25.84	47.71	29.42	4.34	2.53	12.32	9.67	103.37
122.0	61.0	4.00	253.74	85.69	41.60	28.09	52.30	32.21	4.32	2.51	13.59	10.67	93.76
122.0	61.0	4.30	269.01	90.61	44.10	29.71	55.65	34.23	4.30	2.50	14.52	11.40	87.72
122.0	61.0	4.50	278.91	93.78	45.72	30.75	57.84	35.55	4.29	2.49	15.14	11.88	84.15
122.0	61.0	5.00	302.72	101.34	49.63	33.23	63.17	38.76	4.26	2.47	16.66	13.07	76.49
145.0	82.0	3.50	424.38	175.94	58.53	42.91	71.67	48.41	5.30	3.42	15.08	11.84	84.45
145.0	82.0	3.60	434.93	180.22	59.99	43.96	73.52	49.65	5.30	3.41	15.49	12.16	82.23
145.0	82.0	4.00	476.32	196.93	65.70	48.03	80.82	54.53	5.28	3.39	17.11	13.43	74.46
145.0	82.0	4.30	506.49	209.05	69.86	50.99	86.19	58.11	5.26	3.38	18.31	14.37	69.59
145.0	82.0	4.50	526.19	216.94	72.58	52.91	89.72	60.46	5.25	3.37	19.10	14.99	66.70
145.0	82.0	5.00	574.00	236.00	79.17	57.56	98.35	66.20	5.22	3.35	21.06	16.53	60.50
172.0	92.0	3.50	696.21	265.21	80.95	57.65	99.20	64.49	6.28	3.87			

Structural Applications

Structural Applications EN39

TECHNICAL DATA OF STEEL TUBES & PIPES AS PER EN 39 : 2001

Depth	Width	Thickness		Moment of Inertia (mm ⁴) Specified	Elastic Modulus (cm ³) (Kg / Mtr) Specified
		Min.(mm)	Max.(mm)		
Type - 3	48.3	47.8	48.8	3.2	3.56
Type - 4	48.3	47.8	48.8	4.0	4.37

- Straightness** : Max. deviation does not exceed 0.002 x length
Thickness : - 10%
Free bore test : The inside diameter shall allow insertion of a gauge of diameter 37.7 mm for a length on 200 mm

■ Firefighting & HVAC Applications
IS 3589

TECHNICAL DATA OF STEEL TUBES &
PIPES CONFORMING TO IS 3589:2001

Nominal Bore		Outside Diameter		Wall Thickness		Weight of Black Pipes Plain End		
(mm)	(Inch)	(mm)	(Inch)	(mm)	(Inch)	(Kg/m)	(Mtr/ton)	(ft/ton)
150	6	168.3	6.626	4.00	0.157	16.207	62	202
				4.50	0.177	18.177	55	181
				4.85	0.191	18.549	51	168
				5.00	0.197	20.135	50	163
				5.40	0.213	21.692	46	151
				5.50	0.217	22.081	45	149
				6.00	0.236	24.014	42	137
				6.35	0.250	25.360	39	129
				7.00	0.276	27.844	36	118
200	8	219.1	8.626	4.00	0.157	21.217	47	155
				4.50	0.177	23.814	42	138
				4.85	0.191	25.625	39	128
				5.00	0.197	26.399	38	124
				5.40	0.213	28.457	35	115
				5.50	0.217	28.971	35	113
				6.00	0.236	31.530	32	104
				6.35	0.250	33.315	30	98
				7.00	0.276	36.613	27	90
				7.50	0.295	39.135	26	84
				8.00	0.315	41.646	24	79
				9.00	0.354	46.630	21	70
				9.50	0.374	49.103	20	67
				10.0	0.394	51.564	19	64
				10.5	0.413	54.013	19	61
250	10	273.0	10.748	4.00	0.157	26.534	38	124
				4.50	0.177	29.795	34	110
				4.85	0.191	32.071	31	102
				5.00	0.197	33.044	30	99
				5.40	0.213	35.635	28	92
				5.50	0.217	36.281	28	90
				6.00	0.236	39.505	25	83
				6.35	0.250	41.755	24	79
				7.00	0.276	45.917	22	71
				7.50	0.295	49.104	20	67
				8.00	0.315	52.279	19	63
				9.00	0.354	58.592	17	56
				9.50	0.374	61.730	16	53
				10.0	0.394	64.856	15	51
				10.5	0.413	67.969	15	48
300	12	323.9	12.752	4.00	0.157	31.555	32	104
				4.50	0.177	35.444	28	93
				4.85	0.191	38.159	26	86
				5.00	0.197	39.320	25	83
				5.40	0.213	42.413	24	77
				5.50	0.217	43.185	23	76
				6.00	0.236	47.036	21	70
				6.35	0.250	49.725	20	66
				7.00	0.276	54.703	18	60
				7.50	0.295	58.518	17	56
				8.00	0.315	62.321	16	53
				9.00	0.354	69.889	14	47
				9.50	0.374	73.654	14	45
				10.0	0.394	77.408	13	42
				10.5	0.413	81.149	12	40

■ Firefighting & HVAC Applications

TECHNICAL DATA OF STEEL TUBES &
PIPES CONFORMING TO IS 3589:2001

Nominal Bore		Outside Diameter		Wall Thickness		Weight of Black Pipes Plain End		
(mm)	(Inch)	(mm)	(Inch)	(mm)	(Inch)	(Kg/m)	(Mtr/ton)	(ft/ton)
350	14	355.6	14.000	4.00	0.157	34.682	29	95
				4.50	0.177	38.962	26	84
				4.85	0.191	41.950	24	78
				5.00	0.197	43.229	23	76
				5.40	0.213	46.634	21	70
				5.50	0.217	47.484	21	69
				6.00	0.236	51.727	19	63
				6.35	0.250	54.689	18	60
				7.00	0.276	60.175	17	55
				7.50	0.295	64.381	16	51
				8.00	0.315	68.575	15	48
				9.00	0.354	76.924	13	43
400	16	406.4	16.020	9.50	0.374	81.081	12	40
				10.0	0.394	85.225	12	38
				10.50	0.413	89.357	11	37
				4.00	0.157	39.742	25	83
				4.50	0.177	44.654	22	73
				4.85	0.191	48.086	21	68
				5.00	0.197	49.554	20	66
				5.40	0.213	53.465	19	61
				5.50	0.217	54.442	18	60
				6.00	0.236	59.317	17	55
				6.35	0.250	62.723	16	52
				7.00	0.276	69.031	14	48
7.50	0.295	73.869	14	44				
8.00	0.315	78.695	13	42				
9.00	0.354	88.310	11	37				
9.50	0.374	93.099	11	35				
10.0	0.394	97.876	10	34				
10.5	0.413	102.640	10	32				

Tolerances:

Outside Diameter : ± 0.75%

Thickness : ± 10%

Weight : 10M T & Above ± 7.5%

Random Length : 4 Mtrs. to 7 Mtrs./for specific length, ± 100 mm



Firefighting & HVAC Applications

Firefighting & HVAC Applications ASTM A795

ASTM A795 GRADE A & B (BLACK & GALVANIZED STEEL PIPES)

Nominal Bore		Outside Diameter		SCH 10				No of Pcs / Bundle
				Wall Thickness		Weight Plain End		
mm	Inch	mm	Inch	mm	Inch	kg/Mtr	lbs /Ft	
20	¾	26.7	1.051	2.11	0.083	1.28	0.96	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	60
32	1 ¼	42.2	1.661	2.77	0.109	2.69	1.81	42
40	1 ½	48.3	1.902	2.77	0.109	3.11	2.09	36
50	2	60.3	2.374	2.77	0.109	3.93	2.64	26
65	2 ½	73.0	2.874	3.05	0.120	5.26	3.53	18
80	3	88.9	3.500	3.05	0.120	6.46	4.34	14
90	3 ½	101.6	4.000	3.05	0.120	7.41	4.98	12
100	4	114.3	4.500	3.05	0.120	8.37	5.62	10
125	5	141.3	5.563	3.40	0.134	11.58	7.78	8
150	6	168.3	6.626	3.40	0.134	13.85	9.30	7
200	8	219.1	8.625	4.78	0.188	25.26	16.96	5
250	10	273.0	10.74	4.78	0.188	31.62	21.23	-

Nominal Bore		Outside Diameter		SCH 30 & SCH 40				No of Pcs / Bundle
				Wall Thickness		Weight Plain End		
mm	Inch	mm	Inch	mm	Inch	kg/Mtr	lbs /Ft	
15	½	21.3	0.840	2.77	0.109	1.27	0.85	110
20	¾	26.7	1.050	2.87	0.113	1.69	1.13	90
25	1	33.4	1.315	3.38	0.133	2.50	1.68	60
32	1 ¼	42.2	1.660	3.56	0.140	3.39	2.27	42
40	1 ½	48.3	1.900	3.68	0.145	4.05	2.72	36
50	2	60.3	2.375	3.91	0.154	5.44	3.66	26
65	2 ½	73.0	2.875	5.16	0.203	8.64	5.80	18
80	3	88.9	3.500	5.49	0.216	11.29	7.58	14
90	3 ½	101.6	4.000	5.74	0.226	13.58	9.12	12
100	4	114.3	4.500	6.02	0.237	16.09	10.80	10
125	5	141.3	5.563	6.55	0.258	21.79	14.63	8
150	6	168.3	6.625	7.11	0.280	28.29	18.99	6
200	8	219.1	8.625	7.04	0.277	36.82	24.72	5
250	10	273.1	10.750	7.80	0.307	51.05	34.27	--

ASTM A135 ASTM A135 GRADE A & B (BLACK & GALVANIZED STEEL PIPES)

Nominal Bore		Outside Diameter		SCH 10				No of Pcs / Bundle
				Wall Thickness		Weight Plain End		
mm	Inch	mm	Inch	mm	Inch	kg/Mtr	lbs /Ft	
20	¾	26.7	1.051	2.11	0.083	1.28	0.96	90
25	1	33.4	1.315	2.77	0.109	2.09	1.41	60
32	1 ¼	42.2	1.661	2.77	0.109	2.69	1.81	61
40	1 ½	48.3	1.902	2.77	0.109	3.11	2.09	61
50	2	60.3	2.374	2.77	0.109	3.93	2.64	37
65	2 ½	73.0	2.874	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 ½	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	5.560	3.40	0.134	11.58	7.78	14

Tolerances:

- Outside Diameter** : All Size, ± 1%
- Thickness** : - 12.5% (Max.)
- Weight** : ± 10%



Firefighting & HVAC Applications GROOVED PIPES

Standard Groove Specifications

Standard Roll Groove specifications for Steel and other IPS Pipe*

Roll grooving removes no metal, cold forming a groove by the action of an upper male roll being forced into pipe as it is rotated by a lower female drive roll.

Roll groove configuration has rounded edges which reduce the available pipe end movement (expansion, contraction and deflection).

Note : Coatings applied to the interior surfaces, including bolt pad mating surfaces, of our grooved and bolted plain end couplings should not exceed 0.010"/0.25 mm. Also, the coating thickness applied to the gasket seating surface and within the groove on the pipe exterior should not exceed 0.010"/0.25 mm.

1 Nominal Size Inches/mm	2 Dimensions = Inches/millimeters									
	2 Pipe Outside Dia. O. D.			3 Gasket Seat - A ± 0.03 ± 0.76	4 Grv Width -B ± 0.03 ± 0.76	5 Groove Dia - C		6 Groove Depth D (ref)	7 Min. Allow. Wall Thk. T	8 Max. Allow. Flare Dia.
	Tolerance					Basic	Toi. + 0.000 + 0.00			
	Basic	+	-							
1 25	1.315 33.7	0.013 0.33	0.013 0.33	0.625 15.88	0.281 7.14	1.190 30.23	-0.015 -0.38	0.063 1.60	0.065 1.65	1.43 36.3
1 ¼ 32	1.660 42.4	0.016 0.41	0.016 0.41	0.625 15.88	0.281 7.14	1.535 38.99	-0.015 -0.38	0.063 1.60	0.065 1.65	1.77 45.0
1 ½ 40	1.900 48.3	0.019 0.48	0.019 0.48	0.625 15.88	0.281 7.14	1.775 45.09	-0.015 -0.38	0.063 1.60	0.065 1.65	2.01 51.1
2 50	2.375 60.3	0.024 0.61	0.024 0.61	0.625 15.88	0.344 8.74	2.250 57.15	-0.015 -0.038	0.063 1.60	0.065 1.65	2.48 63.0
2 ½ 65	2.875 73.0	0.029 0.74	0.029 0.74	0.625 15.88	0.344 8.74	2.720 69.09	-0.018 -0.46	0.078 1.98	0.083 2.11	2.98 75.7
76.1mm	3.000 76.1	0.030 0.76	0.030 0.76	0.625 15.88	0.344 8.74	2.845 72.26	-0.018 -0.46	0.078 1.98	0.083 2.11	3.10 78.7
3 80	3.500 88.9	0.035 0.89	0.031 0.89	0.625 15.88	0.344 8.74	3.344 84.94	-0.018 -0.46	0.078 1.98	0.083 2.11	3.60 91.4
3 ½ 90	4.000 101.6	0.040 1.02	0.031 0.79	0.625 15.88	0.344 8.74	3.834 97.38	-0.020 -0.51	0.083 2.11	0.083 2.11	4.10 104.1
4 100	4.500 114.3	0.045 1.14	0.031 0.79	0.625 15.88	0.344 8.74	4.334 110.08	-0.020 -0.51	0.083 2.11	0.083 2.11	4.60 116.8
108.0mm	4.250 108.0	0.043 1.09	0.031 0.79	0.625 15.88	0.344 8.74	4.084 103.73	-0.020 -0.51	0.083 2.11	0.083 2.11	4.35 110.5
4 ½ 120	5.000 127.0	0.050 1.27	0.031 0.79	0.625 15.88	0.344 8.74	3.834 122.78	-0.020 -0.51	0.083 2.11	0.095 2.41	5.10 129.5
133.0mm	5.250 133.0	0.053 1.35	0.031 0.79	0.625 15.88	0.344 8.74	5.084 129.13	-0.020 -0.51	0.083 2.11	0.109 2.77	5.35 135.9
139.7mm	5.500 139.7	0.056 1.42	0.031 0.79	0.625 15.88	0.344 8.74	5.334 135.48	-0.020 -0.51	0.083 2.11	0.109 2.77	5.60 142.2
5 125	5.563 141.3	0.056 1.42	0.031 0.79	0.625 15.88	0.344 8.74	5.395 137.03	-0.022 -0.56	0.084 2.13	0.109 2.77	5.66 143.8
152.4mm	6.000 152.4	0.056 1.42	0.031 0.79	0.625 15.88	0.344 8.74	5.830 148.08	-0.022 -0.56	0.085 2.16	0.109 2.77	6.10 154.9
159.0mm	6.250 159.0	0.063 1.60	0.031 0.79	0.625 15.88	0.344 8.74	6.032 153.21	-0.030 -0.76	0.109 2.77	0.109 2.77	6.35 161.3
165.1mm	6.500 165.1	0.063 1.60	0.031 0.79	0.625 15.88	0.344 8.74	6.330 160.78	-0.022 -0.56	0.85 2.16	0.109 2.77	6.60 167.6
6 150	6.625 168.3	0.063 1.60	0.031 0.79	0.625 15.88	0.344 8.74	6.455 163.96	-0.022 -0.56	0.85 2.16	0.109 2.77	6.73 170.9

Firefighting & HVAC Applications GROOVED PIPES

Standard Groove Specifications

1 Nominal Size Inches/mm	2 Dimensions = Inches/millimeters									
	2 Pipe Outside Dia. O. D.			3 Gasket Seat - A ± 0.03 ± 0.76	4 Grv Width -B ± 0.03 ± 0.76	5 Groove Dia - C		6 Groove Depth D (ref)	7 Min. Allow. Wall Thk. T	8 Max. Allow. Flare Dia.
	Tolerance					Basic	Toi. + 0.000 + 0.00			
	Basic	+	-							
203.2mm	8.000 203.2	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	7.816 198.53	-0.025 -0.64	0.092 2.34	0.109 2.77	8.17 207.5
8 200	8.625 219.1	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	8.441 214.40	-0.025 -0.64	0.092 2.34	0.109 2.77	8.80 223.5
254.0mm	10.000 254.0	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	9.812 249.23	-0.027 -0.69	0.094 2.39	0.134 3.40	10.17 258.3
10 250	10.750 273.0	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	10.562 268.28	-0.027 -0.69	0.094 2.39	0.134 3.40	10.92 277.4
304.8mm	12.000 340.8	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	11.781 299.24	-0.030 -0.76	0.109 2.77	0.156 3.96	12.17 309.1
12 300	12.750 323.9	0.063 1.60	0.031 0.79	0.750 19.05	0.469 11.91	12.531 318.29	-0.030 -0.76	0.109 2.77	0.156 3.96	12.92 328.2

*On roll grooved pipe, Allowable cap End Separation and Deflection from Centerline will be ½ values listed for cut grooved pipe

COLUMN 1 : Nominal IPS Pipes size

COLUMN 2 : IPS outside diameter

COLUMN 3 : Gasket seat

COLUMN 4 : Groove width

COLUMN 5 : Groove outside diameter

COLUMN 6 : Groove depth

COLUMN 7 : Minimum allowable wall thickness

COLUMN 8 : Maximum allowable pipe end flare diameter



Steel Tubular Pole



General Engineering Applications IS 9295~AS1143

ERW STEEL TUBES FOR IDLERS AND BELT CONVEYORS CONFORMING TO IS 9295 : 1983 DIMENSION AND NOMINAL MASSES

Outside Dia. (mm)	Thickness (mm)	Mass (kg/m)	Mtr / ton
63.50	3.65	5.39	186
	4.05	5.87	170
	4.50	6.55	153
76.10	3.65	6.52	153
	4.05	7.20	139
	4.50	7.95	126
88.90	4.05	8.47	118
	4.50	9.36	107
	4.85	10.05	99
	5.40	11.12	90
	6.30	12.83	78
101.60	4.05	9.74	103
	4.50	10.78	93
	4.85	11.57	86
	5.40	12.81	78
	6.30	14.81	68
114.30	4.50	12.19	82
	4.85	13.09	76
	5.40	14.50	69
	6.30	16.78	60
127.0	4.50	13.60	74
	4.85	14.61	68
	5.40	16.19	62
	6.30	18.75	53

Outside Dia. (mm)	Thickness (mm)	Mass (kg/m)	Mtr / ton
139.70	4.50	15.00	67
	4.85	16.13	62
	5.40	17.80	56
	6.30	22.72	44
152.4	4.50	16.41	61
	4.85	17.64	57
	5.40	19.57	51
	6.30	22.69	44
159.0	4.50	17.10	58
	4.85	18.44	54
	5.40	20.46	49
	6.30	23.72	42
165.10	4.50	17.80	56
	4.85	19.17	52
	5.40	21.27	47
	6.30	24.67	41
168.30	4.50	18.20	55
	4.85	19.55	51
	5.40	21.69	46
	6.30	25.17	40
193.70	5.40	25.10	40
	6.30	29.12	34
	7.10	33.67	30
219.10	5.40	28.50	35
	6.30	33.06	30
	7.10	37.12	27

Tolerance:

- 1. Outside Diameter ± 0.8%
- 2. Ovality below 168.3 mm 0.5 mm
- 3. Ovality including 168.3 mm and above 1.0 mm
- 4. Weight Kg/Mtr : Single tube ± 10%
- 5. For truck load of ten ton ± 7.5%
- 6. Thickness ± 10%

Swaged Type Steel Tubular Poles
Conforming to IS : 2713/80

Designation	Overall Length	Planting Depth	Load Applied from Top at a Distance of	Height above ground H	Length of Sections			Outside diameter and Thickness of sections			Approx Weight of Pole	Breaking Load	Crippling Load	Working Load		Load for Permanent Set not Exceeding	Load for Temporary Deflection of
					Bottom h 3	Middle h 2	Top h 1	Bottom	Middle	Top				Col 14	Col 13		
														2	2.5		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(m)	(m)	(m)	(m)	(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))
410 SP-1	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	62	2570 (262)	1820 (186)	912 (93)	1013 (105)	1245 (127)	785 (80)
410 SP-2	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	73	3100 (316)	2240 (1224)	1100 (112)	1240 (126)	1510 (154)	941 (96)
410 SP-3	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 5.40	88.9 x 3.25	76.1 x 3.25	85	3630 (370)	2580 (263)	1280 (131)	1450 (148)	1760 (180)	1000 (111)
410 SP-4	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	67	2350 (240)	1670 (170)	1320 (135)	941 (96)	1150 (117)	627 (64)
410 SP-5	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	79	2760 (281)	1960 (200)	981 (100)	1100 (112)	1340 (137)	745 (76)
410 SP-6	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	93	3320 (339)	2360 (241)	1180 (120)	1330 (136)	1620 (165)	873 (89)
410 SP-7	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	97	4330 (442)	3080 (314)	1540 (157)	1740 (177)	2110 (215)	1400 (143)
410 SP-8	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	103	4630 (472)	3280 (335)	1650 (168)	1850 (189)	2250 (229)	1480 (151)
410 SP-9	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	110	5100 (520)	3620 (369)	1810 (185)	2040 (208)	2480 (253)	1600 (163)
410 SP-10	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	70	2260 (230)	1600 (163)	804 (82)	902 (92)	1100 (112)	520 (53)
410 SP-11	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	83	2730 (278)	1930 (197)	971 (99)	1090 (111)	1320 (117)	618 (63)
410 SP-12	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	97	3190 (325)	2270 (231)	1130 (115)	1270 (130)	1550 (158)	725 (74)
410 SP-13	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	101	4160 (424)	2950 (301)	1480 (151)	1670 (170)	2020 (206)	1180 (120)
410 SP-14	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 4.85	114.3 x 4.50	88.9 x 3.25	111	4440 (453)	3160 (322)	1580 (161)	1770 (181)	2160 (220)	1280 (131)
410 SP-15	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	119	4890 (499)	3470 (314)	1740 (177)	1960 (200)	2380 (243)	1380 (140)
410 SP-16	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	75	2090 (213)	1480 (151)	754 (76)	834 (85)	1020 (112)	432 (44)
410 SP-17	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	89	2520 (257)	1790 (182)	893 (91)	1010 (103)	1230 (125)	510 (52)
410 SP-18	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	104	2950 (301)	2100 (214)	1050 (107)	1180 (120)	1430 (146)	598 (61)
410 SP-19	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	109	3844 (392)	2730 (278)	1360 (139)	1540 (157)	1800 (191)	961 (98)
410 SP-20	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	115	4110 (419)	2910 (297)	1460 (149)	1650 (168)	2000 (204)	1010 (103)
410 SP-21	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	129	4530 (462)	3220 (328)	1620 (164)	1810 (185)	2210 (225)	1130 (115)
410 SP-22	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	141	5450 (556)	3870 (395)	1930 (197)	2180 (222)	2650 (270)	1730 (176)
410 SP-23	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	148	5840 (596)	4150 (423)	2080 (212)	2330 (238)	2840 (290)	1820 (186)
410 SP-24	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	158	6450 (658)	4580 (467)	2340 (234)	2579 (263)	3140 (320)	1970 (201)
410 SP-25	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	78	1940 (198)	1380 (141)	686 (70)	775 (79)	941 (96)	333 (34)
410 SP-26	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 4.50	88.9 x 3.25	76.1 x 3.25	92	2340 (239)	1670 (170)	834 (85)	941 (96)	1140 (116)	402 (41)
410 SP-27	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 5.40	88.9 x 3.25	76.1 x 3.25	108	2750 (280)	1950 (199)	971 (99)	1100 (112)	1330 (136)	461 (47)
410 SP-28	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	113	3580 (365)	2540 (259)	1270 (130)	1430 (146)	1740 (177)	745 (78)
410 SP-29	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	125	3820 (390)	2720 (277)	1350 (138)	1530 (156)	1860 (190)	814 (83)
410 SP-30	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	133	4220 (430)	2990 (305)	1500 (153)	1690 (172)	2050 (209)	882 (90)
410 SP-31	9.00	1.50	0.30	7.50	5.00	2.00	2.00	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	147	5070 (517)	3600 (367)	1800 (184)	2030 (207)	2460 (251)	1360 (139)
410 SP-32	9.00	1.50	0.30	7.50	5.00	2.00	2.00	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	154	5430 (554)	3850 (393)	1930 (197)	2180 (222)	2640 (269)	1430 (146)
410 SP-33	9.00	1.50	0.30	7.50	5.00	2.00	2.00	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	164	6000 (612)	4270 (435)	2130 (217)	2410 (245)	2910 (297)	1540 (157)
410 SP-34	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	122	3630 (370)	2580 (263)	1280 (131)	1450 (148)	1760 (180)	745 (76)
410 SP-35	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	129	3880 (396)	2760 (281)	1390 (142)	1550 (158)	1880 (192)	784 (80)
410 SP-36	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	137	4280 (436)	3040 (310)	1520 (155)	1710 (174)	2080 (212)	833 (85)
410 SP-37	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	153	5150 (525)	3660 (373)	1820 (186)	2060 (210)	2500 (255)	1300 (133)
410 SP-38	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	160	5510 (582)	3910 (399)	1960 (200)	2210 (225)	2680 (273)	1370 (140)
410 SP-39	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	170	6090 (621)	4320 (441)	2160 (220)	2430 (248)	2960 (302)	1480 (151)
410 SP-40	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	128	3390 (370)	2580 (346)	1210 (123)	1350 (138)	1650 (168)	608 (62)
410 SP-41	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	135	3630 (370)	2580 (263)	1280 (131)	1450 (148)	1760 (180)	637 (65)
410 SP-42	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	144	3990 (407)	2830 (289)	1410 (144)	1600 (163)	1940 (198)	677 (69)
410 SP-43	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	160	4810 (490)	3410 (348)	1710 (174)	1920 (196)	2330 (238)	1060 (108)
410 SP-44	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	168	5150 (525)	3660 (373)	1820 (186)	2060 (210)	2500 (255)	1120 (114)
410 SP-45	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	178	5690 (580)	4040 (412)	2020 (206)	2280 (232)	2760 (282)	1200 (122)
410 SP-46	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 4.85	165.1 x 4.50	139.7 x 4.50	208	7210 (735)	5120 (522)	2560 (261)	2880 (294)	3500 (357)	1850 (189)
410 SP-47	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 4.85	165.1 x 4.50	139.7 x 4.50	221	7910 (807)	5620 (573)	2800 (286)	3170 (323)	3840 (392)	1990 (203)
410 SP-48	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 4.85	165.1 x 4.50	139.7 x 4.50	233	8620 (879)	6120 (624)	3060 (312)	3450 (352)	4190 (427)	2110 (215)

Swaged Type Steel Tubular Poles
Conforming to IS : 2713/80

Designation	Overall Length	Planting Depth	Load Applied from Top at a Distance of	Height above ground H	Length of Sections			Outside diameter and Thickness of sections			Approx. Weight of Pole	Breaking Load	Crippling Load	Working Load		Load for Permanent Set not Exceeding	Load for Temporary Deflection of
					Bottom h 3	Middle h 2	Top h 1	Bottom	Middle	Top				Col 14	Col 13		
														2	2.5		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(m)	(m)	(m)	(m)	(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))	(N(kgf))
410 SP-49	11.00	1.80	0.60	9.20	5.80	2.70	2.70	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	140	3000 (306)	2130 (217)	1070 (109)	1200 (122)	1460 (149)	412 (42)
410 SP-50	11.00	1.80	0.60	9.20	5.80	2.70	2.70	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	147	3210 (327)	2280 (232)	1140 (116)	1280 (131)	1560 (159)	431 (44)
410 SP-51	11.00	1.80	0.60	9.20	5.80	2.70	2.70	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	164	3530 (360)	2510 (256)	1260 (128)	1410 (144)	1720 (175)	480 (49)
410 SP-52	11.00	1.80	0.60	9.20	5.80	2.70	2.70	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	175	4250 (433)	3010 (307)	1510 (154)	1700 (173)	2060 (210)	726 (74)
410 SP-53	11.00	1.80	0.60	9.20	5.80												



Swaged Type Steel Tubular Poles As Per IS:2713/80

Designation	Overall Length (m)	Planting Depth (m)	Load Applied from Top (m)	Height above ground (m)	Length of Sections			Outside diameter and Thickness of sections			Approx Weight of Pole (Kg)	Breaking Load (N(Kgf))	Crippling Load (N(Kgf))	Working Load		Load for Permanent Set not Exceeding 13 mm (N(Kgf))	Load for Temporary Deflection of 157.5 mm (N(Kgf))
					Bottom h3 (m)	Middle h2 (m)	Top h1 (m)	Bottom (m)	Middle (m)	Top (m)				Col 14 2 N(Kgf)	Col 13 2.5 N(Kgf)		
540-SP-01	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	62	3360 (343)	2390 (244)	1200 (122)	1340 (137)	1640 (167)	785 (80)
540-SP-02	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	73	4060 (414)	2880 (294)	1440 (147)	1630 (166)	1970 (201)	941 (96)
540-SP-03	7.00	1.25	0.30	5.75	4.00	1.50	1.50	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	85	4750 (484)	3370 (344)	1900 (194)	2300 (235)	1090 (111)	
540-SP-04	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	67	3080 (314)	2190 (223)	1090 (111)	1240 (126)	1500 (153)	628 (64)
540-SP-05	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	79	3720 (379)	2640 (269)	1320 (135)	1490 (152)	1800 (184)	745 (76)
540-SP-06	7.50	1.25	0.30	6.25	4.50	1.50	1.50	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	93	4350 (444)	3090 (315)	1550 (158)	1750 (178)	2120 (216)	873 (89)
540-SP-07	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	97	5680 (579)	4030 (411)	2020 (206)	2760 (281)	1400 (143)	
540-SP-08	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	103	6060 (618)	4300 (439)	2150 (219)	2420 (247)	2940 (300)	1480 (151)
540-SP-09	7.50	1.25	0.30	6.25	4.50	1.50	1.50	139.7 x 5.40	114.3 x 3.65	88.9 x 3.25	110	6680 (681)	4750 (484)	2370 (242)	2670 (272)	3250 (331)	1600 (163)
540-SP-10	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	70	2960 (302)	2090 (214)	1050 (107)	1190 (121)	1440 (147)	520 (53)
540-SP-11	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	83	3620 (369)	2570 (262)	1280 (131)	1450 (148)	1760 (179)	619 (63)
540-SP-12	8.00	1.50	0.30	6.50	4.50	1.75	1.75	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	97	4180 (426)	2960 (302)	1480 (151)	1670 (170)	2030 (207)	726 (74)
540-SP-13	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	101	5440 (555)	3860 (394)	1930 (197)	2180 (222)	2650 (270)	1180 (120)
540-SP-14	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	111	5820 (593)	4130 (421)	2070 (211)	2320 (237)	2820 (288)	1280 (131)
540-SP-15	8.00	1.50	0.30	6.50	4.50	1.75	1.75	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	119	6410 (654)	4550 (464)	2280 (232)	2570 (262)	3120 (318)	1370 (140)
540-SP-16	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	75	2740 (279)	1940 (198)	971 (99)	1100 (112)	1330 (136)	431 (44)
540-SP-17	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	89	3300 (337)	2340 (239)	1180 (120)	1320 (135)	1610 (164)	510 (52)
540-SP-18	8.50	1.50	0.30	7.00	5.00	1.75	1.75	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	104	3860 (394)	2750 (280)	1370 (140)	1550 (158)	1870 (191)	598 (61)
540-SP-19	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	109	5040 (514)	3580 (365)	1780 (182)	2020 (206)	2450 (250)	961 (98)
540-SP-20	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 4.85	114.3 x 3.65	88.9 x 3.25	115	5380 (549)	3820 (390)	1910 (195)	2160 (220)	2620 (267)	1010 (103)
540-SP-21	8.50	1.50	0.30	7.00	5.00	1.75	1.75	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	129	5930 (605)	4220 (430)	2110 (215)	2370 (242)	2880 (294)	1130 (115)
540-SP-22	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	141	7140 (728)	5070 (517)	2530 (258)	2850 (291)	3570 (354)	1730 (176)
540-SP-23	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	148	7650 (780)	5430 (554)	2720 (277)	3060 (312)	3720 (379)	1820 (186)
540-SP-24	8.50	1.50	0.30	7.00	5.00	1.75	1.75	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	158	8450 (862)	6000 (612)	3000 (306)	3380 (345)	4110 (419)	1970 (201)
540-SP-25	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 3.65	88.9 x 3.25	76.1 x 3.25	78	2550 (260)	1810 (185)	902 (92)	1020 (104)	1240 (126)	333 (34)
540-SP-26	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 4.50	88.9 x 4.05	76.1 x 3.25	92	3070 (313)	2180 (222)	1090 (111)	1230 (125)	1490 (152)	402 (41)
540-SP-27	9.00	1.50	0.30	7.50	5.00	2.00	2.00	114.3 x 5.40	88.9 x 4.85	76.1 x 3.25	108	3600 (367)	2560 (261)	1280 (130)	1440 (147)	1750 (178)	461 (47)
540-SP-28	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 4.50	114.3 x 3.65	88.9 x 3.25	113	4690 (478)	3320 (339)	1670 (170)	1870 (191)	2280 (232)	745 (76)
540-SP-29	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 4.85	114.3 x 4.50	88.9 x 3.25	125	5010 (511)	3560 (363)	1780 (181)	2000 (204)	2430 (248)	814 (83)
540-SP-30	9.00	1.50	0.30	7.50	5.00	2.00	2.00	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	133	5520 (563)	3920 (400)	1960 (200)	2210 (225)	2690 (274)	883 (90)
540-SP-31	9.00	1.50	0.30	7.50	5.00	2.00	2.00	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	147	6650 (678)	4720 (481)	2360 (241)	2660 (271)	3240 (330)	1360 (139)
540-SP-32	9.00	1.40	0.30	7.50	5.00	2.00	2.00	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	154	7120 (726)	5050 (515)	2530 (258)	2840 (290)	3460 (353)	1430 (146)
540-SP-33	9.00	1.40	0.30	7.50	5.00	2.00	2.00	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	164	7860 (802)	5580 (569)	2800 (285)	3150 (321)	3820 (390)	1540 (157)
540-SP-34	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 4.50	114.3 x 4.50	88.9 x 3.25	122	4760 (485)	3370 (344)	1690 (172)	1900 (194)	2310 (236)	745 (76)
540-SP-35	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 4.85	114.3 x 4.50	88.9 x 3.25	129	5080 (518)	3610 (368)	1800 (184)	2030 (207)	2470 (252)	785 (80)
540-SP-36	9.50	1.80	0.60	7.70	5.00	2.25	2.25	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	137	5600 (571)	3970 (405)	1990 (203)	2240 (228)	2730 (278)	834 (85)
540-SP-37	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	153	6740 (687)	4790 (488)	2390 (244)	2700 (275)	3280 (334)	1300 (133)
540-SP-38	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	160	7200 (736)	5130 (523)	2560 (261)	2880 (294)	3510 (358)	1370 (140)
540-SP-39	9.50	1.80	0.60	7.70	5.00	2.25	2.25	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	170	7970 (813)	5660 (577)	2830 (289)	3190 (325)	3870 (395)	1480 (151)
540-SP-40	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 4.50	114.3 x 4.50	88.9 x 3.25	128	4440 (453)	3160 (322)	1580 (161)	1780 (181)	2160 (220)	608 (62)
540-SP-41	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 4.85	114.3 x 4.50	88.9 x 3.25	135	4750 (484)	3370 (344)	1690 (172)	1900 (194)	2300 (235)	637 (65)
540-SP-42	10.00	1.80	0.60	8.20	5.20	2.40	2.40	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	144	5230 (533)	3710 (378)	1850 (189)	2090 (213)	2540 (259)	677 (69)
540-SP-43	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	160	6300 (642)	4470 (456)	2240 (228)	2520 (257)	3060 (312)	1060 (108)
540-SP-44	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	168	6750 (688)	4790 (488)	2390 (244)	2700 (275)	3280 (334)	1120 (114)
540-SP-45	10.00	1.80	0.60	8.20	5.20	2.40	2.40	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	178	7450 (760)	5300 (540)	2650 (270)	2980 (304)	3620 (369)	1200 (122)
540-SP-46	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 4.85	165.1 x 4.50	139.7 x 4.50	208	9440 (963)	6710 (684)	3350 (342)	3780 (385)	4590 (468)	1850 (189)
540-SP-47	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 5.40	165.1 x 4.50	139.7 x 4.50	221	10400 (1067)	7350 (750)	3680 (375)	4150 (423)	5040 (514)	1990 (203)
540-SP-48	10.00	1.80	0.60	8.20	5.20	2.40	2.40	193.7 x 5.90	165.1 x 4.50	139.7 x 4.50	233	11300 (1151)	8010 (817)	4010 (409)	4510 (460)	5480 (559)	2110 (215)

Swaged Type Steel Tubular Poles As Per IS:2713/80

Designation	Overall Length (m)	Planting Depth (m)	Load Applied from Top (m)	Height above ground (m)	Length of Sections			Outside diameter and Thickness of sections			Approx Weight of Pole (Kg)	Breaking Load (N(Kgf))	Crippling Load (N(Kgf))	Working Load		Load for Permanent Set not Exceeding 13 mm (N(Kgf))	Load for Temporary Deflection of 157.5 mm (N(Kgf))
					Bottom h3 (m)	Middle h2 (m)	Top h1 (m)	Bottom (m)	Middle (m)	Top (m)				Col 14 2 N(Kgf)	Col 13 2.5 N(Kgf)		
540-SP-49	11.00	1.80	0.60	9.20	5.60	2.70	2.70	139.7 x 4.50	114.3 x 4.50	88.9 x 3.25	140	3920 (400)	2790 (284)	1390 (142)	1570 (160)	1900 (194)	412 (42)
540-SP-50	11.00	1.80	0.60	9.20	5.60	2.70	2.70	139.7 x 4.85	114.3 x 4.50	88.9 x 3.25	147	4200 (428)	2980 (304)	1490 (152)	1680 (171)	2040 (208)	431 (44)
540-SP-51	11.00	1.80	0.60	9.20	5.60	2.70	2.70	139.7 x 5.40	114.3 x 4.50	88.9 x 3.25	164	4620 (471)	3280 (334)	1640 (167)	1840 (188)	2250 (229)	480 (49)
540-SP-52	11.00	1.80	0.60	9.20	5.60	2.70	2.70	165.1 x 4.50	139.7 x 4.50	114.3 x 3.65	175	5560 (567)	3950 (403)	1970 (201)	2230 (227)	2710 (276)	726 (74)
540-SP-53	11.00	1.80	0.60	9.20	5.60	2.70	2.70	165.1 x 4.85	139.7 x 4.50	114.3 x 3.65	183	5960 (608)	4240 (432)	2120 (216)	2380 (243)	2890 (295)	765 (78)
540-SP-54	11.00	1.80	0.60	9.20	5.60	2.70	2.70	165.1 x 5.40	139.7 x 4.50	114.3 x 3.65	194	6590 (672)	4680 (477)	2340 (239)	2640 (269)	3210 (327)	814 (83)



Quality Benchmarking

Strict adherence to Quality Norms is exercised at every stage of each specific domain as under:

- HR Coil** - Physical & Chemical properties
- Slitting** - Exact width and thickness
- Pipe Rolling** - Online NDT for 100% check of leakage/hydrostatic test
- End champering** - 90° end and bevelled end
- Exact length** - By PLC controlled Cold Saw
- Galvanizing** - Min. 52 microns or as required
- Packing** - By High Tensile Strips in Hexagonal form or as required

Quality Objectives

- Our R&D team continuously strives to reduce various costs and increase operational efficiencies so as to enable us to deliver high end products with quality and cost-effectiveness
- Grooved Pipes developed from 1" to 12" for Sprinkler Applications
- Coupler developed in-house
- Flux Filtering Plant for zero iron in Flux
- Special Additives developed for extra shine





Environment Concerns

- Zero Discharge Plant
- Water Recycling after Treatment
- Tree Plantation in works neighbourhood
- OHSAS 18001 Certified
- ISO 14001 Certified

Global Footholds

Utkarsh India Ltd., a Govt. of India recognised Export House, has achieved the EEPC India Award for Export Excellence for two consecutive years and gained footholds in the following countries:

- Germany
- Australia
- Canada
- Denmark
- Iraq
- Kuwait
- Qatar
- Martinique
- Mozambique
- Nigeria
- Northern Ireland
- Reunion Islands
- Malawi
- Sierra Leone
- Sri Lanka
- United Arab Emirates
- United Kingdom
- Lithuania

