

Pipes & Tubes

Smooth Flow,
Strong Structures





JSW Group

The US\$ 23 billion JSW Group is ranked among India's leading business houses. JSW's innovative and sustainable presence in various sectors including Steel, Energy, Infrastructure, Cement, Paints, Venture Capital and Sports is helping the Group play an important role in driving India's economic growth. The Group strives for excellence by leveraging its strengths & capabilities including a successful track-record of executing large capital-intensive & technically complex projects, differentiated product-mix, state-of-the-art manufacturing facilities and greater focus on pursuing sustainable growth. With a culturally diverse workforce spread across India, USA, Europe and Africa, JSW Group directly employs nearly 40,000 people. It also has a strong social development focus aimed at empowering local communities residing around its Plant & Port locations. JSW Group is known to create value for all its stakeholders by combining its growth roadmap, superior execution capabilities and a relentless drive to be #BetterEveryday.





JSW Steel Ltd.

JSW Steel is the flagship business of the diversified, US\$ 23 billion JSW Group. As one of India's leading business houses, JSW Group also has interests in energy, infrastructure, cement, paints, sports, and venture capital. JSW Steel, certified by Great Places To Work in 2021, has emerged as an organization with a strong cultural foundation. Over the last three decades, it has grown from a single manufacturing unit to become India's leading integrated steel company with a capacity of 28.5 MTPA in India and the USA (including capacities under joint control). Its next phase of growth will take its total capacity to 38.5 MTPA by FY25. The Company's manufacturing unit in Vijayanagar, Karnataka is the largest single-location steel-producing facility in India with a capacity of 12 MTPA. JSW Steel has always been at the forefront of research and innovation.

It has a strategic collaboration with global leader JFE Steel of Japan, enabling JSW to access new and state-of-the-art technologies to produce and offer high-value special steel products to its customers. These products are extensively used across industries and applications including construction, infrastructure, automobile, electrical applications, and appliances. JSW Steel is widely recognized for its excellence in business and sustainability practices. Some of these recognitions include World Steel Association's Steel Sustainability Champion (consecutively from 2019 to 2022), Leadership Rating (A-) in CDP (2020 & 2021), Deming Prize for TQM for its facilities at Vijayanagar (2018), and Salem (2019). It is part of the S&P Dow Jones Sustainability Index (DJSI) for Emerging Markets (2021) and S&P Global's Sustainability Yearbook (consecutively for 2020 and 2021).

JSW Kalinga Pipes & Tubes

JSW Steel offers a comprehensive spectrum of pipes and tubes for diverse applications. Manufactured with the finest raw materials, using modern equipment and technology, the pipes and tubes are engineered to offer high performance, strength and durability.



JSW Kalinga comprises a selection of black hollow section pipes and tubes in round, square, and rectangular shapes, serving as a versatile building material for various residential, commercial, and infrastructure projects. These structural steel pipes and tubes are crafted from top-notch steel and produced using advanced manufacturing facilities at JSW Steel.



JSW Kalinga Z+ consists of a collection of pipes and tubes in round, square and rectangular galvanized (GI) steel. These non-corrosive pipes and tubes are specifically designed for areas with high humidity and meet stringent quality standards. They are perfect for demanding fabrication tasks due to their exceptional strength and durability.



JSW Kalinga Z Fab is a collection of high-quality GP steel pipes and tubes designed to withstand corrosion. Crafted from top-notch steel, these tubes come in round, square, and rectangular shapes. With a steadfast dedication to upholding superior quality, the hollow steel sections are an exceptional option for rigorous fabrication requirements.



JSW Kalinga Pipes and Tubes

Product Profile

Size	1/2" to 8"
Thickness	0.60 mm to 8.00 mm
Capacity (MT per annum)	6,00,000 (0.6 million)
Length	3000 mm to 8000 mm
Grade	All national / international specifications including IS 1239 (part I), IS 1161, IS 3601,IS 4923, IS 3589, IS 9295, IS 9537 (part II), IS 4270, IS 3074 EN 10255, EN 10219 AS: 1074, ASTM A53, ASTM A795-04
Pipe Ends	Plain / Bevelled / Pre-grooved



JSW Kalinga Pipes and Tubes

Application & Standards

The products conform to the following national and international specifications.

Water pipe lines	Water Mains, Plumbing, Sewerage Systems industrial water lines, Plant piping (IS 1239 (part-1) 2004, IS 3589:2001, ASTM A53-12 JIS G 3452:2010, EN 10255: 2004, EN 10217-1:2002, AS 1074:1989, ASNZ 1163-2009)
Agriculture and Irrigation	Farming, Deep Tube-wells & Casing pipes As per IS 1239/3589, IS 4270-2001
Fire Fighting/HVAC Industries	(Heating Ventilation air conditioning) In MEP, PHE & other Industrial applications IS 1239 (part 1) 2004, IS 3589:2001 ASTM A53-12, ASTM A795-04
Construction {RHS/SHA/CHS}	Scaffolding & Structural purposes IS 1161: 2014, IS 4923:2017, EN 39:2001, EN 10219-PART 1& 2: 2006, AS/NZ 1163:2009 ASTM A500-13
Gas/Oil Pipe Lines	Pipe lines for natural gas, LPG, PNG And other non-toxic gases IS 1239 (Part 1): 2004, IS/ISO 3183:2007
Cement/Sugar/Paper Industries	Steel tubes for mechanical & general Engineering purposes. (IS 3601: 2006, BS 1775: 1964)
Automobiles	Motorcycles & Car IS 3074: 2013, IS3601:2006, EN10305: 2003
Bicycles	IS2039/1991, BS1717
Steel/Power Project	Ash handling systems LP piping (IS3589:2001, IS1239 (PART 1): 2004
General Engineering	Furniture, barricade, Commercial vehicle body, Supply of exhaust piping, Cold storage industry, LPG cylinder rings, (IS 1239 (PART1):2004 Steel tubes for idlers & belt conveyers (IS 9295:1983) Electrical poles & Telecom tower (IS 1161: 2014)



JSW Kalinga Pipes and Tubes Specifications

Conforming to IS 1239 {Part-I} :2004

Nominal Bore (N.B.)		Outside	Diameter		Wall Thickness		Normal Weight		Meters / Ton	
		Minimum	Maximum				Kg. / Meters			
MM	INCH	MM	MM	CLASS	MM	SWG	P.E.	S&S	P.E.	S&S
15	(1/2")	21.00	21.40	L	2.00	14	0.95	0.96	1056	1046
		21.00	21.80	M	2.60	12	1.21	1.22	826	820
		21.00	21.80	H	3.20	10	1.44	1.45	694	690
20	(3/4")	26.40	26.90	L	2.30	13	1.38	1.39	725	719
		26.50	27.30	M	2.60	12	1.56	1.57	641	637
		26.50	27.30	H	3.20	10	1.87	1.88	535	532
25	(1")	33.20	33.80	L	2.60	12	1.98	2.00	505	500
		33.30	34.20	M	3.20	10	2.41	2.43	415	411
		33.30	34.20	H	4.00	8	2.93	2.95	341	339
32	(1 1/4")	41.90	42.50	L	2.60	12	2.54	2.57	394	389
		42.00	42.90	M	3.20	10	3.10	3.13	322	319
		42.00	42.90	H	4.00	8	3.79	3.82	264	262
40	(1 1/2")	47.80	48.40	L	2.90	1	3.23	3.27	310	306
		47.90	48.80	M	3.20	10	3.56	3.60	281	278
		47.90	48.80	H	4.00	8	4.37	4.41	229	227
50	(2")	59.60	60.20	L	2.90	1	4.08	4.15	245	241
		59.70	60.80	M	3.60	9	5.03	5.10	199	196
		59.70	60.80	H	4.50	7	6.19	6.26	161	160
65	(2 1/2")	75.20	76.00	L	3.20	10	5.71	5.83	175	171.5
		75.30	76.60	M	3.60	9	6.42	6.54	156	153
		75.30	76.60	H	4.50	7	7.93	8.05	126	124
80	(3")	87.90	88.70	L	3.20	10	6.72	6.89	149	145
		88.00	89.50	M	4.00	8	8.36	8.53	120	117
		88.00	89.50	H	4.80	6	9.90	10.10	101	99
100	(4")	113.00	113.90	L	3.60	9	9.750	10.00	102	100
		113.10	115.00	M	4.50	7	12.20	12.50	82	80
		113.10	115.00	H	5.40	5	14.50	14.80	69	67
125	(5")	138.50	140.80	M	4.80	6	15.90	16.40	63	61
		138.50	140.80	H	5.40	5	17.90	18.40	56	54
150	(6")	163.90	166.50	M	4.80	6	18.90	19.50	53	51
		163.90	166.50	H	5.40	5	21.30	21.90	47	46

Tolerance

Thickness:		Chemical Composition:	
Light Tubes :	+No limit -8%	As per IS 10748 : 2004	
Medium and Heavy Tubes:	+No limit -10%		
Weight:		Physical Properties:	
Single Tube(light series) :	+10% -8%	Tensile strength :	Min. 320MPa
Single Tube (Medium and Heavy series) :	+/-10%	Elongation% age :	20% Min. above 25mm NB 12% Min. upto 25mm NB
For quantities per load of 10 ton Min (light series) :	+7.5% -5.0%	Hydro Test Pressure :	5MPa
For quantities per load of 10 ton Min (Medium and Heavy series) :	+/-7.5%	Mass Of Zinc Coating :	Min 360 gm/m ²

Product Range

Square Hollow Section (SHS)

SHS (DXB)*	Thickness	Unit Weight	
MM	MM	Kg/Meter	Meter/Ton
15 x 15	1.20	0.49	2037
	1.60	0.62	1609
	2.00	0.74	1359
19 x 19	2.00	0.99	1013
	2.60	1.20	832
	2.90	1.30	772
25 X 25	2.00	1.36	733
	2.60	1.69	591
	3.20	1.98	504
32 x 32	2.60	2.26	442
	3.20	2.69	372
	4.00	3.19	313
38 x 38	2.00	2.18	459
	2.60	2.75	364
	3.20	3.29	304
	4.00	3.95	253
40 X 40	2.00	2.31	434
	2.60	2.92	343
	3.20	3.49	286
	4.00	4.20	238
49.5 X 49.5	2.60	3.69	271
	3.20	4.45	225
	4.50	5.95	168
60 X 60	2.60	4.55	220
	3.20	5.50	182
	3.50	5.96	168
	4.50	7.43	135
72 x 72	3.20	6.71	149
	4.00	8.22	122
	5.00	10.01	100

SHS (DXB)*	Thickness	Unit Weight	
MM	MM	Kg/Meter	Meter/Ton
80 x 80	3.20	7.51	133
	4.00	9.22	108
	5.00	11.27	89
91.5x91.5	3.60	9.67	103
	4.50	11.88	84
	5.40	14.01	71
100 x 100	3.60	10.64	94
	4.50	13.08	76
	6.00	16.98	59
113.5 x 113.5	4.00	13.43	74
	5.00	16.53	60
	6.00	19.53	51
125 x 125	4.00	14.87	67
	5.00	18.33	55
	6.00	21.69	46
132 x 132	4.00	15.75	63
	5.00	19.43	51
	6.00	23.01	43
150 x 150	5.00	22.26	45
	6.00	26.40	38
	7.00	30.44	33
180 x 180	5.00	26.97	37
	6.00	32.05	31
	8.00	41.91	24

Steel Grade	Min. Yield Stress	Min. UTS
	MPa	MPa
YSt 210	210	330
YSt 240	240	410
YSt 310	310	450
YSt 355	355	490

Steel Grade	Elongation Percent Min, for Sizes	
	25.4 and under*	Over 25.4*
YSt 210	12	20
YSt 240	10	15
YSt 310	8	10
YSt 355	8	10

The size which are not covered in the Table can also be supplied as per customer requirement.

*The value shall be applicable for the smaller side of the rectangular section.



Product Range

Rectangular Hollow Section (RHS)

Conforming to IS 4923: 2017

RHS	Thickness	Unit Weight	
MM	MM	Kg/Meter	Meter/Ton
40 X 20	2.00	1.68	595
	2.60	2.10	476
	3.20	2.49	402
40 X 25	1.60	1.50	666
	2.00	1.83	545
	2.50	2.23	449
50 x 25	2.00	2.15	465
	2.60	2.71	369
	3.20	3.27	309
	4.00	3.88	258
	2.00	2.31	434
	2.50	2.82	355
	2.90	3.21	312
	2.00	2.62	382
	2.50	3.21	312
	2.90	3.66	273
	2.60	3.73	268
	3.20	4.50	222
	4.50	6.02	166
	2.60	3.69	271
	3.20	4.45	225
	4.50	5.95	168
	2.60	3.73	268
	3.20	4.50	222
	4.50	6.02	166
	2.90	5.03	199
	3.50	5.96	168
	4.50	7.43	135
	3.20	6.17	149
	4.00	8.22	122
	5.00	10.01	100
	3.20	7.01	143
	4.00	8.59	116
	5.00	10.48	95
	3.20	7.01	143
	4.00	8.59	116
	5.40	11.21	89
	6.00	12.27	81
120 x 60	3.60	9.50	105
	4.50	11.67	86
	5.40	13.76	73
122 x 61	3.60	9.67	103
	4.50	11.88	84
	5.40	14.01	71
125 x 75	4.00	11.73	85
	5.00	14.41	69
	6.00	16.98	59
125 x 100	4.00	13.30	75
	5.00	16.37	61
	6.00	19.34	52
145 x 82	3.60	12.16	82
	4.50	14.99	67
	5.40	17.74	56
150 x 75	3.60	12.05	83
	4.50	14.85	67
	5.40	17.57	57

RHS	Thickness	Unit Weight	
MM	MM	Kg/Meter	Meter/Ton
150 x100	3.60	13.46	74
	4.50	16.62	60
	5.40	19.69	51
172 x92	3.60	14.25	70
	4.50	17.61	57
	5.40	20.88	48
200 x 100	4.50	20.15	50
	6.00	26.40	38
	7.00	30.44	33
200 x 150	4.50	23.68	42
	6.00	31.11	32
	8.00	40.66	25

General Technical Specifications and Tolerances:

Spec:	IS 4923: 2017
Length:	6.0mtrs. +/- 6.0mm customized length ranging from 4mtrs. to 8mtrs. May be supplied
Thickness:	For all sizes: +/- 7.5%
Outer Dimensions:	1% with a min of 0.5mm
Corner Squareness:	90° +/- 2°
Corner Radii:	Max. 3t (t = Thickness of the section)
Weight:	on individual length: +10%, -8% on lots of 10MT: +/- 7 %
Straightness:	Min1:600 of any length measured along the center line (mill straightened condition) unless otherwise specifically arranged
Twist Tolerance:	Max.2mm: +0.5mm/1m length the measured relative vertical shift of any adjacent corner of the measured by keeping one side on flat surface.
End finish:	Plain Ended - Mechanically sheared, mill-cut finish without further machining.
Surface Finish:	Black without any surface treatment of oiling or varnishing
Raw Material:	Sulphur content: 0.040% max; Phosphorus content:0.040% max.

Remark : Mass Of Zinc Coating Per Galvanized Tube as Per Customers Requirements.

Grooved Pipe

In about the time it takes to read this page, you can install the new fire lock EZTM 009V Coupling. The company is Manufacturing Grooved Pipes. The Technique involves grooves joining, the fastest, easiest way to install the most rigid coupling ever.



Diameter	Wall Thickness		Pos.of Seal A	Wideness of Grover B	Diameter of Grover B	Diameter of Grover C	Diameter of Grover D
MM	MM	MM			Base	Tolerance	
60.30	2.60	3.60	15.88	8.74	57.15	-0.38	1.60
76.10	2.60	3.60	15.88	8.74	72.26	-0.46	1.98
88.90	2.90	4.00	15.88	8.74	84.94	-0.46	1.98
114.30	2.90	4.00	15.88	8.74	110.08	-0.51	2.11
139.70	3.20	4.00	15.88	8.74	135.48	-0.51	2.11
168.30	3.20	4.50	15.88	8.74	163.96	-0.56	2.16
219.10	3.20	5.00	19.05	11.91	214.04	-0.64	2.34

Product Range

Structural Purpose

Conforming to IS 1161 : 2014

Nominal Size NB		Outside Diameter D	Thickness T		Nominal Weight Back Tubes Plain End	
MM	INCH	MM	MM	SWG	Kg/Meter	Meter/Ton
15	(1/2")	21.30	2.00	14	0.952	1050
			2.60	12	1.200	834
			3.20	10	1.430	700
20	(3/4")	26.90	2.30	13	1.400	717
			2.60	12	1.560	642
			3.20	10	1.870	535
25	(1")	33.70	2.60	12	1.990	501
			3.20	10	2.410	415
			4.00	08	2.930	341
32	(1 1/4")	42.40	2.60	12	2.552	392
			3.20	10	3.094	323
			4.00	08	3.790	264
40	(1 1/2")	48.30	2.90	11	3.250	308
			3.20	10	3.560	281
			4.00	08	4.370	229
50	(2")	60.30	2.90	11	4.110	244
			3.60	09	5.030	199
			4.50	07	6.190	162
65	(2 1/2")	76.10	3.20	10	5.750	175
			3.60	09	6.440	155
			4.50	07	7.950	126
80	(3")	88.90	3.20	10	6.760	148
			4.00	08	8.380	119
			4.80	06	9.960	100
100	(4")	114.30	3.60	09	9.830	102
			4.50	07	12.190	82
			5.40	05	14.500	69
110	(4 1/2")	127.00	4.50	07	13.600	74
			4.80	06	14.500	69
			5.40	05	16.190	62
125	(5")	139.70	4.50	07	15.000	67
			4.80	06	15.970	63
			5.40	05	17.900	56
135	(5 1/2")	152.40	4.50	07	16.400	61
			4.80	06	17.500	57
			5.40	05	19.600	51
150	(6")	165.10	4.50	07	17.800	56
			4.80	05	18.980	53
			5.40	05	21.300	47
150	(6")	168.30	4.50	07	18.200	55
			4.80	06	19.400	52
			5.40	05	21.700	46
			6.30	03	25.200	40
175	(7")	193.70	4.80	06	22.400	45
			5.40	05	25.100	40
			5.90	04	27.300	37
200	(8")	219.10	4.80	06	25.400	39
			5.60	05	29.500	34

Chemical Properties

C	0.20% Max
Mn	1.3% Max
P	0.04% Max
S	0.04% Max

Physical Properties

Grade	YS (Min.) MPa	TS (Min.) MPa	% age (Min.) Elong.
YSt 210	210	330	20
YSt 240	240	410	17
YSt 310	310	450	14
YSt 355	355	490	10

Note: For tubes upto size 25mm NB including Elongation of 12% shall be permissible.

Weight

Single tubes	+/- 10%
--------------	---------

Weight Truck Load

	+/- 7.5%
---	----------

Tolerance

Outside diameter: upto and including 48.3mm	+ 0.4mm - 0.8mm
Over 48.3mm	+/- 1%

Thickness

	
---	---

Mass of Zinc Coating : Min 360 gm/m²

Product Range

Water And Sewage

Conforming to IS 3589 : 2001

Nominal N.B. Size		Outside Diameter	Wall Thickness	Calculated Weight	
MM	INCH	MM	MM	Kg/m	Mtr/Tone
150	(6")	168.30	2.60	10.60	94.30
		168.30	3.20	13.03	76.75
		168.30	4.00	16.21	61.70
		168.30	5.00	20.14	49.66
		168.30	6.00	24.01	41.64
		168.30	7.00	27.84	35.91
175	(7")	193.70	4.00	18.71	53.44
		193.70	5.00	23.27	42.97
		193.70	6.00	27.77	36.01
		193.70	7.00	32.23	31.03
200	(8")	219.10	2.60	13.88	72.00
		219.10	3.60	19.13	52.27
		219.10	4.00	21.22	47.13
		219.10	5.00	26.40	37.88
		219.10	5.40	28.46	35.14
		219.10	6.00	31.53	31.72
		219.10	7.00	36.61	27.31

Tolerance

Outside Diameter:	+/- 0.75% of OD
Wall Thickness:	+/- 10%
Ovality:	Shall not exceed 1 % of the specified diameter
Bead Height:	The maximum height of the weld bead on the internal surface of the pipes shall not exceed 60% of nominal wall thickness
Straightness:	Shall not deviate from the straightness by more than 0.2% of total length
Length:	Single random length of 4 to 7 meter
Weight:	+/- 7.5% on truck load

Physical Properties

Grade Yield	Stress Tensile	Strength	%Elongation
	MPa (Min)	MPa (Min)	(Min)
Fe 330	195	330	20
Fe 410	235	410	18
Fe 450	275	450	15



Low Carbon Steel Tubes

Mechanical And General Engineering

Outside Diameter	Thickness	Mass
MM	MM	M/T
21.30	1.80	0.87
	2.00	0.95
	2.60	1.20
	3.20	1.43
26.90	1.80	1.11
	2.00	1.23
	2.30	1.40
	2.60	1.56
	3.20	1.87
33.70	2.00	1.56
	2.30	1.78
	2.60	1.99
	3.20	2.41
	4.00	2.93
42.40	2.30	2.27
	2.60	2.55
	3.20	3.09
	3.60	3.44
	4.00	3.79
48.30	2.30	2.61
	2.60	2.93
	2.90	3.25
	3.20	3.56
	3.60	3.97
60.30	4.00	4.37
	2.30	3.29
	2.60	3.70
	2.90	4.11
	3.20	4.51
	3.60	5.03
76.10	4.00	5.55
	4.50	6.19
	2.60	4.71
	2.90	5.24
	3.20	5.75
	3.60	6.44
88.90	4.50	7.11
	5.00	7.95
	2.90	6.15
	3.20	6.76
	4.00	8.38
	5.00	10.30
	5.40	11.10
	5.60	11.50

Outside Diameter	Thickness	Mass
MM	MM	M/T
101.60	3.60	8.70
	4.00	9.63
	5.00	11.90
114.30	3.20	8.77
	3.60	9.83
	4.50	12.20
	5.40	14.50
	6.30	16.80
139.70	3.60	12.10
	4.00	13.40
	4.50	15.00
	5.00	16.60
	5.40	17.90
	6.30	20.70
152.40	4.50	16.40
	5.00	18.20
	5.40	19.60
165.10	4.50	17.80
	5.00	19.70
	5.40	21.20
	6.30	24.80
168.30	4.00	16.20
	4.50	18.20
	5.00	20.10
	5.40	21.70
	6.30	25.20
	7.10	28.20
193.70	8.00	31.60
	5.00	23.30
	5.40	25.10
	5.90	27.30
	6.30	29.10
	8.00	36.60
219.10	4.50	23.80
	5.00	26.40
	5.60	29.50
	6.30	33.10
	8.00	41.60

Physical Properties

Grade	Y.S.(Min.)	T.S.(Min)	% age Elongation (Min.)	
	(MPa)	(MPa)	As Welded (less than or equal to 33.7 mm OD)	As Welded (more than 33.7 mm OD)
WT160	160	310	15	22
WT210	210	330	12	20
WT240	240	410	10	15
WT310	310	450	6	10

Tolerance

Outside Diameter upto 25.40 mm	+0.15 mm
Outside Diameter upto & including 51 mm	+0.18 mm
Over 51 mm to 76.10 mm	±0.25 mm
Above 76.10 to 88.90 mm	±0.31 mm
Above 88.90 to 101.60 mm	±0.36 mm
Above 101.60 to 114.3mm	±0.43 mm
Above 114.30 to 152.40 mm	±0.58 mm
Above 152.40 to 168.30 mm	±0.65 mm
Above 168.30	±0.75 mm

- Note:
- 1.Any OD & Thickness not covered in this table may be supplied as per customer requirement
 - 2.The Tolerance of thickness excluding the weld shall be 10%

Equivalent National / International Standards

Indian Standard	American Standard	British Standard	Japanese Standard	European Standard
IS 1161: 2014	ASTM A500	BS 4360	JIS G3444 : 1994	EN 10219
	GR A: 1993	BS 7613: 1994		
IS 1239 (Part 1): 2004	ASTM A53/1993	BS 1387 : 1985		EN 10255
	Elong 20% for all			
	Galv. 550Gms/m ²			
IS 9295 : 1983	ASTM A513	BS 6323 : 1982		
IS 3601 : 2006		BS 1775	JIS G3343 : 1983	EN 10219
		BS 6323 : 1982		
IS 4923 : 2017	ASTM A500	BS 6363	JIS G3466 : 1982	EN 10219
	GR A : 1993			
IS 4270 : 2001		BS 879		
IS 3589 : 2001		BS 5534		
IS 9537 : 1981		BS 4568		



Quality Credentials

TUV NORD

CERTIFICATE

OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

0045-CPR-2518

In compliance with Regulation (EU) No. 305/2011 of the European Parliament and the Council of 9 March 2011 (the Construction products Regulation - CPR), this certificate applies to the construction product

Hot rolled products of structural steels

placed on the market under the name or trade mark of

Bhushan Power & Steel Limited
Vill: Thekolol, P.O.: Lapanga, Tehsil: Rengoli,
Distt. Sambalpur, 768232 Odisha, India

and produced in the manufacturing plant(s)

see above

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 10025-1:2004

under **system 2+** are applied and that the

factory production control is assessed to be in conformity with the applicable requirements.

The manufacturer is responsible for the usability of the CE-marked structural products acc. to the product standard and the Declaration of Performance (DoP).

This certificate was first issued in 20-07-2021 and will remain valid until 2026.07.26 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified body.

Hamburg, 2021-07-26

Validity endorsement valid until: 2026.07.26	Revision Rev.: 01	Certification Body Accredited Body D-ZE 11074-09-00 Notified Body, ID number 0045
TUV NORD Systems GmbH & Co. KG Gröbe Bahnstraße 31 D-22525 Hamburg Germany info@tuev-nord.de www.tuev-nord.de	File: - SAP: 8118561587 Tel.: +49-(0) 40-8557-2090 E-mail: BWUS@tuev-nord.de Rev.: 00000001	

To verify the validity of the digital signature of the TÜV NORD Systems employee, the installation of the TÜV NORD GROUP root certificate is required:
<http://www.tuev-nord.de/wordpress/wp-content/uploads/2014/04/RootCertificate.pdf>

TUV NORD

CERTIFICATE

OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

0045-CPR-1960

In compliance with Regulation (EU) No. 305/2011 of the European Parliament and the Council of 9 March 2011 (the Construction products Regulation - CPR), this certificate applies to the construction product

Cold formed welded structural hollow sections of non-alloy and fine grain steels

placed on the market under the name or trade mark of

Bhushan Power & Steel Limited
Village Thekolol, P.O. Lapanga, Tehsil - Rengoli,
Distt. Sambalpur - 768212, Orissa, India

and produced in the manufacturing plant(s)

see above

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 10219-1:2006

under **system 2+** are applied and that the

factory production control is assessed to be in conformity with the applicable requirements.

The manufacturer is responsible for the usability of the CE-marked structural products acc. to the product standard and the Declaration of Performance (DoP).

This certificate was first issued in 08.12.2014 and will remain valid until 2026.02.18 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified body.

Hamburg, 2021-02-18

Validity endorsement valid until: 2026.02.18	Revision Rev.: 01	Certification Body Accredited Body D-ZE 11074-09-00 Notified Body, ID number 0045
TUV NORD Systems GmbH & Co. KG Gröbe Bahnstraße 31 D-22525 Hamburg Germany info@tuev-nord.de www.tuev-nord.de	File: 80784W_1960/20 SAP: 8118561587 Tel.: +49-(0) 40-8557-2090 E-mail: BWUS@tuev-nord.de Rev.: 00000001	

To verify the validity of the digital signature of the TÜV NORD Systems employee, the installation of the TÜV NORD GROUP root certificate is required:
<http://www.tuev-nord.de/wordpress/wp-content/uploads/2014/04/RootCertificate.pdf>

TUV NORD
Systems

Confirmation of Conformity with the requirements of

DIN EN 10255:2004+A1:2007

Inspection Report TÜV file: 1328WL186042

Based on the performed tests it is confirmed that the following structural products

Welded tubes (process 27 acc. to EN ISO 4063) of series H and M as well as of type L1 and L2 (OD 21,3 - 165,1 mm and T 2,0 - 5,4 mm) of non-alloy steel suitable for welding and threading according to DIN EN 10255:2004+A1:2007

produced by the company

Bhushan Power & Steel Limited
Vill: Thekolol, PO Lapanga
Distt. Sambalpur
Odisha, India

are in accordance with the requirements acc. to system 3, annex ZA
DIN EN 10255:2004+A1:2007. The tests were accomplished acc. to section 12.2 of the standard

The manufacturer is authorized to mark the construction products mentioned above with the CF marking acc. to the REGULATION (EU) No 305/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, article 9, section 2 as long as those technical and organisational production conditions endure which have been found during the approval.

Hamburg, den 03.11.2014

Test body
Construction products for metal structure
Head of the notified body





Dr.-Ing. Wolfgang
Bauer - Report No. 1328WL186042 and test results of TUV file 1328WL186042 - 1 -

document

TUV NORD Systems GmbH & Co. KG • Technisches Zentrum
Gröbe Bahnstraße 31 • Postfach 54 02 23 • D-22525 Hamburg
Tel. Nr. 040-8557-2309 • Fax Nr. 040-8557-2710 • E-Mail: service@tuev-nord.de



JSW STEEL LTD.

JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400051

Email: support.steel@jsw.in | Web: www.jswsteel.in