Good Luck India Limited

(Formerly known as Good Luck Steel Tubes Limited)











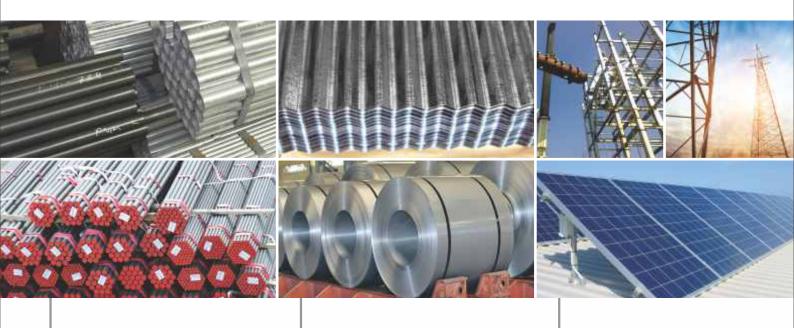
A versatile business group with strong foundation

An innovative & progressive group

Good Luck Group is a manufacturer and exporter of wide range of ERW Hot Dip Galvanized Pipes, Black Pipes, Black & GI Hollow Sections, CR Coils, CRCA, Galvanized Plain & Corrugated Sheets, ERW Precision & CDW Tubes, Power & Telecom Towers, Solar Structures, Forged Flanges and Custom Forgings, The company was established two decades ago.

With its innovative and progressive approach, the group today is one of the leading and fastest business groups in the Steel Industry. An ISO 9001, TS - 16949, EN - 9100, EMS 14001, OHSAS 18001 & CE certified organization, Good Luck group operates under three verticals; Good Luck India Limited, Good Luck Industries and Good Luck Engineering Co.

Good Luck India Limited



Black / Galvanized Steel Tubes (Round / Sections)

Cold Rolled Coils & Sheets Galvanized Coils & Sheets CRCA

Galvanized Structures for Power & Telecom Projects Steel Structure Fabrication & Solar Structure

















Q018
Good Luck Metallics
Gujarat
(port based) Unit
Commissioned

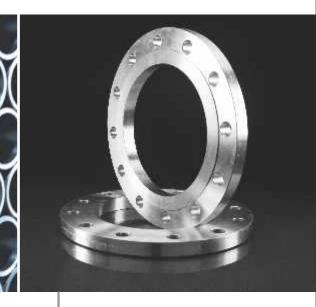
Infinite possibilities we aspire



Good Luck Industries

Good Luck Engineering





Galvanized & Black Section Tubes

ERW / CDW Precision Tubes Boiler / APH Tubes

Shock Absorber / Strut Tubes Hydraulic Cylinder Tubes Flanges
Custom Forgings

450 Customers

Customers spread across the world

100 Countries

Customers served globally across all business verticals 2500 Workforce

A motivated and talented team powering growth

32 Years

Over three decades of consistent growth and progress

State-of-the-art pipe & section making technology

It's all about in-time delivery

Good Luck India Limited

Established in the year 1986, Goodluck India Ltd. is an ISO 9001:2008, TS-16949, EMS 14001, OHSAS18001 & CE certified organization, engaged in manufacturing and exporting of a wide range of ERW Hot Dip Galvanized Pipes, Black Pipes, Black & GI hollow sections, CR coils, CRCA, Galvanized & Plain Corrugated Sheets. We also specialize in providing Telecommunication Structures. These are acclaimed for high tensile strength, long service life and higher efficiency.

Our plant is situated at Sikandarabad industrial area just 45 km. from Delhi. It has the state-of-the-art tube mills, galvanizing units, cold rolling mills galvanized coil unit and corrugation machines. Pipe and lattice type structures are also fabricated and galvanized here.

Good Luck Metallics (Unit of Good luck India Ltd.)

In order to meet the growing demand of Steel Tubes & Pipes in both domestic as well as international market and to be more competitive internationally, the group has set up a new state-of-the-art facility under its subsidiary name Good Luck Metallics at Kutch, (west coast of India) State of Gujarat close

to India's premium international sea ports - Mundra and Kandla. The new facility will add 72000 MT per annum to our existing capacities and its strategic location; close to the port; will help the company to overcome global competition.

Manufacturing Tubes & Sheet according to **Specifications**

IS: 1239 (Part - 1) 2004

IS: 1161 / 2014 IS: 3589 / 2001 IS: 3601 / 2006 IS: 9295 / 1983 IS: 4270 / 2001 IS: 2713/1980

IS/ISO: 3183/2007 IS: 277 / 2003 IS: 4923: 1997 BS: 1387/1992 BS: 534/1990 BS: 1139 / EN39

BS: 3059

BS: 6323 DIN: 2458 **DIN: 2439** DIN: 2440 DIN: 2441 DIN: 1626 JIS: G-3452

ASTM: A-423 ASTM: A-120 **ASTM: A-53** ISO: 65-1981 EN: 10219 EN: 10217 EN: 10255 AS: 1074

AS/NZS: 1163 **ASTM: A 500** SLS: 829









Conforming to the highest standards

Delivering high quality

Equivalent Standards of Tubes with Applications

S.No.	Standard End Use	Indian	British	American	Japanese	German
1.	Water, Gas, Steam	IS-1239	BS-1387	ASTM A-53	-	DIN-2439, 2440 & 2441
2.	Water, Sewage	IS-3589	BS-5534	_	-	
3.	Structural, Scaffolding	IS-1161	BS-1139, 6323	ASTM A-500	JIS G 3444	-
4.	Idlers, Belt Conveyers	IS-9295	BS-6323	ASTM A-513		-
5.	Water Wells, Casing	IS-4270	BS-879	-	-	-
6.	Sectional Tubes (Sq. & Rect.)	IS-4923		ASTM A-500	JIS G 3466	DIN-2395
7.	Furniture Tube	IS-7138	-	-	JIS G 3445	-
8.	Oil Pipes	IS\ISO-3183	EN-10217	API5L	JIS G 3452	DIN-17177
9.	Mechanical	IS-3601	BS-6323	-	JIS G 3445	DIN-2393
10.	Hydro Carbon & Process Industries	IS-6286	-	-	-	-
11.	Boiler & APH Tubes	-	BS: 3059, 6323	-	-	_







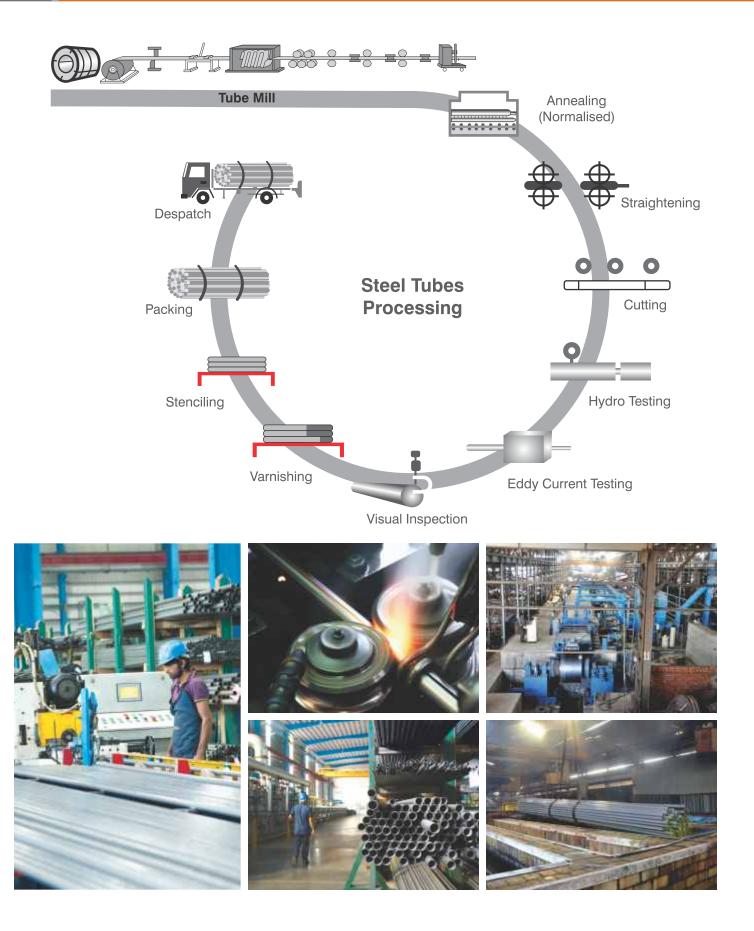
ISO 9001:2008
OHSAS 18001
CE Certified Company

EMS 14001 TS-16949



Manufacturing process

Process flow that works with precision



Quality, our mantra to win clients

Recognized by experts

Quality Assurance begins at the raw material stage itself. Material is inspected for chemical composition and tested for other parameters like mechanical properties, gauge variation etc. for total evaluation of raw material to ascertain its suitability for the intended end-use-applications. At the surface-pickling operations, the material is checked for surface finish before it is fed into the tube mills.

At the tube mills, each product for the customer is processed according to the norms sequenced by the process control engineers based on stringent international standards and monitored through uncompromising quality control tests of every stage.

The engineers are guided by the latest equipment at the R&D centre. Parent materials & soundness is checked by conducting various tests such as yield, tensile, drift expansion, flattening, bend, impact test, etc, that include Leco Carbon apparatus, scanning electron microscope, atomic absorption emission spectrophotometer, universal microscope and micro hardness tester. This facilitates all the required metallurgical tests on the materials.

Flattening Test



TensileTest



Crushing Test



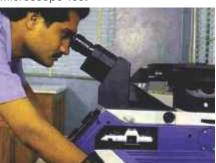
Drift Test



Bend Test



Microscope Test



Impact Testing Machine



Profile Projector







Steel tubes for uses in water, gas, air & steam

Conforming to IS:1239 (part-1) 2004/ BS:1387/85

N.B. and Series		side neter		all	No	minal Weig	ht Black 1	ubes	Nomina	ıl Weight	Galvanize	d Tubes	Soc	kets
mm	Min (mm)	Max (mm)	mm	SWG	Pla	in End	Screwed	& Socked	Pla	in End	Screwed	l & Socked	Minimum OD	Maximum Length
	(111111)	(111111)			Kg/m	m/tonne	Kg/m	m/tonne	Kg/m	m/tonne	Kg/m	m/tonne	mm	mm
15 L	21.0	21.4	2.00	14	0.947	1056	0.956	1046	0.947	1056	0.956	1046	27.0	37.0
M	21.0	21.8	2.60	12	1.21	826	1.22	819	1.21	826	1.22	819		
Н	21.0	21.8	3.20	10	1.44	694	1.45	689	1.44	689	1.45	689		
20 L	26.4	26.9	2.30	13	1.38	724	1.39	719	1.38	719	1.39	719	32.5	39.0
M	26.5	27.3	2.60	12	1.56	641	1.57	637	1.56	637	1.57	637		
Н	26.5	27.3	3.20	10	1.87	534	1.88	532	1.87	532	1.88	532		
25 L	33.2	33.8	2.60	12	1.98	505	2.0	500	1.98	500	2.0	500	39.5	46.0
M	33.3	34.2	3.20	10	2.41	415	2.43	411	2.41	411	2.43	411		
Н	33.3	34.2	4.00	8	2.93	341	2.95	339	2.93	339	2.95	339		
32 L	41.9	42.5	2.60	12	2.54	393	2.57	389	2.54	389	2.57	389	49.0	51.0
M	42.0	42.9	3.20	10	3.10	322	3.13	319	3.10	319	3.13	319		
Н	42.0	42.9	4.00	8	3.79	264	3.82	261	3.79	261	3.82	261		
40 L	47.8	48.4	2.90	11	3.23	309	3.27	306	3.23	306	3.27	306	56.0	51.0
M	47.9	48.8	3.20	10	3.56	281	3.60	227	3.56	227	3.60	277		
Н	47.9	48.8	4.00	8	4.37	229	4.41	226	4.37	226	4.41	226		
50 L	59.6	60.2	2.90	11	4.08	245	4.15	241	4.08	241	4.15	241	68.0	60.0
M H	59.7 59.7	60.8	3.60	9	5.03	199	5.10	196 159	5.03	196 159	5.10	196 159		
		60.8	4.50		6.19	161	6.26		6.19		6.26		0.4.0	20.0
65 L M	75.2 75.3	76.0 76.6	3.20 3.60	10 9	5.71 6.42	175 155	5.83 6.54	171 153	5.71 6.42	171 153	5.83 6.54	171 153	84.0	69.0
H	75.3	76.6	4.50	7	7.93	126	8.05	124	7.93	124	8.05	124		
80 L	87.9	88.7	3.20	10	6.72	149	6.89	145	6.72	145	6.89	145	98.0	75.0
M	88.0	89.5	4.00	8	8.36	119	8.53	117	8.36	117	8.53	117	30.0	75.0
Н	88.0	89.5	4.80	6	9.90	101	10.10	96	9.90	96	10.40	96		
100 L	113.0	113.9	3.60	9	9.75	102	10.0	100	9.75	100	10.0	100	124.0	87.0
M	113.1	115.0	4.50	7	12.20	82	12.50	80	12.20	80	12.50	80	.21.0	
Н	113.1	115.0	5.40	5	14.50	69	14.80	67	14.50	67	14.80	67		
125 M	138.5	140.8	4.80	6	15.90	63	16.40	61	15.90	61	16.40	61	151.0	96.0
Н	138.5	140.8	5.40	5	17.90	56	18.4	54	17.9	54	18.4	54		
150 M	163.9	166.5	4.80	6	18.90	53	19.50	51	18.90	51	19.50	51	178.0	96.0
Н	163.9	166.5	5.40	5	21.30	47	21.9	45	21.30	45	21.9	45		

Tolerances

(a) Thickness

1. Light Tube + Not limited -8%

2. Medium and +Not limited Heavy Tubes -10%

(b) Weight

1. Single Tube +10% (Light Series) -8%

2. Single Tube +/- 10% (Medium And Heavy Series)

3. For Light Series -5%, +7.5%

4. For Quantities per load of 10 tonnes +/- 7.5% minimum (Medium and heavy Series)

(c) Length 4 to 7 meters unless otherwise specified

Mechanical Properties

TS (MPa)	% EL (Minimum)
320	12 Upto & Including 25 mm NB
Min.	20 Above 25 mm NB

Chemical Composition

As per IS: 10748

Steel tubes for water, gas and sewerage purposes

Conforming to IS:3589 / 2001 (grade FE 330 and FE 410)

Outside	Thickness	Weight (Plair	ı End)
Diameter mm	mm	Kg / M	M / Tonne
168.3	2.6	10.6	94
	3.2	13.02	77
	4.0	16.20	62
	4.5	18.2	55
219.1	2.6	13.9	72
	3.6	19.1	52
	4.5	23.8	42
	6.3	33.1	30
	7.0	36.61	27
	8.0	41.64	24
273.0	3.6	23.9	42
	4.0	26.5	38
	5.0	33.0	30
	6.3	41.4	24
	7.0	45.92	22
	8.0	52.28	19
323.9	4.0	31.6	31
	4.5	35.4	28
	5.6	44.0	23
	7.1	55.5	18
355.6	4.0	34.7	29
	5.0	43.2	23
	5.6	48.3	21
	8.0	68.6	15
406.4	4.0	39.7	25
	5.0	49.5	20
	6.3	62.2	16
	8.8	86.3	12

Tolerances

b. Thickness

a. Outside Diameter +/- 0.75%

+/- 10%

c. Length

Unless otherwise specified, length are in single random Length of 4 to 7 meters or double random Length of 7 to 14 meters

Also Available: Internal Bead Free & Screwed & Socketed Black & Galvanized Pipes

Chemical Composition

Steel Grade	% C (Max)	% Mn (Max)	% P (Max)	% S (Max)	CE (Max)
Fe 330	0.16	1.20	0.040	0.040	-
Fe 410	0.20	1.30	0.040	0.040	0.45

Mechanical Properties

YST (MPa) Min	TS (MPa) Min	% EL (Min)
195	330	20
235	410	18

Steel tubes for structural purposes

Conforming to IS: 1161:2014

N.B. and Series	Outside Diameter	Thickness	Nominal Weight Black Tubes Plain End		Calcu Nominal Galvaniz Plain	Weight ed Tubes
	mm	mm	Kg/m	m/tonne	Kg/m	m/tonne
15	21.3	2.0	0.947	1058	1.00	1003
		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
		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	493
		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	2.9	5.24	192	5.37	186
		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	8.63	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

A. Chemical Composition as per IS: 10748

B. Tensile Properties

Grade	Y.S. (MIN) Mpa (Kg/mm2)	T.S. (MIN) Mpa (Kg/mm2)	%age Elongation
YST-210	210 (21.42)	330 (33.66)	20
YST-240	240 (24.48)	410 (41.82)	17
YST-310	310 (31.62)	450 (45.9)	14

NOTE: For tube size upto and including 25 mm NB, elongation of 12% shall be permissible

N.B. and Series	Outside Diameter	Thickness	Nominal Weight Black Tubes Plain End		Calcu Nominal Galvaniz Plain	Weight ed Tubes
	mm	mm	Kg/m	m/tonne	Kg/m	m/tonne
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
135	152.4	4.5	16.40	61	16.78	60
		4.8	17.50	57	17.88	56
		5.4	19.60	51	19.98	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	22.24	45
		6.3	25.2	40	41.00	24
175	193.7	4.8	22.40	45	22.94	44
		5.4	25.10	40	25.64	39
		5.9	27.30	37	27.84	36
200	219.1	4.8	25.40	39	25.95	39
		5.6	29.50	34	30.05	33
		5.9	31.00	32	31.55	32
225	244.5	5.9	34.70	29	35.36	28
250	273.0	5.9	38.90	26	39.68	25
300	323.9	6.3	49.30	20	50.28	20
350	355.6	8.0	68.60	15	69.58	14

C. Tolerences

i) Outside diameter upto & including 48.3 mm +0.4 mm $\,$ -0.8 mm Over 48.3 mm $\,$ +/- 1 %

D. Thickness

For all sizes

Welded Tubes ± 10%

E. Weight

Single tube (Light Class) $\pm 10\%$

 \pm 7.5%

For medium & Heavy Class 10 Tonne Light, Medium

& Heavy

Steel tubes for line pipes used in oil & petroleum industries

Conforming to IS/ISO:3183:2007 (E)

MD	O.D.	Wall	Plain End	Test Press	sure (Min)
NB (mm)	OD (mm)	Thickness (mm)	Weight (Kg/m)	Grade L 210 STD 100 kpa	Grade L 245 STD 100 kpa
80	88.90	3.20	676	89	104
		3.60	7.57	101	117
		4.00	8.37	112	130
		4.40	9.17	123	143
		4.80	9.95	134	156
		5.50	11.31	154	172
90	101.60	3.60	8.70	88	102
		4.00	9.63	98	114
		4.40	10.55	108	125
		4.80	11.46	117	137
		5.70	13.48	139	162
		6.40	15.02	156	182
		7.10	16.55	174	193
100	114.30	3.60	9.83	78	91
		4.00	10.88	87	101
		4.80	12.96	104	121
		5.20	13.99	113	132
		5.60	15.01	122	142
		6.00	16.02	130	152
		6.40	17.03	139	162
		7.10	18.77	154	180
125	141.30	3.20	10.90	56	65
		4.00	13.54	70	82
		4.80	16.16	84	98
		5.60	18.74	98	115
		6.60	21.92	116	135
		7.10	23.50	125	145
150	168.30	3.60	14.62	53	62
		4.00	16.21	59	76
		4.80	19.35	71	81
		5.20	20.91	77	89
		5.60	22.47	83	96
		6.40	25.55	94	110
		7.10	28.22	105	122

ND	0.0	Wall	Plain End	Test Press	sure (Min)
NB (mm)	OD (mm)	Thickness (mm)	Weight (Kg/m)	Grade L 210 STD 100 kpa	Grade L 245 STD 100 kpa
200	219.10	4.80	25.37	54	63
		5.60	29.48	63	74
		6.40	33.57	73	84
		7.00	36.61	79	92
250	273.10	4.80	31.76	44	51
		5.60	36.94	51	59
		6.40	42.09	58	68
		7.10	46.57	65	75
		7.80	51.03	71	83
		8.70	56.72	79	92
		9.30	60.50	85	98
300	323.90	4.80	37.77	37	43
		5.60	43.96	43	50
		6.40	50.11	49	57
		7.10	55.47	54	63
		7.90	61.56	61	71
		8.40	65.35	64	75
		8.70	67.62	67	78
		9.50	73.65	73	85
350	355.60	4.80.	41.52	34	39
		5.20	44.93	36	42
		6.40	55.11	45	52
		7.10	61.02	50	58
		7.90	67.74	55	64
		8.70	74.42	61	71
		9.50	81.08	66	77
400	406.40	4.80	47.54	29	34
		5.20	51.45	32	37
		5.60	55.35	34	40
		6.40	63.13	39	46
		7.10	69.91	43	51
		7.90	77.63	48	56
		8.70	85.32	53	62
		9.50	92.98	58	68

A. Outside Diameter - The Outside diameter

tolerance shall be as follows,
Pipe Body Tolerance
For Size + 0.40 mm
60.3 mm and less - 0.80 mm

60.3 mm and above +/- 0.75%

B. Wall thickness - The Tolerance on the wall thickness of line pipes shall be as follows:

Type For Tolerance Welded Pipes =/<5.0~mm thick +/-0.5~mm >5.00~mm to <15.0~mm +/-0.1~t

C. Weight

Grade L 210 & L 245 - 1.75%
Grade L 175 - 2.5%

Hollow steel sections for structural use

Conforming to IS: 4923 1997 (Hot Dip / Black, Galvanized & Pre Galvanized)

Square Hollow Sections (SHS)

Section Depth Width Thickness Weight Mtr. SHS (mm) W (Kg/m) D (mm) B (mm) T (mm) / Tonne 1.05 20.00 20.00 2.00 952 826 779 2.60 1.28 20.00 20.00 25 x 25 25.00 25.00 25.00 2.60 1.69 1.98 591 3.20 2.10 2.49 30 x 30 30.00 30.00 30.00 30.00 2.60 3.20 402 32 x 32 2.00 1.80 555 32.00 32.00 2 40 2 11 473 32.00 32.00 2.60 2.26 442 32.00 32.00 32.00 32.00 2.90 3.20 2.48 2.69 403 372 35 x 35 35.00 35.00 1.80 1.81 552 2.60 1.99 2.51 35.00 35.00 399 38 x 38 38.00 38.00 2.00 2.80 459 2.40 38.00 38.00 2.60 2.75 363 38.00 38.00 38.00 3.20 3.29 304 38.00 3.60 276 40 x 40 40.00 40.00 2.60 3.20 2.92 3.49 343 286 40.00 3.60 4.00 40.00 40.00 40.00 4.20 238 2.00 2.40 49.5 x 49.5 49.5 49.5 49.5 49.5 2.90 345 49.5 49.5 49.5 49.5 2.60 2.90 3.69 271 245 49.5 49.5 49.5 49.5 3.20 3.60 4.45 4.93 225 203 49.5 49.5 49.5 49.5 4.00 5.39 5.95 185 4.50 168 60 x 60 3.56 4.22 60.00 60.00 2.40 237 2.90 60.00 5.03 199 60.00 60.00 60.00 3.60 6.11 164 70.00 70.00 2.40 2.60 70 x 70 70.00 4 98 201 70.00 70.00 70.00 70.00 70.00 2.90 5 94 168 3.20 70.00 70.00 7.24 7.97 70.00 3.60 138 70.00 4.00 126 70.00 70.00 4.50 8.85 113 72 x 72 6.71 8.22 72.00 72.00 4.00 122 2.40 2.60 5.73 6.18 80 x 80 80.00 80.00 174 80.00 80.00 162 80.00 80.00 2.90 6.85 146 3.20 80.00 80.00 7.51 80.00 3.60 8.37 80.00 80.00 4 00 9 22 108 80.00 80.00 4.50 10.26 97 91.5 91.5 91.5 x 91.5 3.6 4.5 9.67 11.88 91.5 91.5 84 100 x 100 100.00 3.20 9.52 10.64 105 100 00 100 00 3 60 94 4.00 11.73 85 100 00 100 00 4 50 76 4.80 72 69 13.88 14.41 100.00 100.00 5.00 5.40 132.00 132.00 20.88 48 150 x 150 150.00 150.00 5.0 22.26 45 150.00

Elongation T.S. (min) Mpa Y.S. (min) Mpa Grade 25.4 mm & under Over 25.4 mm Yst - 210 Yst - 240 410 240 10

Tolerance

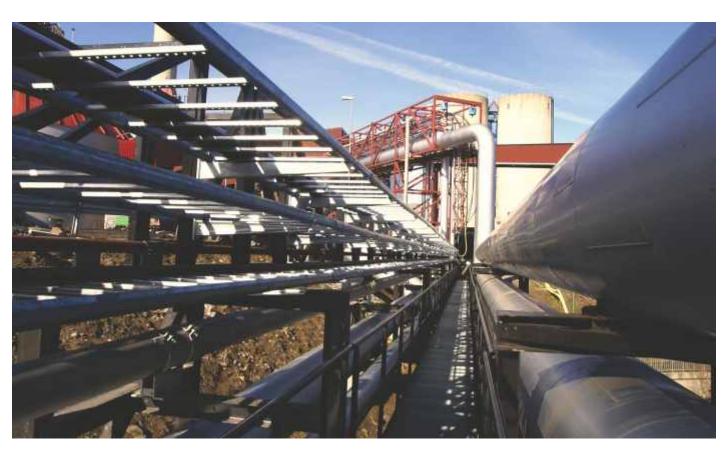
Weight

1% With Minimum +/- 0.5 mm 0.D. Thickness : +/-10% : -8% + 10%

Single Pine -8% + 10%On lots of 10 Tonne : +/- 7.5%

Rectangular Hollow Sections (RHS)

Section SHS (mm)	Depth D (mm)	Width B (mm)	Thickness T (mm)	Weight W (Kg/m)	Mtr. / Tonne
30 x 30	30.00	20.00	2.00	1.36	733
40 x 20	40.00	20.00	2.00	1.68	596
40 x 30	40.00	30.00	2.00	1.99	502
	40.00 40.00	30.00 30.00	2.40	2.34 2.51	427 399
	40.00	30.00	2.90	2.75	363
	40.00	30.00	3.20	2.99	335
F0 0F	40.00	30.00	4.00	3.57	280
50 x 25	50.00 50.00	25.00 25.00	2.90 3.20	2.98 3.24	335 309
50 x 30	50.00	30.00	2.00	2.31	434
00 X 00	50.00	30.00	2.40	2.72	368
	50.00	30.00	2.60	2.92	343
	50.00 50.00	30.00 30.00	2.90 3.20	3.21 3.49	312 286
	50.00	30.00	4.00	4.20	238
50 x 40	50.00	40.00	2.00	2.62	382
	50.00	40.00	2.40	3.09	323
	50.00	40.00	2.60	3.33	301
	50.00 50.00	40.00 40.00	2.90 3.20	3.66 3.99	273 250
	50.00	40.00	4.00	4.83	207
60 x 30	60.00	30.00	1.60	2.13	471
	60.00	30.00	1.80	2.38	421
	60.00 60.00	30.00 30.00	2.00 2.60	2.62 3.33	382 301
	60.00	30.00	3.20	3.99	250
66 x 33	66.00	33.00	2.90	4.07	245
	66.00	33.00	3.60	4.93	203
00 40	66.00	33.00	4.50	5.95	168
60 x 40	60.00 60.00	40.00 40.00	2.00 2.40	2.93 3.47	341 288
	60.00	40.00	2.60	3.73	268
	60.00	40.00	3.20	4.50	222
	60.00	40.00	4.00	5.45	183
70 x 30	70.00	30.00	2.90	4.12	243
	70.00 70.00	30.00 30.00	3.20 4.00	4.50 5.45	222 183
75 x 50	75.00	50.00	1.60	3.01	332
	75.00	50.00	1.80	3.37	297
	75.00	50.00	2.00	3.72	269
	75.00 75.00	50.00 50.00	2.60 3.20	4.75 5.75	210 174
76 x 38	76.00	38.00	2.90	4.76	210
	76.00	38.00	3.20	5.20	192
	76.00	38.00	3.60	5.77	173
80 x 40	76.00 80.00	38.00 40.00	4.00 2.90	6.33 5.03	158 199
00 X 40	80.00	40.00	3.20	5.50	182
	80.00	40.00	4.00	6.71	149
80 x 50	80.00	50.00	2.90	5.49	182
	80.00 80.00	50.00 50.00	3.20 3.60	6.00 6.68	167 150
	80.00	50.00	4.00	7.34	136
96 x 48	96.00	48.00	3.20	6.71	149
30 10	96.00	48.00	4.00	8.22	122
460 55	196.00	48.00	4.80	9.66	103
100 x 50	100.00 100.00	50.00 50.00	3.20 3.60	7.01 7.81	143 128
	100.00	50.00	4.00	8.59	116
	100.00	50.00	4.50	9.55	105
115 x 60	115.00	60.00	3.20	8.26	121
	115.00	60.00	3.60 4.00	9.22	108 98
	115.00 115.00	60.00 60.00	4.50	11.32	88
	115.00	60.00	4.80	12.00	83
	115.00	60.00	5.00	12.45	80
122 x 61	122.00	61.00	3.6	9.67	103
	122.00 122.00	61.00 61.00	4.5 5.4	11.88 14.01	84 71
145 x 82	145.00	82.00	4.8	15.92	63
	145.00	82.00	5.4	17.74	56
160 x 80	160.00	80.00	4.00	14.25	70
	160.00	80.00	5.00	17.55	57
172 x 92	172.00 172.00	92.00 92.00	4.8 5.4	18.71 20.88	56 48
	114.00	J2.0U	J. T	20.00	70





ERW steel tubes for idlers for belt conveyors

Conforming to IS: 9295 - 1983 dimensions & nominal masses

Outside Diameter mm	Thickness mm	Mass kg / Mtr	Mtr / tone
63.50	3.65	5.39	186
	4.05	5.87	170
	4.50	6.55	153
	4.85	7.01	143
	5.40	7.74	129
	6.30	8.89	112
76.10	3.65	6.52	153
	4.05	7.20	139
	4.50	7.95	126
	4.85	8.52	117
	5.40	9.41	106
	6.30	10.84	92
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
108.0	4.05	10.38	96
	4.85	12.34	81
	6.30	15.80	63
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 Diameter mm	Thickness mm	Mass kg / Mtr	Mtr / tone
133.0	4.50	14.30	70
	5.40	16.99	59
	6.30	19.69	51
139.70	4.50	15.00	67
	4.85	16.13	62
	5.40	17.90	56
	6.30	20.73	48
152.40	4.50	16.40	61
	4.85	17.65	57
	5.40	19.50	51
	6.30	22.70	44
159.00	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
219.10	5.40	28.50	35
	6.30	33.06	30

Tolerances

* Outside Diameter

* Ovality below 168.3mm OD

* Ovality including 168.3mm and above

* Weight Kg / Mtr : Single tube For truck load of ten tonne

* Thickness

+ / - 0.8%

0.5 mm

1.0 mm

+/- 10%

+/- 7.5%

+/- 10%



Carbon steel tubes suitable for screwing

Conforming to ISO: 65

				Thicknesses (T) and masses per unit length (M) according to the series										
			ı	Heavy Seri	es	M	edium Ser	ies	l	ight Serie:	s 1	L	ight Serie	s 2
DN	DN Designator	Outside Diameter¹ D mm	T mm	Plain end M kg/m	Screwed Socketed M kg/m	T mm	Plain end M kg/m	Screwed Socketed M kg/m	T mm	Plain end M kg/m	Screwed Socketed M kg/m	T mm	Plain end M kg/m	Screwed Socketed M kg/m
15	1/2	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	3/4	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 1/4	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 1/2	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 1/2	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

Outer Diameter as per above table Thickness

Light Serie	s 1	Light Series 1				
+ Not Limited	-12.5%	+ Not Limited	-8%			

Weight

Light	Series 1	Light Series 1			
Single Tube	10 Tonn Load	Single Tube	10 Tonn Load		
+ / - 10%	+ / - 7.5%	+10% -8%	+ / - 5%		

Steel tubes for water wells (casing pipes)

Conforming to IS: 4270 / 2001

N.B. of Pipe MM	Outside Diameter	Thickness		eight Black lain End
	mm	mm	kg/m	m/tonne
100	114.3	5.4	14.5	69
125	141.3	5.4	18.1	55
		7.1	23.5	43
150	168.3	5.4	21.6	46
		7.1	28.2	35
175	193.7	6.4	29.6	34
		8.0	36.6	27
200	219.1	6.4	33.6	30
		8.0	41.6	24
225	244.5	7.1	41.6	24
		9.0	52.3	19
250	273.1	8.0	52.3	19
		10.0	64.9	15
300	323.9	8.0	62.3	16
		10.0	77.4	13
350	355.6	9.52	81.25	12
400	406.4	9.52	93.17	11

A. PHYSICAL PROPERTIES

Grade	Y. S. (min) MPa (kg/mm²)	T. S. (min) MPa (kg/mm2)	% age Elongation
Fe410	235	410	15
Fe450	275	450	13

B. TOLERENCE

Outside Diameter
 Thickness

Welded tube Up to +15% And including 406.4 MM -12.5%

Over 406.4 MM outside +15% Diameter -10%

3. Weight - 8% Single Tube + 10%

DIN Pipes

Steel Tubes Conforming to DIN 2440

Nominal Size	Size is	OD MM	Wall Thickness	Socket D	imension	Mass P. E. Tube	Mass P. E. Tube	Mass Socked	Socket D	imension
DN	Inch			Dia Min (mm)	Length Min (mm)	(kg/ mtr)	Tube (kg/ mtr)	Dia Min (mm)	Length Min (mm)	
15	1/2	21.3	2.65	21.8	21.0	1.22	1.23	26.4	34.0	
20	3/4	26.9	2.65	27.3	26.5	1.58	1.59	31.8	36.0	
25	1	33.7	3.25	34.2	33.3	2.44	2.46	39.5	43.0	
32	1 1/4	42.4	3.25	42.9	42.0	3.14	3.17	48.3	48.0	
40	1 1/2	48.3	3.25	48.8	47.9	3.61	3.65	54.5	48.0	
50	2	60.3	3.65	60.8	59.7	5.10	5.17	66.3	56.0	
65	21/2	76.1	3.65	76.6	75.3	6.51	6.63	82.0	65.0	
80	3	88.9	4.05	89.5	88.0	8.47	8.64	95.0	71.0	
100	4	114.3	4.50	115.0	113.1	12.10	12.40	122.0	83.0	
125	5	139.7	4.85	140.8	138.5	16.20	16.70	147.0	92.0	
150	6	165.1	4.85	166.5	163.9	19.20	19.8	174.0	92.0	

Material

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

Wall Thickness -12.5% For single tube Mass For ten tonne lot

For single tube +/-10%For ten tonne lot +/-7.5%

Scaffolding Pipes Conforming to BS EN 39

Size	Outside diameter	48.3 mm
Туре	Wall thickness (in mm)	Weight in Kg/Mtr
3	3.20	3.56
4	4.00	4.37

Tolerances on dimensions

Straightness 0.20% of total length

Mass per unit length Not less than 7.5% the specified mass on individual lengths

Mechanical Properties

Grade	YS	TS	% EL
	(MPa) Min	(MPa) Min	(Min)
S235 GT	235	340-520	24

CHEMICAL COMPOSITION (%) Max.

C	Si	Mn	P	S	Al
(Max)	(Max)	(Max)	(Max)	(Max)	(Min)
0.200	0.04	1.40	0.04	0.045	0.02

Flatteing Test 1. Flatten upto 75% of tube dia for weld test (Weld at 0°& 90° position)

SCAFFOLDING PIPES CONFORMING TO BS EN 10219 (HIGH- GRADE)

Size	Outside diameter	48.3 mm
Туре	Wall thickness (in mm)	Weight in Kg/Mtr
1 1/2"	3.20	3.56

Tolerances on dimensions

Characteristics Tolerances

External Dimensions $\pm 1\%$, with a minimum of ± 0.5 mm and a maximum of ± 10 mm Thickness For do ≤ 406.4 mm, T ≤ 5 mm : $\pm 10\%$, T > 5mm ± 0.5 mm;

For do > 406.4 mm: $\pm 10\%$ with a max of ± 2 mm

 $\hbox{Out-of-roundness} \qquad \hbox{ 2\% for hollow sections having a diameter to thickness ratio not exceeding 100}$

Straightness 0.20% of total length

Mass per unit length \pm 6% on individual delivered lengths

Mechanical Properties

Grade	YS Min		Min Pa	% EL (Min)	Minimum impact energy J		
	MPa	< 3	≥3 ≤40	≤ 40	-20°C	0°C	20°C
S355 J0H	355	510-680	470-630	20	_	27	

CHEMICAL COMPOSITION (%) Max.

Grade	C (Max)	Si (Max)	Mn (Max)	P (Max)	S (Max)	N (Min)	CEV
S355 J0H	0.220	0.550	1.600	0.035	0.035	0.009	0.450

ASTM Pipes

Pipes conforming to ASTM A - 53 GR A & B

NPS	DN Designator	Outside I	Diameter	Odlicualo		Mass of Pla	ain end Pipe	Hydrostatic Test Pressure		Pieces/	
Designator	Designator	Inch	mm	No.	Inch	mm	lb/ft.	Kg/mtr.	Grade A-Mpa	Grade B-Mpa	bunale
1/2	15	0.840	21.3	40	0.109	2.77	0.850	1.27	4.8	4.8	120
3/4	20	1.050	26.7	40	0.113	2.87	1.130	1.69	4.8	4.8	84
1	25	1.315	33.4	40	0.133	3.38	1.680	2.50	4.8	4.8	60
11/4	32	1.660	42.2	40	0.140	3.56	2.270	3.39	8.3	9.0	42
11/2	40	1.900	48.3	40	0.145	3.68	2.720	4.05	8.3	9.0	36
2	50	2.375	60.3	40	0.154	3.91	3.660	5.44	15.9	17.2	26
21/2	65	2.874	73.0	40	0.203	5.16	5.800	8.63	17.2	17.2	18
3	80	3.500	88.9	40	0.216	5.49	7.580	11.29	15.3	17.2	14
4	100	4.500	114.3	40	0.237	6.02	10.800	16.07	13.1	15.2	10
5	125	5.563	141.3	40	0.258	6.55	14.630	21.77	11.5	13.4	7
6	150	6.625	168.3	40	0.280	7.11	18.990	28.26	10.5	12.3	7
8	200	8.625	219.1	20	0.250	6.35	22.380	33.31	7.2	8.4	
8	200	8.625	219.1	40	0.322	8.18	28.580	42.55	9.2	10.8	
10	250	10.750	273.1	20	0.250	6.35	28.060	41.75	5.8	6.8	
10	250	10.750	273.1	40	0.365	9.27	40.520	60.29	8.4	9.9	
12	300	12.750	323.9	20	0.250	6.35	33.410	49.71	4.9	5.7	
12	300	12.750	323.9	30	0.330	8.38	43.810	65.18	6.4	7.5	
12	300	12.750	323.9	STD	0.375	9.52	49.610	73.78	7.3	8.5	
12	300	12.750	323.9	40	0.406	10.31	53.570	79.70	7.9	9.2	
14	350	14.000	355.6	10	0.250	6.35	36.750	54.69	4.4	5.2	
14	350	14.000	355.6	30	0.375	9.52	54.620	81.25	6.6	7.7	
14	350	14.000	355.6	40	0.438	11.13	63.500	94.55	7.8	9.0	
16	400	16.000	406.4	10	0.250	6.35	42.090	62.64	3.9	4.5	
16	400	16.000	406.4	30	0.375	9.52	62.640	93.17	5.8	6.8	
16	400	16.000	406.4	40	0.500	12.70	82.850	123.30	7.7	9.0	_

Tolerances

Outside Diameter Pipe size upto & including DN 40

Pipe size DN 50 or larger

Thickness - 12.5% (max) / + Not specified

Weight +/- 10%

TestingOnline NDT

For Pipes NPS 2 (DN 50) or larger

Weld seam of each pipe shall be tested by Eddy Current Test

Bend Test For pipe upto & including DN 50

Bending Angle 90°

Bending Radius 12 times to the OD of tube (No cracks in body & weld)

Flattening (0° & 90°)

For Pipes over DN 50

- 1. Flatten upto 2/3 of OD for ductility of weld
- 2. Flatten upto 1/3 of OD for ductility of steel
- 3. Full flattening for testing of lamination

or unsound material

Mechanical Properties

	Grade A	Grade B
Yield Strength	205 Mpa (Min)	240 Mpa (Min)
Tensile Strength	330 Mpa (Min)	415 Mpa (Min)
Elongation	As per ASTM A-53	As per ASTM A-53

Chemical Composition (Maximum %)

Grade	Carbon	Manganese	Phosphorus	Sulphur	Copper	Nickel	Chromium	Molybdenum	Vanadium
Grade A	0.250	0.950	0.050	0.045	0.400	0.400	0.400	0.150	0.080
Grade B	0.300	1.200	0.050	0.045	0.400	0.400	0.400	0.150	0.080

+/- 0.4 mm of 0D

+/- 1% of OD

Cu + Ni + Cr + Mb + V < 1%

Galvanizing

As per ASTM A-53 with test method ASTM A90/A90M

 $\begin{array}{ll} \mbox{Min. of any surface of specimen} & 0.400\mbox{Kg/Mtr}^2\ (55\mbox{ microns approx}) \\ \mbox{Average of one specimens} & 0.490\mbox{Kg/Mtr}^2\ (70\mbox{ microns approx}) \\ \mbox{Average of two specimens} & 0.550\mbox{Kg/Mtr}^2\ (79\mbox{ microns approx}) \end{array}$

Marking/Stenciling

Online stenciling as per the standard & client requirements.

European Standard for Steel Tubes and Pipes for Ordinary Services

Pipes Conforming to EN: 10255

Nomin	al Size	01	Outside Dia	meter (mm)	Thick.	Weight	Weight	Pcs per
MM	Inch	Class	Min	Max	(mm)	(Plain End) (Kg/mtr.)	(Socketed) (Kg/mtr.)	Bundle
15mm	1/2	L1	21.0	21.7	2.30	1.08	1.09	169
20mm	3/4	L1	26.4	27.1	2.30	1.39	1.40	127
25mm	1	L1	33.2	34.0	2.90	2.20	2.22	91
32mm	1 1/4	L1	41.9	42.7	2.90	2.82	2.85	61
40mm	1 1/2	L1	47.8	48.6	2.90	3.24	3.28	61
50mm	2	L1	59.6	60.7	3.20	4.49	4.56	37
65mm	2 1/2	L1	75.2	76.3	3.20	5.73	5.85	24
80mm	3	L1	87.9	89.4	3.60	7.55	7.72	19
100mm	4	L1	113.0	114.9	4.00	10.80	11.10	14
15mm	1/2	L2	21.0	21.4	2.00	0.947	0.956	169
20mm	3/4	L2	26.4	26.9	2.30	1.380	1.390	127
25mm	1	L2	33.2	33.8	2.60	1.98	2.00	91
32mm	1 1/4	L2	41.9	42.5	2.60	2.540	2.570	61
40mm	1 1/2	L2	47.8	48.4	2.90	3.230	3.270	61
50mm	2	L2	59.6	60.2	2.90	4.08	4.15	37
65mm	2 1/2	L2	75.2	76.0	3.20	5.710	5.830	24
80mm	3	L2	87.9	88.7	3.20	6.720	6.890	19
100mm	4	L2	113.0	113.9	3.60	9.75	10.00	14
15mm	1/2	L	21.0	21.7	2.30	1.08	1.09	169
20mm	3/4	L	26.4	27.1	2.30	1.40	1.41	127
25mm	1	L	33.2	34.0	2.90	2.20	2.22	91
32mm	1 1/4	L	41.9	42.7	2.90	2.82	2.85	61
40mm	1 1/2	L	47.8	48.6	2.90	3.25	3.29	61
50mm	2	L	59.6	60.7	3.20	4.51	4.58	37
65mm	2 1/2	L	75.2	76.0	3.20	5.75	5.87	24
80mm	3	L	87.9	88.7	3.20	6.76	6.93	19
100mm	4	L	113.0	113.9	3.60	9.83	10.10	14
125mm	5	<u>L</u>	138.5	140.8	4.50	15.00	15.50	7
150mm	6	L	163.9	166.5	4.50	17.80	18.40	7
15mm	1/2	M	21.0	21.8	2.60	1.21	1.22	169
20mm	3/4	M	26.5	27.3	2.60	1.56	1.57	127
25mm	1	M	33.3	34.2	3.20	2.41	2.43	91
32mm	1 1/4 1 1/2	M	42.0	42.9	3.20	3.10	3.13	61
40mm		M	47.9	48.8	3.20	3.56	3.60	61
50mm 65mm	2 1/2	M	59.7 75.3	60.8 76.6	3.60 3.60	5.03 6.42	5.10 6.54	37 24
80mm	3	M	88.0	89.5	4.00	8.36	8.53	19
100mm	4	M	113.1	115.0	4.00	12.20	12.50	19
125mm	5	M	138.5	140.8	5.00	16.60	17.10	7
150mm	6	M	163.9	166.5	5.00	19.80	20.40	7
15mm	1/2	H	21.0	21.8	3.20	1.44	1.45	169
20mm	3/4	H	26.5	27.3	3.20	1.87	1.88	127
25mm	1	H	33.3	34.2	4.00	2.93	2.95	91
32mm	1 1/4	H	42.0	42.9	4.00	3.79	3.82	61
40mm	1 1/2	H	47.9	48.8	4.00	4.37	4.41	61
50mm	2	H	59.7	60.8	4.50	6.19	6.26	37
65mm	2 1/2	H	75.3	76.6	4.50	7.93	8.05	24
80mm	3	H	88.0	89.5	5.00	10.30	10.50	19
100mm	4	H	113.1	115.0	5.40	14.50	14.80	10
125mm	5	H	138.5	140.8	5.40	17.90	18.40	7
150mm	6	H	163.9	166.5	5.40	21.30	21.90	7

Tolerances

(Outside Diameter as per above table)

•					,		
Thickness	Medium	Heavy	Light L	Light L1	Light L2		
	±10%	±10%	±10%	-8%	-8%		

Weight : $\pm 7.5\%$ for M, H & L series (on lot) and +10%/-8% for L1 & L2 series

Mechanical Properties

Yield Strength	195 MPa (Minimum)
Tenslie Strength	320 to 520 Mpa
%Elongation	20% Minimum

Chemical Composition

Carbon	0.20 % Max
Manganese	1.40 % Max
Phosphorous	0.035 % Max
Sulphur	0.030 % Max

Bend Test For Tubes upto & including 2"
Black Tube Bending angle
Bending radius

Bending radius As per EN 10255
Weld Position outside of the bend
Bending angle

Galvanized Tube Bending angle 90°

Bending radius 8 times to the OD of Tube
Weld Position outside of the bend

Flattening Test For Tubes above 2"

1. Flatten upto 75% of tube dia for weld test (Weld at 12 or 3 $\mbox{O}\mbox{'clock}$ position)

2. Flatten upto 60% of tube dia for raw material test 100% Hydrotesting at 50 bar or online eddy current testing

Leak Tightness Test 100% Hydrotesting at 50 bar or or Galvanizing Test As per EN 10240 / EN ISO 1461

Threading As per EN 10226-1

European Standard for Steel Tubes and Pipes for Structural Purposes

Pipes Conforming to EN: 10219-1&2 Circular Hollow Section

SIZE					WALI	. THICKNESS	(mm)						
OD	2	2.5	3	4	5	6	6.3	8	10	12	12.5		
(mm)		Mass per unit length (Kg/mtr)											
21.3	0.95	1.16	1.35										
26.9	1.23	1.50	1.77										
33.7	1.56	1.92	2.27										
42.4	1.99	2.46	2.91	3.79									
48.3	2.28	2.82	3.35	4.37	5.34								
60.3	2.88	3.56	4.24	5.55	6.82								
76.1	3.65	4.54	5.41	7.11	8.77	10.40	10.80						
88.9	4.29	5.33	6.36	8.38	10.30	12.30	12.80						
101.6	4.91	6.11	7.29	9.63	11.90	14.10	14.80						
114.3		6.89	8.23	10.90	13.50	16.00	16.80	21.00					
139.7			10.10	13.40	16.60	19.80	20.70	26.00	32.00				
168.3			12.20	16.20	20.10	24.00	25.20	31.60	39.00				
219.1				21.20	26.40	31.50	33.10	41.60	51.60	61.30	63.70		
244.5					29.50	35.30	37.00	46.70	57.80	68.80	71.50		
273.0					33.00	39.50	41.40	52.30	64.90	77.20	80.30		

Tolerances on dimensions

Characteristics Tolerances

 $\begin{array}{ll} \text{External Dimensions} & \pm 1\%, \text{ with a minimum of } \pm 0.5 \text{ mm and a maximum of } \pm 10 \text{ mm} \\ \text{Thickness} & \text{For do} \leq 406.4 \text{ mm}, \text{T} \leq 5 \text{mm} : \pm 10\%, \text{T} > 5 \text{mm} \pm 0.5 \text{mm}; \\ \end{array}$

For do > 406.4 mm: $\pm 10\%$ with a max of ± 2 mm

Out-of-roundness 2% for hollow sections having a diameter to thickness ratio not exceeding 100

Straightness 0.20% of total length

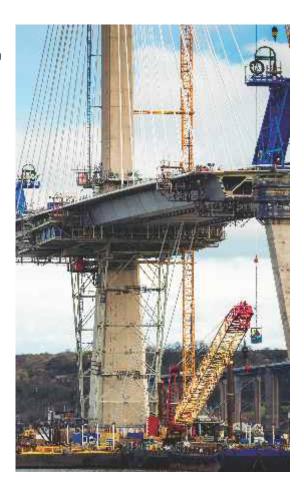
Mass per unit length \pm 6% on individual delivered lengths

Mechanical Properties

Grade	YS Min MPa		Min Pa	% EL (Min)	Minimu	m impact e	energy J						
Graue		MPa	MPa	MPa	MPa	MPa	MPa	MPa	< 3	≥ 3 ≤ 40	≤ 40	-20° C	0° C
S235 JRH	235	360-510	360-510	24	-	-	27						
S275 J0H	075	400 500	440.500		-	27	_						
S275 J2H	275	275 430-580	410-560	20	27	-	_						
S355 J0H					-	27	-						
S355 J2H	235	510-680	470-630	20	27	-	-						
S355 K2H					40	-	-						

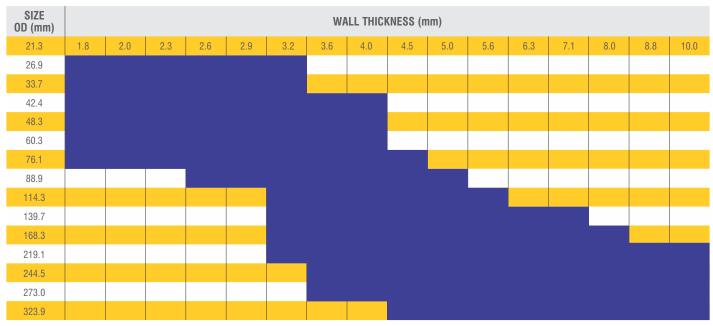
Chemical Composition (%) max.

		` '					
Grade	С	Si	Mn	Р	S	N	CEV
S235 JRH	0.170	-	1.400	0.040	0.040	0.009	0.350
S275 J0H	0.200	-	1.500	0.035	0.035	0.009	0.400
S275 J2H	0.200	_	1.500	0.030	0.030	-	0.400
S355 J0H	0.220	0.550	1.600	0.035	0.035	0.009	0.450
S355 J2H	0.220	0.550	1.600	0.030	0.030	-	0.450
S355 K2H	0.220	0.550	1.600	0.030	0.030	-	0.450



European Standard for Steel Tubes and Pipes for Pressure Purposes

Pipes Conforming to EN: 10217-1



^{*}Preferred thickness are as per shaded area with blue color

Tolerances on dimensions

Outside Diameter For \leq 219.1: \pm 1% or \pm 0.5 mm whichever is greater; For > 219.1: \pm 0.75% or \pm 6 mm whichever is smaller Thickness For T \leq 5mm: \pm 10% or \pm 0.3mm whichever is greater; for 5< T \leq 40 mm: \pm 8% or \pm 2 mm whichever is smaller

Height of weld seam Outside trimmed and inside 1.5 mm for Quality TR1 & 0.5+0.05t mm for Quality TR2

Straightness 0.15% of total length and 3 mm over any 1 m length

Mechanical Properties

	VC M	in MPa		0/ EI	(Min)	Minimum impact energy J			
Grade	19 1/11	III IVIPa	TS Min MPa	/0 LL	(IVIIII)	0°C	0°C		
	T ≤ 16	16 <t≤ 40<="" td=""><td>IVIFA</td><td>long.</td><td>trans.</td><td colspan="2">long.</td><td>trans.</td></t≤>	IVIFA	long.	trans.	long.		trans.	
P195TR1	195	185	320-440	27	25	-	-	-	
P195TR2	195	185	320-440	27	25	40	28	27	
P235TR1	235	225	360-500	25	23				
P235TR2	235	225	360-500	25	23	40	28	27	
P265TR1	265	255	410-570	21	19				
P265TR2	265	255	410-570	21	19	40	28	27	

Chemical Composition (%) Max.

Grade	С	Si	Mn	Р	S	Cr	Мо	Ni	Al	Cu	Nb	Ti	V	Cr+Cu+Mo+Ni
P195TR1	0.130	0.350	0.700	0.025	0.020	0.300	0.080	0.300	-	0.300	0.010	0.040	0.020	0.700
P195TR2	0.130	0.350	0.700	0.025	0.020	0.300	0.080	0.300	0.020	0.300	0.010	0.040	0.020	0.700
P235TR1	0.160	0.350	1.200	0.025	0.020	0.300	0.080	0.300		0.300	0.010	0.040	0.020	0.700
P235TR2	0.160	0.350	1.200	0.025	0.020	0.300	0.080	0.300	0.020	0.300	0.010	0.040	0.020	0.700
P265TR1	0.200	0.400	1.400	0.025	0.020	0.300	0.080	0.300		0.300	0.010	0.040	0.020	0.700
P265TR2	0.200	0.400	1.400	0.025	0.020	0.300	0.080	0.300	0.020	0.300	0.010	0.040	0.020	0.700

Drift Expanding Test: For sizes D≤150mm & T≤10mm

Grade	P195 TR1&2	P235 TR1&2	P265 TR1&2

% increase in diameter

For d/D≤0.8	10	10	8
For d/D>0.8	12	12	10

Leak Tightness Test : 100% Hydrotesting at 70 bar or Electromagnetic testing
Non Destructive Test : Full length of weld seam shall be subjected to non

destructively test for the detection of longitudinal imperfections

Australian Standard for Steel Tubes and Tubulars for Ordinary Services

Pipes Conforming to AS: 1074

Nomi	nal Size	01	Outside Dia	meter (mm)	Thick.	Weight	Weight	Pcs per
MM	Inch	Class	Min	Max	(mm)	(Plain End) (Kg/mtr.)	(Socketed) (Kg/mtr.)	Bundle
15	1/2"	L	21.0	21.4	2.00	0.947	0.956	217
20	3/4"	L	26.4	26.9	2.30	1.380	1.390	127
25	1"	L	33.2	33.8	2.60	1.980	2.000	91
32	11/4"	L	41.9	42.5	2.60	2.540	2.570	61
40	11/2"	L	47.8	48.4	2.90	3.230	3.270	61
50	2"	L	59.6	60.2	2.90	4.080	4.150	37
65	21/2"	L	75.2	76.0	3.20	5.710	5.830	37
80	3"	L	87.9	88.7	3.20	6.720	6.890	19
100	4"	L	113.0	113.9	3.60	9.750	10.000	19
15	1/2"	M	21.1	21.7	2.60	1.210	1.220	217
20	3/4"	M	26.6	27.2	2.60	1.560	1.570	127
25	1"	M	33.4	34.2	3.20	2.410	2.430	91
32	11/4"	M	42.1	42.9	3.20	3.100	3.130	61
40	11/2"	M	48.0	48.8	3.20	3.570	3.610	61
50	2"	M	59.8	60.8	3.60	5.030	5.100	37
65	21/2"	M	75.4	76.6	3.60	6.430	6.550	37
80	3"	M	88.1	89.5	4.00	8.370	8.540	19
100	4"	M	113.3	114.9	4.50	12.200	12.500	19
125	5"	M	138.7	140.6	5.00	16.600	17.100	13
150	6"	M	164.1	166.1	5.00	19.700	20.300	10
15	1/2"	Н	21.1	21.7	3.20	1.440	1.450	217
20	3/4"	Н	26.6	27.2	3.20	1.870	1.880	127
25	1"	Н	33.4	34.2	4.00	2.940	2.960	91
32	11/4"	Н	42.1	42.9	4.00	3.800	3.830	61
40	11/2"	Н	48.0	48.8	4.00	4.380	4.420	61
50	2"	Н	59.8	60.8	4.50	6.190	6.260	37
65	21/2"	Н	75.4	76.6	4.50	7.930	8.050	37
80	3"	Н	88.1	89.5	5.00	10.300	10.500	19
100	4"	Н	113.3	114.9	5.40	14.500	14.800	19
125	5"	Н	138.7	140.6	5.40	17.900	18.400	13
150	6"	Н	164.1	166.1	5.40	21.300	21.900	10

Tolerances

(Outside Diameter as per above table)

Thickness	Light	Medium	Heavy
	-8%	-10%	-10%
	+unlimited	+unlimited	+unlimited

Weight: -8% & +10% (for single tube)

Mechanical Properties

Yield Strength	195 MPa (Minimum)
Tenslie Strength	320 to 460 Mpa
%Elongation	20% Minimum

Chemical Composition

Carbon	0.40 % Max
Phosphorous	0.045 % Max
Sulphur	0.045 % Max
Equivalent	

Ductility Test For Tubes upto & including 2"

Black Tube Bending angle 180°

Bending radius 6 times to the OD of Tube

Weld Position 3 O'clock

Galvanized Tube Bending angle 90°

Bending radius 8 times to the OD of Tube

Weld Position 3 O'clock

Ductility Test For Tubes above 2"

1. Flatten upto 75% of tube dia for weld test (Weld at 3 O'clock position)

2. Flatten upto 60% of tube dia for raw material test

Leak Tightness Test 100% Hydrotesting at 5 MPa or online eddy current testing

or ultrasonic testing

Galvanizing Test As per AS 1650 Threading As per AS 1722-1





Circular Hollow Section

Pipes Conforming to AS / NZS : 1163

SIZE										WALL 1	THICKN	ESS (m	nm)								
CHS OD	2.30	2.60	3.00	3.20	3.50	3.60	4.00	4.50	4.80	4.90	5.00	5.40	5.50	5.90	6.00	6.40	7.10	8.20	9.30	9.50	12.70
mm									Ma	ass per	unit lei	ngth (K	g/mtr)							•	
21.3		1.20		1.43		1.57															
26.9		1.56		1.87			2.26														
33.7				2.41			2.93	3.24													
42.4				3.09			3.79			4.53											
48.3				3.56			4.37					5.71									
60.3						5.03		6.19				7.31									
76.1	4.19			5.75		6.44		7.95						10.20							
88.9		5.53		6.76			8.38		9.96		10.30		11.30	12.10							
101.6		6.35		7.77			9.63				11.90										
114.3				8.77		9.83		12.20	13.00			14.50			16.00						
139.7			10.10		11.80						16.60	17.90									
165.1			12.00		13.90						19.70	21.30									
168.3									19.40							25.60	28.20				
219.1									25.40							33.60		42.60			
273.1									31.80							42.10			60.50		
323.9																50.10				73.70	97.50
355.6																55.10				81.10	107.00
406.4																63.10				93.00	123.00

Tolerances on dimensions

Characteristics Tolerances

External Dimensions $\pm 1\%$, with a minimum of ± 0.5 mm and a maximum of ± 10 mm

Thickness For do \leq 406.4 mm: \pm 10%; For do > 406.4 mm: \pm 10% with a max of \pm 2 mm Out-of-roundness 2% for hollow sections having a diameter to thickness ratio not exceeding 100

Straightness 0.20% of total length

Mass per unit length Not less than 0.96 times the specified mass on individual lengths

Mechanical Properties

	YS Min	TS Min		% EL (Min)		Minimum Absorbed Energy, Joules						
Grade	MDo	MDo		do/t			Avg. of 3 tests	3		Individual tests	3	
	MPa	MPa	≤15	>15≤30	>30	10x10	10x7.5	10x5.0	10x10	10x7.5	10x5.0	
C250, C250L0	250	320	18	20	22	27	22	18	20	16	13	
C350, C350L0	350	430	16	18	20	27	22	18	20	16	13	
C450, C450L0	450	500	12	14	16	27	22	18	20	16	13	

Chemical Composition (%) Max.

Grade	С	Si	Mn	Р	S	Cu	Ni	Cr	Мо	V	Nb	Ti	Ai	V+Nb	CE
C250, C250L0	0.120	0.05	0.50	0.03	0.03	0.25	0.25	0.15	0.10	0.02	0.01	0.04	0.10	0.03	0.25
C350, C350L0	0.200	0.45	1.60	0.03	0.03	0.25	0.25	0.30	0.10	0.10	0.01	0.04	0.10	0.11	0.43
C450, C450L0	0.200	0.45	1.70	0.03	0.03	0.25	0.25	0.50	0.35	0.10	0.01	0.04	0.10	0.11	0.43

Manipulation (Bend Test) For Galvanized Tubes upto & including 60.3 mm

Bending angle 90°

Bending radius 6 times to the OD of Tube

Flattening Test 1. Flatten upto 75% of tube dia for weld test (Weld at 45°_{10} position for do \leq 60mm)

2. Flatten upto 75% of tube dia for weld test (Weld at 90° position for do>60mm)

Sri-Lankan Standard for Galvanized Steel Pipes

Pipes Conforming to SLS - 829 : 2009

Nominal Size	Thread Size	Class/	Outside Dia	meter (mm)	Thick.	Weight	Socket Dim	nension (mm)
(DN)	Designation	Series	Min	Max	(mm)	(Kg/mtr.)	Minimum 0.D.	Minimum Length
15mm	1/2	L1	21.0	21.4	1.80	0.866	26.4	34
20mm	3/4	L1	26.4	26.9	1.80	1.110	31.8	36
25mm	1	L1	33.2	33.8	2.00	1.560	39.5	43
32mm	1 1/4	L1	41.9	42.5	2.30	2.270	48.3	48
40mm	1 1/2	L1	47.8	48.4	2.30	2.610	54.5	48
50mm	2	L1	59.6	60.2	2.30	3.290	66.3	56
65mm	2 1/2	L1	75.2	76.0	2.60	4.710	82	65
65mm	3	L1	87.9	88.7	2.90	6.150	95	71
100mm	4	L1	113.0	113.9	3.20	8.770	122	83
15mm	1/2	L	21.0	21.4	2.00	0.947	26.4	34
20mm	3/4	L	26.4	26.9	2.30	1.380	31.8	36
25mm	1	L	33.2	33.8	2.60	1.980	39.5	43
32mm	1 1/4	L	41.9	42.5	2.60	2.540	48.3	48
40mm	1 1/2	L	47.8	48.4	2.90	3.230	54.5	48
50mm	2	L	59.6	60.2	2.90	4.080	66.3	56
65mm	2 1/2	L	75.2	76.0	3.20	5.710	82	65
65mm	3	L	87.9	88.7	3.20	6.720	95	71
100mm	4	L	113.0	113.9	3.60	9.750	122	83
15mm	1/2	M	21.0	21.8	2.60	1.21	26.4	34
20mm	3/4	M	26.5	27.3	2.60	1.56	31.8	36
25mm	1	M	33.3	34.2	3.20	2.41	39.5	43
32mm	1 1/4	M	42.0	42.9	3.20	3.10	48.3	48
40mm	1 1/2	M	47.9	48.8	3.20	3.56	54.5	48
50mm	2	M	59.7	60.8	3.60	5.03	66.3	56
65mm	2 1/2	M	75.3	76.6	3.60	6.42	82	65
65mm	3	M	88.0	89.5	4.00	8.36	95	71
100mm	4	M	113.1	115.0	4.50	12.20	122	83
125mm	5	M	138.5	140.8	5.00	16.60	147	92
150mm	6	M	163.9	166.5	5.00	19.80	174	92
15mm	1/2	Н	21.0	21.8	3.20	1.44	26.4	34
20mm	3/4	Н	26.5	27.3	3.20	1.87	31.8	36
25mm	1	Н	33.3	34.2	4.00	2.93	39.5	43
32mm	1 1/4	Н	42.0	42.9	4.00	3.79	48.3	48
40mm	1 1/2	Н	47.9	48.8	4.00	4.37	54.5	48
50mm	2	Н	59.7	60.8	4.50	6.19	66.3	56
65mm	2 1/2	Н	75.3	76.6	4.50	7.93	82	65
65mm	3	Н	88.0	89.5	5.00	10.30	95	71
100mm	4	Н	113.1	115.0	5.40	14.50	122	83
125mm	5	Н	138.5	140.8	5.40	17.90	147	92
150mm	6	Н	163.9	166.5	5.40	21.30	174	92

Tolerances

(Outside Diameter as per above table)

Thickness	Medium	Heavy	Light L	Light L1
	±10%	±10%	-8%	-8%

Weight : For M & H Series $\pm 10\%$ on each pipe & $\pm 7.5\%$ on lot For L1 & L Series $\pm 10/-8\%$ on each pipe & $\pm 5\%$ on lot

Mechanical Properties

Yield Strength	195 MPa (Minimum)	
Tenslie Strength	320 Mpa (Minimum)	
%Elongation	20% Minimum	

Chemical Composition

Carbon	0.20 % Max		
Manganese	1.40 % Max		
Phosphorous	0.040 % Max		
Sulphur	0.040 % Max		

Bend Test For Tubes upto & including 2" Black Tube Bending angle

Bending radius 8 times to the OD of Tube

Flattening Test For Tubes above 2"

1. Flatten upto 75% of tube dia for weld test (Weld at 90° position)

2. Flatten upto 60% of tube dia for raw material test

Leak Tightness Test 100% Hydrotesting at 5 MPa or online eddy current testing Galvanizing Test

Zinc Coating for M & H Series 400 g/m² & for L1 & L Series 360 g/m²

Uniformity Test

Free Bore test (for tubes upto 1")

Threading As per ISO 7-1

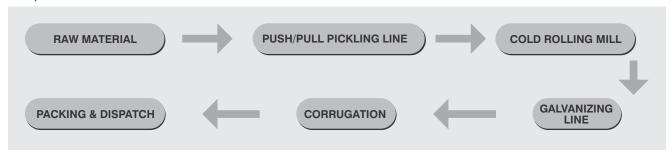




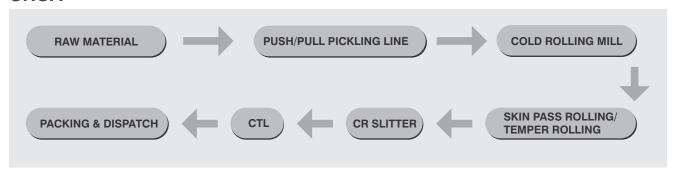
CR/CRCA/HRPO & GP/GC Sheets

GP/GC

GP/GC



CRCA



Raw material

Our integrated manufacturing processes start with sourcing the best quality of Hot Rolled Coils. Consistency of raw material quality is maintained by our reliable suppliers. Our suppliers for HR Coils include Tata Steel, Steel Authority of India, Essar Steel, JSW, Bhushan etc. All these companies have their local stockyard at Ghaziabad for timely delivery of material

Push/pull pickling line

To ensure the right quality input of HR Coils to the mill, the unit is equipped with advance technology Pickling Line. High pressure hot acid jet is sprayed on strips thereby removing scales of HR Coils & produce clean bright surface, suitable for Cold Rolling and other processes.

Cold rolling

4 High reversible mills are designed and engineered with latest technology viz Hydraulic Automatic Gauge Control (AGC) for rolling in very close thickness tolerances, positive and negative roll bending for controlling the strip shape etc. Various other features are also part of Mill Management System for maintaining the consistency of product quality.

Annealing

Cold Rolled Coils are annealed under protective atmosphere for retaining the properties of material. Bell Annealing furnaces are installed for producing clean and bright strip having excellent metallurgical and surface properties.

Skin pass rolling/temper rolling

This process is carried out at the 4 High Mill with non reversible operation. Approx 1% to 5% reduction is applied on annealed coils for preventing stretcher strain marking on strip. Bridle rolls are provided to enhance the process capability at temper rolling.

Galvanizing line

The Galvanized sheets & coils manufactured by the company have strong zinc adhesion and corrosion resistance achieved by applying a special coating of zinc & zinc alloys. Further the life of coating is enhanced by giving a special chemical treatment on the surface so as to prevent the attack of environmental pollutants.



Product specifications

Catering to your specific requirements

Cold Rolled Full Hard Coils / Sheets

Specifications : JIS G 3141-SPCC-1B &

other equivalent specifications

Thickness Range : 0.140 mm to 2.00 mm

Hardness : 90 to 98 HRB or 85 HRB Min.

Edge Condition : Smooth Mill Edges or

Trimmed Edges as required.

Surface Finish : Bright

CRCA (Cold Rolled Close Annealed) Coils / Sheets

Specifications : IS 513 (D, DD, EDD),

JIS G 3141 (SPCC, SPCD, SPCE),

DIN 1623 (ST12, ST13, ST14), BS 1449 ASTM

Thickness Range : 0.25 mm to 2.00 mm (Further closed

tolerances on request)

Width Range (mm) : 50 mm to 1000 mm

Cut-to-length(mm) : Up to 3500 mm with tolerance of $\pm 2/-0$ mm

Coil Weight : 3MT Max
Coil ID : 508 mm

Hardness : 45 to 65 HRB (Max) for D/DD, 34/52 (Max)

for EDD

Edge Condition : Trimmed Edges.

Surface Finish : Super Bright, Bright, Dull & Matt

Tolerances:

Thickness	Specified Thickness	(MM)	Tolerances	Tolerance
	Over	Upto	Upto 250	Over 250 mm
			Width (mm) (±)	Width (mm) (±)
	0.14	0.19	0.015	0.015
	0.20	0.40	0.020	0.025
	0.40	0.80	0.025	0.030
	0.80	1.60	0.030	0.035
	1.60	2.00	0.035	0.055
Width (mm)	Specified Thickness	(MM)	Tolerances	Tolerance
	Over	Upto	Upto 250	Over 250 mm
			Width (mm) (±)	Width (mm) (±)
	50	250	0.15	0.20
	250	600	0.20	0.25
	600	1050	0.40	0.50



Galvanized Specifications

JAPANESE IS JIS G 3302 / SGCH IS-277

Coils and Sheets

Thickness : 0.10 to 0.70 mm Coating : 90 gm - 300 gm / sq.m. (both sides)

Width: 750 mm to 1000 mmCoil inner diameter: 508 mmOuter diameter: 1500 mm maximumCoil Weight: 12 MT maximumPacket Weight: 3 MT MaxFinish: Bright Regular

Cut to Length : 4800 mm (Max)

Corrugation Details

Width Before Corrugation (mm)	Width After Corrugation (mm)	Pitch (mm)	Depth (mm)	No. of Corrugations
750 / 762	660 / 665 720 / 740 /	75	17.5	8
900 / 914	750 / 760 / 780 / 800 / 810 / 830 /	65 to 85	12.5 to 20.5	10
1000	885/900/930	75	17.5	11



HRPO

 Thickness
 : 1.4 mm to 6.0 mm
 Length Range
 : 500 mm to 3500 mm

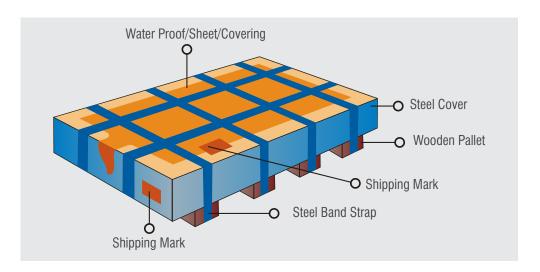
 Width
 : 100 mm to 1000 mm
 Specification
 : IS11513, IS1069

World class packaging

Packaging as per your needs

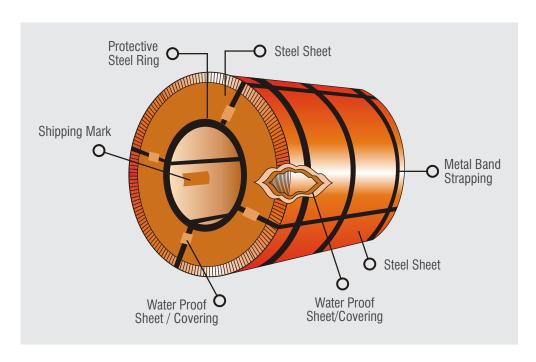
For Sheets

Sheets are wrapped in VCI paper / air bubble polythene and covered with ${\sf GP}$ / ${\sf CR}$ sheets by metal straps, edge protected and fastened on wooden skids.



For Coils

Each Coil is wrapped with VCI paper, covered with Galvanized sheets and edge protected. This packing is secure through three metal straps on the circumference and 4-5 straps through the eye of the Coil.



Packing as per customer's requirement can be provided

Precision Fabrication & Painted Technology Structures

Building the nation's infrastructure

ESP Components:

Our facility has skilled manpower and technical staff to develop component structures for equipments. We have supplied Rapper bars for Electrostatic Precipitator for Power, Cement plants of German design. Hoppers and casing for electrostatic precipitator are also fabricated at our shop.





Bucket Elevators:

We supply bucket elevators of varied dimensions for applications in Cement, Steel Industry. High Quality Standards are maintained in the manufacturing process to ensure correctness in fitting. Our expert manpower can develop and fabricate equipments for material handling like crusher casings and components, apron feeders, conveyor structures, idlers, pulleys etc.

Bag Houses and Filtration Systems

We have in-house expertise to develop and fabricate custom made designs of bag houses, filters and housings. We have supplied one of the largest ESP convert bag houses for Shree Cements, Beawar. We can supply as per the needs of cement units and power houses to major OEM's or also to end-users .





Ash Hoppers and Power Plant equipments

We have supplied Bottom Ash Hoppers to Boilers recovering waste heat to generate power. Our supplies has been to a major project of Keppel Seghers in India through ISGEC Heavy Engg. We have in-house ability of testing and maintaining quality demands of European and Multinational companies coming to India to exchange their technology and expertise.



Ducting Solutions

We have the infrastructure and manpower and equipments to manufacture all kinds of Mild Steel ducting for flue gas and air applications for Power, Cement, Steel, fertilizer and allied industry. We can also supply custom design expansion bellows and dampers for the same ducting systems. We already supply to major Boiler companies.





Primary and Secondary Support Structures for Boilers and Other Equipments

We fabricate structures from plates, channels and rolled sections to columns, bracings and hangers. We use standard sections and plates of reputed make and have inventory of similar stock for easy delivery. Custom made columns can be assembled upto a length of 30-40 mtrs. We have mock assembled lengths of around 25-30 mtrs in our bay. We also have available space to carry mock assemblies of larger lengths. Efficient and qualified welders, following approved Welding procedures of Power grid, NTPC, BHEL, EIL are involved in fabricating these items. Ultarsonic and radiography tests are also carried out on these products. We have in-house facilities for same. Built up beams of web height around 1200 – 2000 mtrs can be fabricated at our workshop. We have executed similar jobs of specified web heights and thickness. We have developed indigenous fixtures and modules to handle built up T's and rolled sections of thickness around 40mm to 52mm. Our supplies presently has been mainly to Boiler support structures for major power plants and refineries in India. We are a registered vendor for Engineers India Limited.

These structures undergo two rounds of internal inspection before the final customer inspection as per quality procedure and QAP of M/s Good Luck India Limited They are thoroughly surface finished by shot/grit/chilled grit blasting in-house and then coated with primer, intermediary paints and even finish paints as per requirement. These facilities are all in-house.

Structures for Infrastructure Projects

At Good Luck India Limited we can design and fabricate structures based on your requirements. We can fabricate structures for subterranean railway, elevated railway tracks and corridors for walkways, gantries, handrails and support structures. These structures are made of pipes, hollow sections and bright bars which are indigenously manufactured by us. This helps us control deliveries and price in the market.

We have also fabricated mild steel structures for Indian Railways and are executing jobs for metro railway projects as well. Our raw material is approved by DMRC and major railways entities.

Gangways, walkways and support structures made from chequered plates, angles and fabricated channels are in our product portfolio.

We can design the structures in specialized software and have also employed experts for it.

Round and Square Hollow Sections:

We are original manufacturers of tubes and pipes and hollow sections. Our square and rectangular hollow sections are manufactured based on international standards.







Transmission Line / Telecom / Solar Structures

Products of higher standards

Galvanize Lattice Structures for Power Transmission & Distribution and Substations

We are one of the largest suppliers for power transmission distribution structures for line segments up to 765kv. These structures are fabricated out of standard angles and channels of Power Grid - approved make as well as non PG material. Good Luck India Limited has control over the market and has primarily supplies to eBoP parties. Our supplies are dominant power players like BHEL, Alstom Siemens, AReva, Crompton Greaves, Techno Electric etc. These fabricated items are then hot dip galvanized in our own kettles to around 86 to 100 microns. These tower material are first assembled in a prototype which are tested and passed as per Power Grid guidelines and then mass produced. Our experience and expertise ensures a proper fit and perfect alignments. Different tower designs are available and we fabricate as per standard designs which are developed in-house. We can also fabricate same from HT material as per end user choice. The designs and drawings are cross vetted through a software for any wind load or structural stability.



Substations are generally air insulated or gas insulated. Air Insulated substations have larger volume of lattice structures in design whereas the gas insulated models have restricted use of steel because of the compactness of the structure. We can supply around 1000-1500 tons of these structures every month.

Tower designs vary as per distribution and as per design. We supply towers to KEC International, Alstom and others and such designs also vary as per geographical domain. We are among the largest power grid corp. approved shops in India. Our workshops are quality certified by PGCIL. We also cater to some global markets through KEC and other OEMs.

Solar Power Projects Turnkey Solutions

The world has turned onto solar power in this decade in a much more optimistic version than earlier. This is the story of India with a planned target of 3000 MW by 2018. Solar power plants are now not just roof top installations but are widely being installed as an alternate source of power by ground mounting structures. The Photovoltaic cells are fixed onto a rafter that are grounded to the surface and spread across in width to derive exposure to sun rays. We procure the photovoltaic module cells from major suppliers and other peripherals like inverter, stringer box, cables and controls and can execute projects on a turnkey basis.



Solar Tracker

Design, Fabrication and Erection Services

Solar Trackers are technologically driven solutions which help in generating higher output from fixed solar tables. Our trackers are indigenously manufactured under the guidance and technology support from a major European company. Our trackers promise generation of extra 30-32% from fixed tilt structures. The design promotes a very balanced structural weight at competitive prices.

Our Solar trackers work, and optional ground mounting fixtures, mainly with below - the - ground poles and also on grouted plates. The Solar tracker involves light weight structures ranging from 50 tons to 65 tons per MW.

We provide designs for -

Fixed Axis Single Axis Tracker Systems Dual Axis Tracker Systems

We can provide solutions for structures from tracker to module mounts of **PV**.



Solar Module Mounting Structures

Design Fabrication Erection

These structures involve pipe, square tube sections and composite (cold formed) purlin structures which are galvanized at 610 GSM and pre galvanized at 550GSM. We fabricate two types of structures: Traditional and Profile type. At Good Luck we have the capacity to produce pipes, plates, purlins for module mounting (both Z purlin, C and Sigma purlins).

We can design the plant as per STAD calculation and also execute the same in EPC mode.





Superior ability for building super structures of steel

Expanding capabilities

Steel Bridges & Girders

As India progresses, investing in Infrastructure projects are mandatory and today we see a surge in construction and building projects essentially bridge and girders. As per supreme court ruling in 2010, all unmanned level crossings will be converted to over bridges. This is the latest integration of business in the Good Luck group. It has aged enough to handle larger quantum of jobs. Good Luck is capable of design engineering, supply and erection of super structures of steel. We are today an RDSO approved facility and equipped with complete facility as per railway norms.

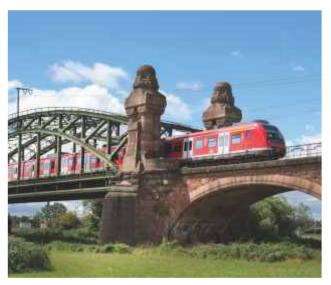
We have facility to auto weld sections of single web girder of 3 mtr. height and flange height of 1250 mm. Our facility has straightening machine for plate girders of thickness around 100 mm. The product line in this sections would be:

- Plate Girder for 25 T loading.
- Open Web Girder
- Composite Girder 25T
- Plate Girder for DFC loading (32.5 Axle Load)
- Railway Over Bridges (ROB)
- Foot Over Bridge

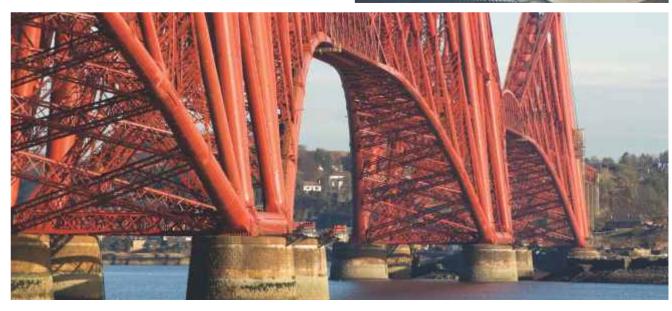
Our quality department maintains strict inspection of the parts as per established QAP. We can also get the drawings vetted by RDSO and third party agency.

Adequate handling facility with 2 EOT cranes in fabrication and around 30 MT of Goliath crane is available. Internal metallising and grit blasting facility completes the process.

We have executed projects for DMRC for walkway platforms.







Awards & recognition

Achieving excellence





- Winners of Award for Excellence in Exports for Northern Region from Engineering Export Promotion Council for the last three years.
- We have achieved certifications from EEPC for our exports to major global destinations.



Also won **Silver Trophy** for two consecutive years (2003-04/2002-03) from Federation of Indian Export Organization.

Our products are favoured by clients globally













































































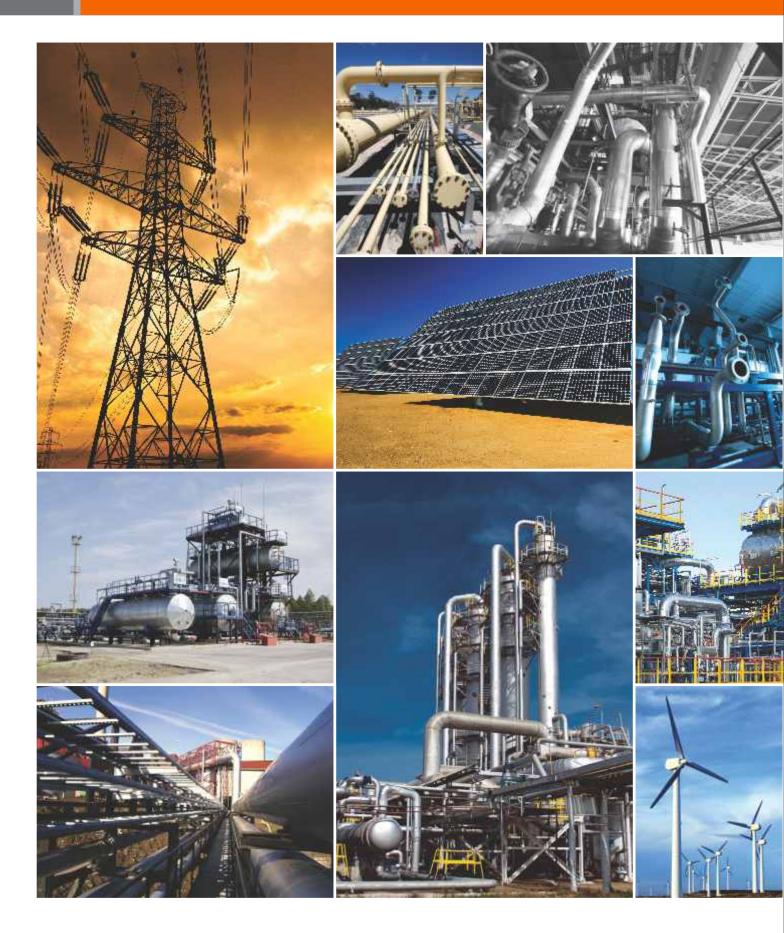






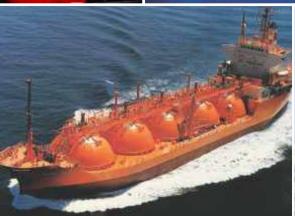
Playing our role in transporting resources, assisting development

The highest focus on engineering excellence



















New Growth Sectors Attracting Expansion and Investment - 2020

Railways Renewable Energy Defence

Products under development

- Railway Components and parts
- Products for high Speed Train Tracks
- Over Head Masts for Railways
- Coach Body and Fiat Body
- Platforms for Ballistic Missiles and other Combative Aircraft component essentials
- Launch Vehicles / Platform
- EPC Solar Projects
- Solar Trackers
- Turnkey solutions for Solar, Wind Energy
- Auto Forging Items