

www.sharvaristeel.com



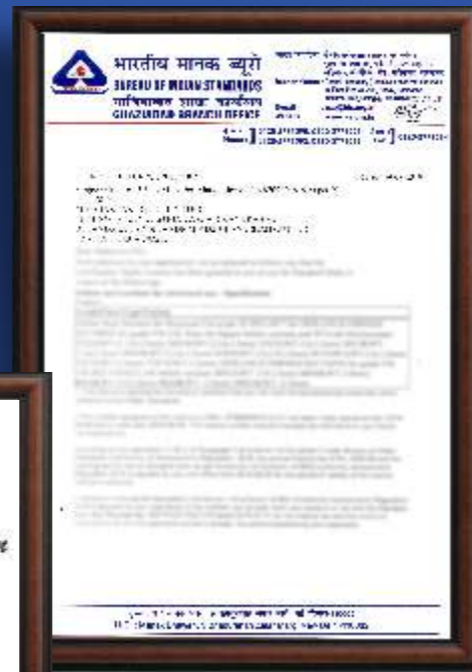
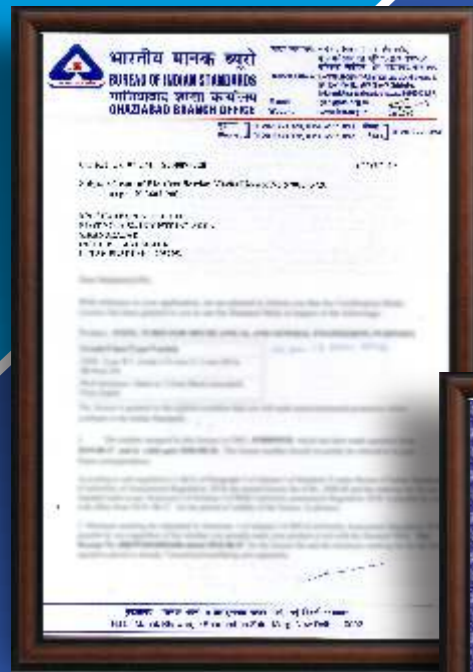
SHARVARI STEEL LIMITED

EXCELLENCE IN PIPES & TUBES

“ उद्यमेन हि सिध्यन्ति कार्याणि न मनोरथैः ।
न हि सुप्तस्य सिंहस्य प्रविशन्ति मुखे मृगाः ॥ ”

“ प्रयत्न करने से ही कार्य पूर्ण होते हैं,
केवल इच्छा करने से नहीं, सोते हुए शेर के
मुख में मृग स्वयं प्रवेश नहीं करते हैं। ”

**Manufacturers of: ERW Black, G.P, CRCA,
CRFH, G.I., Hollow Tubes & Section pipes**



SHARVARI STEEL LIMITED

Factory Address: A-82, Industrial Area,
Sikandrabad, Bulandshahr, U.P.-203205

Office Address: 7/9, First Floor, Site IV,
Sahibabad Industrial Area, Ghaziabad(U.P.)- 201010

Ph: +91-9810016946, 9810024770

Email: marketing@sharvaristeel.com, export@sharvaristeel.com



ABOUT COMPANY

Established in the year 2019, Sharvari Steel Ltd is an upcoming enterprise involved in the manufacturing of high quality Mild Steel ERW Black Pipe, GP Pipe, GI Pipe, Hollow Round Pipe & Hollow Section (Square & Rectangular) Pipe in sizes ranging from 0.5 inches to 8 inches and thickness ranging from 0.5 mm to 8 mm. With an innovative range of products, improved quality and increased productivity, we strive to make a mark in the steel pipe business.

We have 2 state-of-the-art manufacturing units at Sikandrabad, Uttar Pradesh having an installed capacity of 5000 tonnes/ month. We have two high-speed machines along with welders from ThermoTool and cold saw cutoff (no blur). We also have the best in class slitting machine.

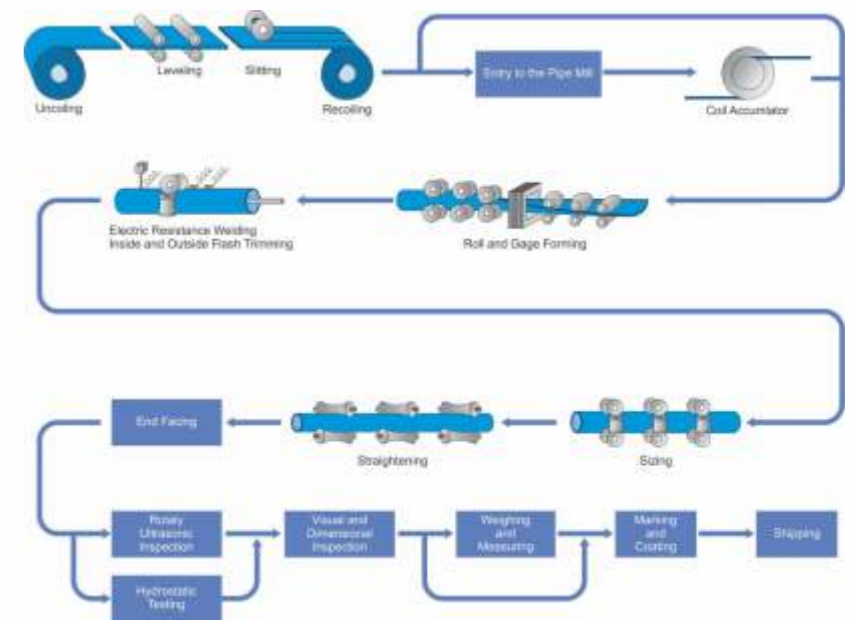
The products are manufactured in compliance with the latest techniques as well as the Indian and international industry standards that ensure durability and strength. Maintaining the industry ethics, we have all standards namely ISI 1239, ISI 1161, ISI 3601 and ISI 4923. We constantly endeavour to produce pipes and tubes which can meet the changing requirements of sectors like Agriculture, Oil & Gas, Irrigation, Engineering and all other industries as well.

We at Sharvari Steel, constantly venture to produce pipes of the highest quality & sustainability at reasonable prices. With the combined experience of our partners and our team of experts, who have years of experience and proficient technique to handle different processes of manufacturing and designing, we guarantee the delivery of high quality products.



Why Choose Us ?

- We source only the best raw materials from world class primary steel producers such as SAIL and TATA.
- Our approach is very customer-centric and we make sure to do everything we can to provide total customer satisfaction.
- With state-of-the-art machinery (GMT mill, ThermoTool welder and Cold-Saw Cutter (No Blur)) and our team of experts who have many years of experience, we ensure that only the highest quality products are provided to our esteemed customers.
- Our pipes are very versatile and can be utilised in various industries for endless purposes.
- We aim to continuously improve and are on the lookout for new innovations to deliver something new everytime.



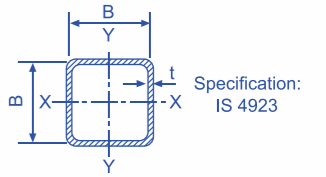
Our Process

Steel Tube for Mechanical & General Purpose IS 3601: 2006

Dimensions and design properties of Steel Tubes Grade WT 160 & WT 210, WT 240, WT 310

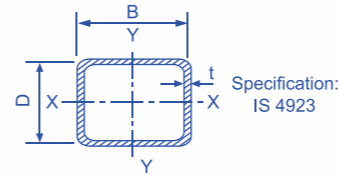
| Outside Diameter | Thickness | Mass | Area of Cross | Moment of Inertia | Modulus of Section | Modulus of Gyration | Outside Diameter | Thickness | Mass | Area of Cross | Moment of Inertia | Modulus of Section | Modulus of Gyration | |
|------------------|-----------|-------|---------------|-------------------|--------------------|---------------------|------------------------------|---------------------|---------------------------|---|------------------------------------|--------------------|---------------------|--|
| mm1 | mm2 | Kg/m3 | Section Cm4 | Cm5 | Cm6 | Cm7 | mm1 | mm2 | Kg/m3 | Section Cm4 | Cm5 | Cm6 | Cm7 | |
| 21.3 | 1.8 | 0.866 | 1.10 | 0.53 | 0.50 | 0.69 | 165.1 | 4.50 | 17.80 | 22.70 | 732.60 | 88.70 | 5.68 | |
| | 2.0 | 0.952 | 1.21 | 0.57 | 0.54 | 0.69 | | 5.00 | 19.70 | 25.10 | 806.60 | 97.70 | 5.66 | |
| | 2.6 | 1.20 | 1.53 | 0.68 | 0.64 | 0.67 | | 5.40 | 21.20 | 27.10 | 864.70 | 105.00 | 5.65 | |
| | 3.2 | 1.43 | 1.82 | 0.77 | 0.72 | 0.65 | | 6.30 | 24.80 | 31.40 | 992.00 | 120.00 | 5.63 | |
| 26.9 | 1.8 | 1.11 | 1.42 | 1.12 | 0.83 | 0.89 | 168.3 | 4.00 | 16.20 | 20.64 | 696.87 | 82.81 | 5.81 | |
| | 2.0 | 1.23 | 1.56 | 1.22 | 0.91 | 0.88 | | 4.50 | 18.20 | 23.20 | 777.20 | 98.40 | 5.79 | |
| | 2.3 | 1.40 | 1.78 | 1.36 | 1.01 | 0.87 | | 5.00 | 20.10 | 25.70 | 855.80 | 102.00 | 5.78 | |
| | 2.6 | 1.56 | 1.98 | 1.48 | 1.10 | 0.86 | | 5.40 | 21.70 | 27.60 | 917.70 | 109.00 | 5.76 | |
| 33.7 | 3.2 | 1.87 | 2.38 | 1.70 | 1.27 | 0.85 | 193.7 | 6.30 | 25.20 | 32.10 | 1053.00 | 125.00 | 5.73 | |
| | 2.0 | 1.56 | 1.99 | 2.51 | 1.49 | 1.12 | | 7.10 | 28.20 | 35.94 | 1169.66 | 139.00 | 5.70 | |
| | 2.3 | 1.78 | 2.27 | 2.81 | 1.67 | 1.11 | | 8.00 | 31.60 | 39.70 | 1288.00 | 153.00 | 5.69 | |
| | 2.6 | 1.99 | 2.54 | 3.09 | 1.84 | 1.10 | | 5.00 | 23.30 | 29.60 | 1320.00 | 136.00 | 6.67 | |
| 44.4 | 3.2 | 2.41 | 3.07 | 3.60 | 2.14 | 1.08 | 219.1 | 5.40 | 25.10 | 31.90 | 1417.00 | 146.00 | 6.66 | |
| | 4.0 | 2.93 | 3.73 | 4.19 | 2.49 | 1.06 | | 5.90 | 27.30 | 34.80 | 1536.00 | 159.00 | 6.64 | |
| | 2.3 | 2.27 | 2.90 | 5.85 | 2.76 | 1.42 | | 6.30 | 29.10 | 37.00 | 1600.00 | 165.00 | 6.60 | |
| | 2.6 | 2.55 | 3.25 | 6.46 | 3.05 | 1.41 | | 8.00 | 36.60 | 46.30 | 2004.00 | 207.00 | 6.57 | |
| 48.3 | 3.2 | 3.09 | 3.94 | 7.62 | 3.59 | 1.39 | 273.0 | 4.5 | 23.80 | 30.32 | 1746.16 | 159.40 | 7.59 | |
| | 3.6 | 3.44 | 4.39 | 8.33 | 3.93 | 1.38 | | 5.0 | 26.40 | 33.60 | 1928.00 | 176.00 | 7.57 | |
| | 4.0 | 3.79 | 4.83 | 8.90 | 4.24 | 1.36 | | 5.6 | 29.50 | 37.60 | 2142.00 | 195.00 | 7.56 | |
| | 2.3 | 2.61 | 3.32 | 8.80 | 3.64 | 1.63 | | 6.3 | 33.10 | 42.00 | 2404.00 | 219.00 | 7.54 | |
| 60.3 | 2.6 | 2.93 | 3.73 | 9.77 | 4.05 | 1.62 | 323.9 | 8.0 | 41.60 | 52.00 | 1940.00 | 268.00 | 7.52 | |
| | 2.9 | 3.25 | 4.14 | 10.70 | 4.43 | 1.61 | | 5.0 | 33.0 | 42.08 | 3779.25 | 276.87 | 9.48 | |
| | 3.2 | 3.56 | 4.53 | 11.59 | 4.80 | 1.60 | | 6.3 | 41.4 | 52.5 | 4745 | 348 | 9.51 | |
| | 3.6 | 3.97 | 5.05 | 12.69 | 5.25 | 1.59 | | 7.1 | 46.6 | 59.0 | 5290 | 388 | 9.48 | |
| 76.1 | 4.0 | 4.37 | 5.57 | 13.77 | 5.70 | 1.57 | 406.4 | 10.0 | 64.9 | 82.6 | 7154 | 524 | 9.31 | |
| | 2.3 | 3.29 | 4.19 | 17.65 | 5.85 | 2.05 | | 5.6 | 44.0 | 55.97 | 7094.44 | 438.06 | 11.3 | |
| | 2.6 | 3.70 | 4.71 | 19.64 | 6.51 | 2.04 | | 7.1 | 55.5 | 70.4 | 8910 | 549 | 11.3 | |
| | 2.9 | 4.11 | 5.23 | 21.59 | 7.16 | 2.03 | | 8.0 | 62.3 | 78.0 | 9830 | 618 | 11.2 | |
| 88.9 | 3.2 | 4.51 | 5.74 | 23.47 | 7.78 | 2.02 | 355.6 | 10.0 | 77.4 | 98 | 12158 | 750 | 11.1 | |
| | 3.6 | 5.03 | 6.41 | 25.87 | 8.58 | 2.01 | | 5.6 | 48.3 | 61.54 | 9425.72 | 530.13 | 12.4 | |
| | 4.0 | 5.55 | 7.07 | 28.15 | 9.34 | 2.00 | | 8.0 | 68.6 | 87.32 | 13195.12 | 742.13 | 12.3 | |
| | 4.5 | 6.19 | 7.89 | 30.90 | 10.20 | 1.98 | | 10.0 | 85.2 | 108.6 | 16223 | 912 | 12.2 | |
| 101.6 | 5.0 | 6.95 | 9.00 | 34.00 | 11.10 | 1.98 | 406.4 | 11.0 | 93.5 | 119.02 | 17684.91 | 994.65 | 12.2 | |
| | 2.6 | 5.24 | 6.00 | 40.57 | 10.66 | 2.60 | | 12.5 | 106.0 | 133.0 | 19820 | 1115 | 12.2 | |
| | 2.9 | 5.75 | 6.67 | 44.74 | 11.76 | 2.59 | | 6.3 | 62.2 | 79.15 | 15841.847 | 779.62 | 14.2 | |
| | 3.2 | 6.44 | 7.33 | 48.78 | 12.80 | 2.58 | | 8.8 | 86.3 | 109.86 | 21719.76 | 1068.89 | 14.1 | |
| 114.3 | 3.6 | 7.11 | 8.20 | 54.01 | 14.20 | 2.57 | 355.6 | 10.0 | 97.8 | 124.5 | 24475 | 1204.5 | 14.0 | |
| | 4.5 | 7.95 | 10.10 | 65.12 | 17.10 | 2.54 | | 12.5 | 121.0 | 153.0 | 30020 | 1475 | 14.0 | |
| | 5.0 | 8.77 | 11.16 | 70.87 | 18.63 | 2.52 | | | | | | | | |
| | 2.9 | 6.15 | 7.83 | 72.47 | 16.30 | 3.04 | | | | | | | | |
| 139.7 | 3.2 | 6.76 | 8.62 | 79.21 | 17.80 | 3.03 | D PHYSICAL PROPERTIES | | | | | | | |
| | 4.0 | 8.38 | 10.70 | 96.34 | 21.70 | 3.00 | Grade | Y.S. (min) (Mpa) | T.S. (min.) (Mpa) | % age | Elongation (min) | | | |
| | 5.0 | 10.30 | 13.20 | 116.40 | 26.20 | 2.97 | | | | As welded (less than or equal to 33.7 mm OD) | As welded (above to 33.7 mm OD) | | | |
| | 5.4 | 11.10 | 14.00 | 123.60 | 27.80 | 2.97 | WT 160 | 160 | 310 | 15 | 22 | | | |
| 152.4 | 5.6 | 11.50 | 14.65 | 127.64 | 28.72 | 2.95 | WT 210 | 210 | 330 | 12 | 20 | | | |
| | 3.6 | 8.70 | 11.10 | 133.20 | 26.20 | 3.47 | WT 240 | 240 | 410 | 10 | 15 | | | |
| | 4.0 | 9.63 | 12.30 | 149.20 | 28.80 | 3.45 | WT 310 | 310 | 450 | 5 | 10 | | | |
| | 5.0 | 11.90 | 15.20 | 177.50 | 34.90 | 3.42 | | | | | | | | |
| 152.4 | 3.2 | 8.77 | 11.16 | 172.33 | 30.15 | 3.93 | TOLERANCE | | | | | | | |
| | 3.6 | 9.83 | 12.50 | 192.00 | 33.60 | 3.92 | S.No | Over mm | Up to and Including mm | Tolerance on Outside Diameter mm | | | | |
| | 4.5 | 12.20 | 15.50 | 234.30 | 41.00 | 3.89 | (1) | (2) | (3) | (4) | | | | |
| | 5.4 | 14.50 | 18.50 | 274.50 | 48.00 | 3.86 | i) | - | 25.4 | ± 0.15 | | | | |
| 152.4 | 6.3 | 16.80 | 21.20 | 315.00 | 55.10 | 3.83 | ii) | 25.4 | 51.0 | ± 0.18 | | | | |
| | 3.60 | 12.10 | 15.38 | 356.36 | 51.02 | 4.81 | iii) | 51.0 | 63.5 | ± 0.25 | | | | |
| | 4.00 | 13.40 | 17.04 | 392.57 | 56.20 | 4.80 | iv) | 63.5 | 76.1 | ± 0.25 | | | | |
| | 4.50 | 15.00 | 19.10 | 437.20 | 62.60 | 4.78 | v) | 76.1 | 88.9 | ± 0.31 | | | | |
| 152.4 | 5.00 | 16.60 | 21.20 | 480.50 | 68.80 | 4.77 | vi) | 8.9 | 101.6 | ± 0.36 | | | | |
| | 5.40 | 17.90 | 22.80 | 514.50 | 73.70 | 4.75 | vii) | 101.6 | 114.3 | ± 0.43 | | | | |
| | 6.30 | 20.70 | 26.30 | 591.00 | 84.70 | 4.73 | viii) | 114 | 152.4 | ± 0.58 | | | | |
| | 152.4 | 4.50 | 16.40 | 20.90 | 572.20 | 75.10 | 5.23 | | | | | | | |

Square Hollow Sections (SHS) Specification : IS 4923



| SHS B x B mm | Thickness mm | Sec Area A cm2 | Unit W Kg/m | Moment of Inertia | | Radius of Gyration | | Elastic Modulus | | Torsional Constants | | Outer Surface Area per m m2 |
|--------------------|-----------------|----------------------|-------------------|-------------------|-------------|--------------------|-----------|-----------------|-------------|---------------------|-----------|--------------------------------------|
| | | | | IXX 4 cm | IYY 4 cm | RXX cm | RYY cm | ZXX 3 cm | ZYY 3 cm | J 4 cm | B 3 cm | |
| 25x25 | 1.6 | 1.43 | 1.12 | 1.28 | 1.28 | 0.94 | 0.94 | 1.02 | 1.02 | 1.96 | 1.46 | 0.092 |
| | 2.0 | 1.74 | 1.36 | 1.48 | 1.48 | 0.94 | 0.94 | 1.19 | 1.19 | 2.29 | 1.68 | 0.090 |
| | 2.6 | 2.16 | 1.69 | 1.72 | 1.72 | 0.89 | 0.89 | 1.38 | 1.38 | 2.68 | 1.92 | 0.087 |
| | 3.2 | 2.53 | 1.98 | 1.89 | 1.89 | 0.86 | 0.86 | 1.51 | 1.51 | 2.96 | 2.07 | 0.084 |
| 32x32 | 2.0 | 2.30 | 1.80 | 3.36 | 3.36 | 1.21 | 1.21 | 2.10 | 2.10 | 5.30 | 3.05 | 0.118 |
| | 2.6 | 2.88 | 2.26 | 4.02 | 4.02 | 1.18 | 1.18 | 2.51 | 2.51 | 6.45 | 3.63 | 0.115 |
| | 3.2 | 3.42 | 2.69 | 4.54 | 4.54 | 1.15 | 1.15 | 2.84 | 2.84 | 7.41 | 4.07 | 0.112 |
| 38x38 | 2.0 | 2.78 | 2.18 | 5.88 | 5.88 | 1.46 | 1.46 | 2.10 | 3.10 | 9.31 | 4.54 | 0.142 |
| | 2.6 | 3.51 | 2.75 | 7.14 | 7.14 | 1.43 | 1.43 | 3.76 | 3.76 | 11.51 | 5.49 | 0.139 |
| | 3.2 | 4.19 | 3.29 | 8.18 | 8.18 | 1.40 | 1.40 | 4.30 | 4.30 | 13.45 | 6.28 | 0.136 |
| | 4.0 | 5.03 | 3.95 | 9.26 | 9.26 | 1.36 | 1.36 | 4.87 | 4.87 | 15.67 | 7.12 | 0.131 |
| 40x40 | 2.6 | 3.72 | 2.92 | 8.45 | 8.45 | 1.51 | 1.51 | 4.22 | 4.22 | 13.63 | 6.20 | 0.147 |
| | 2.9 | 4.09 | 3.21 | 9.11 | 9.11 | 1.49 | 1.49 | 4.56 | 4.56 | 14.85 | 6.65 | 0.145 |
| | 3.2 | 4.45 | 3.49 | 9.72 | 9.72 | 1.48 | 1.48 | 4.86 | 4.86 | 16.00 | 7.12 | 0.244 |
| | 4.0 | 5.35 | 4.20 | 11.07 | 11.07 | 1.44 | 1.44 | 5.54 | 5.54 | 18.75 | 8.12 | 0.139 |
| 50 x 50 | 2.6 | 4.76 | 3.74 | 17.47 | 17.47 | 1.92 | 1.92 | 6.99 | 6.99 | 28.53 | 10.37 | 0.187 |
| | 2.9 | 5.25 | 4.12 | 18.99 | 18.99 | 1.90 | 1.90 | 7.60 | 7.60 | 31.15 | 11.23 | 0.185 |
| | 3.6 | 6.35 | 4.98 | 22.15 | 22.15 | 1.87 | 1.87 | 8.86 | 8.86 | 36.58 | 12.98 | 0.181 |
| | 4.5 | 7.67 | 6.02 | 25.50 | 25.50 | 1.82 | 1.82 | 10.20 | 10.20 | 41.99 | 14.68 | 0.177 |
| 60x60 | 2.6 | 5.60 | 4.55 | 31.33 | 31.33 | 2.33 | 2.33 | 10.44 | 10.44 | 50.05 | 1552 | 0.227 |
| | 2.9 | 6.41 | 5.03 | 34.21 | 34.21 | 2.31 | 2.31 | 11.40 | 11.40 | 56.12 | 16.95 | 0.225 |
| | 3.2 | 7.01 | 5.50 | 35.94 | 36.94 | 2.30 | 2.30 | 12.31 | 12.31 | 60.02 | 18.31 | 0.224 |
| | 4.0 | 8.55 | 6.71 | 43.55 | 43.55 | 2.26 | 2.26 | 14.52 | 14.52 | 72.41 | 21.62 | 0.219 |
| 72 x 72 | 4.8 | 10.01 | 7.85 | 49.22 | 49.22 | 2.22 | 2.22 | 16.41 | 16.41 | 83.86 | 24.51 | 0.215 |
| | 3.2 | 8.54 | 6.71 | 66.32 | 66.32 | 2.79 | 2.79 | 18.42 | 18.42 | 106.81 | 27.47 | 0.272 |
| | 4.0 | 10.47 | 8.22 | 79.03 | 79.03 | 2.75 | 2.75 | 21.95 | 21.95 | 129.85 | 32.79 | 0.267 |
| | 4.8 | 12.31 | 9.66 | 90.31 | 90.31 | 2.71 | 2.71 | 25.09 | 25.09 | 151.55 | 37.55 | 0.263 |
| 80x80 | 3.2 | 9.57 | 7.51 | 92.71 | 92.71 | 3.11 | 3.11 | 23.15 | 73.18 | 148 | | |

Rectangular Hollow Sections (RHS) Specification : IS 4923



| SHS B x B mm | Thickness mm | Sec Area A cm ² | Unit W Kg/m | Moment of Inertia | | Radius of Gyration | | Elastic Modulus | | Torsional Constants | | Outer Surface Area per m ² |
|--------------------------|-----------------|----------------------------------|-------------------|-------------------|-------------|--------------------|-----------|-----------------|-------------|---------------------|-----------|--|
| | | | | IXX 4 cm | IYY 4 cm | RXX cm | RYY cm | ZXX 3 cm | ZYY 3 cm | J 4 cm | B 3 cm | |
| 25x25 | 2.0 | 2.74 | 2.15 | 8.38 | 2.81 | 1.75 | 1.01 | 3.35 | 2.25 | 6.79 | 3.79 | 0.142 |
| | 2.6 | 3.16 | 2.71 | 10.16 | 3.36 | 1.71 | 0.9 | 94.06 | 2.69 | 8.27 | 1.53 | 0.137 |
| | 3.2 | 4.13 | 3.24 | 11.63 | 3.80 | 1.68 | 0.96 | 4.65 | 3.01 | 9.52 | 5.12 | 0.134 |
| | 4.0 | 1.95 | 3.88 | 13.13 | 4.23 | 1.63 | 0.92 | 5.25 | 3.38 | 10.86 | 5.69 | 0.129 |
| 60x40 | 2.6 | 4.76 | 3.73 | 22.76 | 12.09 | 2.19 | 1.59 | 7.59 | 6.05 | 25.59 | 9.83 | 0.187 |
| | 2.9 | 5.25 | 4.11 | 24.74 | 13.11 | 2.17 | 1.58 | 8.25 | 6.56 | 28.02 | 10.66 | 0.185 |
| | 3.6 | 6.35 | 4.98 | 28.90 | 15.23 | 2.13 | 1.55 | 9.63 | 7.62 | 33.30 | 12.41 | 0.181 |
| | 4.5 | 7.67 | 6.02 | 33.31 | 17.44 | 2.08 | 1.51 | 11.10 | 8.72 | 39.34 | 14.29 | 0.177 |
| 66x33 | 2.6 | 4.70 | 3.69 | 25.15 | 8.43 | 2.31 | 1.34 | 7.62 | 5.11 | 20.75 | 8.71 | 0.185 |
| | 2.9 | 5.19 | 4.07 | 27.33 | 9.12 | 2.29 | 1.33 | 8.28 | 5.53 | 22.65 | 9.43 | 0.183 |
| | 3.6 | 6.28 | 4.93 | 31.87 | 10.52 | 2.25 | 1.29 | 9.66 | 6.37 | 26.71 | 10.90 | 0.179 |
| | 4.5 | 7.58 | 5.95 | 36.64 | 11.93 | 2.20 | 1.25 | 11.10 | 7.23 | 31.21 | 12.43 | 0.175 |
| 80x40 | 2.6 | 5.80 | 4.55 | 46.58 | 15.74 | 2.84 | 1.65 | 11.65 | 7.87 | 38.50 | 13.46 | 0.227 |
| | 2.9 | 6.41 | 5.03 | 50.87 | 17.11 | 2.82 | 1.63 | 12.72 | 8.56 | 42.23 | 14.66 | 0.225 |
| | 3.2 | 7.01 | 5.50 | 54.94 | 18.41 | 2.80 | 1.62 | 13.74 | 9.21 | 45.83 | 15.78 | 0.224 |
| | 4.0 | 8.55 | 6.71 | 64.79 | 21.49 | 2.75 | 1.59 | 16.20 | 10.74 | 54.77 | 18.49 | 0.219 |
| 96x48 | 3.2 | 8.54 | 6.71 | 98.61 | 33.28 | 3.40 | 1.97 | 20.54 | 13.87 | 82.13 | 23.82 | 0.272 |
| | 4.0 | 10.47 | 8.22 | 117.54 | 39.32 | 3.35 | 1.94 | 24.19 | 16.38 | 99.11 | 28.24 | 0.267 |
| | 4.8 | 12.31 | 9.66 | 134.35 | 44.55 | 3.30 | 1.90 | 27.99 | 18.56 | 114.80 | 32.14 | 0.263 |
| | 122x61 | 3.6 | 12.32 | 9.67 | 232.61 | 78.83 | 4.34 | 2.53 | 38.13 | 25.84 | 193.91 | 44.50 |
| 4.5 | | 15.14 | 11.88 | 278.94 | 93.78 | 4.29 | 2.49 | 45.73 | 30.75 | 235.39 | 53.13 | 0.343 |
| 5.4 | | 17.85 | 14.01 | 320.83 | 107.03 | 4.24 | 2.45 | 52.60 | 35.09 | 274.29 | 60.89 | 0.338 |
| 120x60 | 3.2 | 10.85 | 8.51 | 199.88 | 67.95 | 4.29 | 2.50 | 33.31 | 22.65 | 165.83 | 38.95 | 0.344 |
| | 3.6 | 12.11 | 9.5 | 220.15 | 74.77 | 4.27 | 2.48 | 36.79 | 24.92 | 184.10 | 42.91 | 0.341 |
| | 4.5 | 14.87 | 11.67 | 264.52 | 88.88 | 4.22 | 2.44 | 44.09 | 29.63 | 223.34 | 51.19 | 0.337 |
| 145x82 | 4.8 | 20.28 | 15.92 | 555.16 | 228.50 | 5.23 | 3.36 | 76.57 | 55.73 | 534.27 | 94.45 | 0.429 |
| | 5.4 | 22.60 | 17.74 | 610.85 | 250.59 | 5.20 | 3.33 | 84.26 | 61.12 | 592.70 | 103.81 | 0.426 |
| 172x92 | 4.8 | 23.83 | 18.71 | 917.13 | 346.91 | 6.20 | 3.82 | 106.64 | 75.41 | 826.04 | 128.85 | 0.503 |
| | 5.4 | 22.59 | 20.88 | 1012.47 | 381.74 | 6.17 | 3.79 | 117.73 | 82.99 | 918.10 | 142.04 | 0.500 |
| 200x100 | 4.0 | 22.95 | 18.01 | 1199.71 | 410.78 | 7.23 | 4.23 | 119.97 | 82.16 | 991.10 | 141.46 | 0.579 |
| | 5.0 | 28.36 | 22.26 | 1459.25 | 496.94 | 7.17 | 4.19 | 145.93 | 99.39 | 1216.96 | 171.53 | 0.574 |
| | 6.0 | 33.63 | 26.40 | 1703.31 | 576.91 | 7.12 | 4.14 | 170.33 | 115.38 | 1434.03 | 199.68 | 0.569 |
| | 7.0 | 38.78 | 30.44 | 1932.19 | 650.93 | 7.06 | 4.10 | 193.22 | 130.19 | 1642.92 | 226.04 | 0.564 |
| 220x140 or 240x120 | 4.0 | 27.75 | 21.78 | 1892.55 | 947.64 | 8.26 | 5.84 | 172.05 | 135.38 | 2000.0 | 1223.99 | 0.699 |
| | 5.0 | 34.36 | 26.97 | 2313.36 | 1155.23 | 8.21 | 5.80 | 210.31 | 165.03 | 2467.63 | 273.47 | 0.694 |
| 310x210 | 6.0 | 40.83 | 32.05 | 2713.97 | 1351.66 | 8.15 | 5.75 | 246.72 | 193.09 | 2922.95 | 320.55 | 0.689 |
| | 7.0 | 47.18 | 37.03 | 3094.76 | 1537.22 | 8.10 | 5.71 | 281.31 | 219.60 | 3366.29 | 365.35 | 0.684 |
| 310x210 | 4.0 | 38.95 | 30.57 | 5072.88 | 2736.56 | 11.41 | 8.38 | 338.19 | 273.66 | 5555.71 | 448.64 | 0.979 |
| | 5.0 | 48.36 | 37.96 | 6241.05 | 3360.92 | 11.36 | 8.34 | 416.07 | 336.09 | 6882.77 | 551.49 | 0.974 |
| | 6.0 | 57.63 | 45.24 | 7370.23 | 3962.19 | 11.31 | 8.29 | 491.35 | 396.22 | 8186.02 | 650.85 | 0.969 |
| | 7.0 | 66.78 | 52.42 | 8460.93 | 4540.76 | 11.26 | 8.25 | 564.06 | 454.08 | 9465.89 | 746.83 | 0.964 |
| | 8.0 | 75.79 | 59.50 | 9513.66 | 5097.04 | 11.20 | 8.20 | 634.24 | 509.70 | 1022.83 | 839.51 | 0.959 |

General Technical Specifications and Tolerances:

| | |
|-------------------|---|
| Length | 5.0m=0.05m Customized length ranging from 4m to 10 m may be supplied |
| Thickness | For all sizes: 10.0% |
| Outer Dimensions | 1% with a minimum of = 0.5mm |
| Corner Squareness | 90 # 2 |
| Corner Radil | Maximum 3x (thickness of the section) |
| Weight | On Individual length + 10% - B on lots 10MT = 7.5% |
| Straightness | Minimum |



Steel Tubes for Structural Purposes

As per IS 1161:1998 & BS 1139 / EN 10219 Equivalent to BS 1775/64

| Size | Series | Outside Diameter mm | Wall Thickness mm | Weight kg/m Plain End | Mtr. Per Ton |
|--------|---------|---------------------|-------------------|-----------------------|--------------|
| 15 | Light | 21.30 | 2.00 | 0.947 | 1056 |
| | Medium | | 2.60 | 1.21 | 826 |
| | Heavy | | 3.20 | 1.44 | 694 |
| 20 | Light | 26.90 | 2.30 | 1.38 | 725 |
| | Medium | | 2.60 | 1.56 | 641 |
| | Heavy | | 3.20 | 1.87 | 535 |
| 25 | Light | 33.70 | 2.60 | 1.98 | 505 |
| | Medium | | 3.20 | 2.41 | 415 |
| | Heavy | | 4.00 | 2.93 | 341 |
| 32 | Light | 42.40 | 2.60 | 2.54 | 394 |
| | Medium | | 3.20 | 3.10 | 323 |
| | Heavy | | 4.00 | 3.79 | 264 |
| 40 | Light | 48.30 | 2.90 | 3.23 | 310 |
| | Medium | | 3.20 | 3.56 | 281 |
| | Heavy | | 4.00 | 4.37 | 229 |
| 50 | Light | 60.30 | 2.90 | 4.08 | 245 |
| | Medium | | 3.60 | 5.03 | 199 |
| | Heavy | | 4.50 | 6.19 | 162 |
| 55 | Light | 76.10 | 3.20 | 5.71 | 175 |
| | Medium | | 3.60 | 6.42 | 156 |
| | Heavy | | 4.50 | 7.93 | 126 |
| 80 | Light | 88.90 | 3.20 | 6.72 | 149 |
| | Medium | | 4.00 | 8.36 | 120 |
| | Heavy | | 4.80 | 9.90 | 101 |
| 90 | Light | 101.60 | 3.60 | 8.70 | 115 |
| | Medium | | 4.00 | 9.63 | 104 |
| | Heavy | | 4.80 | 11.50 | 87 |
| 100 | Light | 114.30 | 3.60 | 9.75 | 103 |
| | Medium | | 4.50 | 12.20 | 82 |
| | Heavy | | 5.40 | 14.50 | 69 |
| 110 | Light | 127.00 | 4.50 | 13.60 | 74 |
| | Medium | | 4.80 | 14.50 | 69 |
| | Heavy | | 5.40 | 16.20 | 62 |
| 125 | Light | 139.70 | 4.50 | 15.0 | 67 |
| | Medium | | 4.80 | 15.9 | 63 |
| | Heavy | | 5.40 | 17.9 | 56 |
| 135 | Light | 152.40 | 4.50 | 16.4 | 61 |
| | Medium | | 4.80 | 17.5 | 57 |
| | Heavy | | 5.40 | 19.6 | 51 |
| 150 | Light | 165.10 | 4.50 | 17.8 | 56 |
| | Medium | | 4.80 | 18.9 | 53 |
| | Heavy | | 5.40 | 21.3 | 47 |
| 150 | Light | 168.30 | 4.50 | 18.2 | 55 |
| | Medium | | 4.80 | 19.9 | 52 |
| | Heavy 1 | | 5.40 | 21.7 | 46 |
| 150 | Heavy 2 | 168.30 | 6.30 | 25.2 | 40 |
| | Light | | 193.70 | 4.80 | 22.4 |
| Medium | 5.40 | 25.1 | | 40 | |
| Heavy | 5.90 | 27.3 | | 37 | |
| 200 | Light | 219.10 | 4.80 | 25.4 | 39 |
| | Medium | | 5.60 | 29.5 | 34 |
| | Heavy | | 5.90 | 31.0 | 32 |
| 225 | Heavy | 244.50 | 5.90 | 34.70 | 29 |
| 250 | Heavy | 273.00 | 5.90 | 38.90 | 26 |
| 300 | Heavy | 323.90 | 6.30 | 49.30 | 20 |

Tolerances

| A. Outside Diameter | C. Weight |
|-------------------------------|---|
| i) Upto and including 48.3 mm | + 0.4 mm - 0.8 mm |
| ii) Over 48.3 mm | ± 1.0% |
| B. Thickness (For all Size) | Single Tubes + 10% mm Light - 8 mm |
| Welded Tubes + Not Ltd. - 10% | Medium & Heavy ± 10% 10 Tones Lot Light ± 5% |

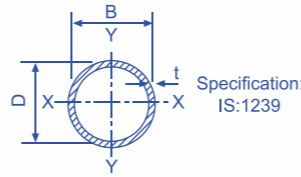
D. Physical Properties

| Grade | Tensile Strength (min.) MPa | Yield Stress (min.) Mpa | Elongation on Gauge Length 5.65 u So (min.) Percent |
|---------|-----------------------------|-------------------------|---|
| YST 210 | 330 | 210 | 20 |
| YST 240 | 410 | 240 | 17 |
| YST 310 | 450 | 310 | 14 |

Note:

• 1 MPa = IN/mm² = 0.102 kg/mm² • Elongation percent for tubes upto and including 25 mm nominal bore for all grades shall be 12% minimum

Steel Tubes and Pipes



ERW Pipes & Tubes / Black Steel Pipes & Tubes / Galvanized Pipes & Tubes

Dimensions and weight of ERW Black & Galvanized Steel Tubes as per IS 1239 (Part-1)1990 Equivalent to BS 1387 / EN 10255

| Normal Bore & Series | | Outside Diameter | | Wall Thickness | Normal Mass of Steel Tube | | | | Sockets | |
|----------------------|------|------------------|--------|----------------|---------------------------|-------------|--------------------|-------------|--------------|---------------|
| mm | Inch | Max mm | Min mm | | Plain End | | Screwed & Socketed | | Min. O.D. mm | Max Length mm |
| | | | | | Kg/m | Mtrs./tonne | Kg/m | Mtrs./tonne | | |
| 15 L | 0.50 | 21.4 | 21.0 | 2.0 | 0.947 | 1056 | 0.956 | 1046 | 27.0 | 37.0 |
| 15 m | 0.50 | 21.8 | 21.0 | 2.6 | 1.21 | 826 | 1.22 | 820 | 27.0 | 37.0 |
| 15 H | 0.50 | 21.8 | 21.0 | 3.2 | 1.44 | 694 | 1.45 | 690 | 27.0 | 37.0 |
| 20 L | 0.75 | 26.9 | 26.4 | 2.3 | 1.38 | 724 | 1.39 | 719 | 32.5 | 39.0 |
| 20 M | 0.75 | 27.3 | 26.5 | 2.6 | 1.56 | 641 | 1.57 | 637 | 32.5 | 39.0 |
| 20 H | 0.75 | 27.3 | 26.5 | 3.2 | 1.87 | 534 | 1.88 | 532 | 32.5 | 39.0 |
| 25 L | 1.00 | 33.8 | 33.2 | 2.6 | 1.98 | 555 | 2.00 | 500 | 39.5 | 46.0 |
| 25 M | 1.00 | 34.2 | 33.3 | 3.2 | 2.41 | 415 | 2.43 | 412 | 39.5 | 46.0 |
| 25H | 1.00 | 34.2 | 33.3 | 4.0 | 2.93 | 341 | 2.95 | 339 | 39.5 | 46.0 |
| 32 L | 1.25 | 42.5 | 41.9 | 2.6 | 2.54 | 393 | 2.57 | 389 | 49.0 | 51.0 |
| 32 M | 1.25 | 42.9 | 42.0 | 3.2 | 3.10 | 322 | 3.13 | 319 | 49.0 | 51.0 |
| 32 H | 1.25 | 42.9 | 42.0 | 4.0 | 3.79 | 264 | 3.82 | 262 | 49.0 | 51.0 |
| 40 L | 1.50 | 48.4 | 47.8 | 2.9 | 3.23 | 309 | 3.27 | 306 | 56.0 | 51.0 |
| 40 M | 1.50 | 48.8 | 47.9 | 3.2 | 3.56 | 231 | 3.60 | 278 | 56.0 | 51.0 |
| 40 H | 1.50 | 48.8 | 47.9 | 4.0 | 4.37 | 229 | 4.41 | 227 | 56.0 | 51.0 |
| 50L | 2.00 | 60.2 | 59.6 | 2.9 | 4.08 | 245 | 4.15 | 241 | 68.0 | 60.0 |
| 50M | 2.00 | 60.8 | 59.7 | 3.6 | 5.03 | 199 | 5.10 | 196 | 68.0 | 60.0 |
| 50 H | 2.00 | 60.8 | 59.7 | 4.5 | 6.19 | 161 | 6.26 | 160 | 68.0 | 60.0 |
| 65 L | 2.50 | 76.0 | 75.2 | 3.2 | 5.71 | 175 | 5.83 | 172 | 84.0 | 69.0 |
| 65 H | 2.50 | 76.5 | 75.3 | 3.6 | 6.42 | 155 | 6.54 | 153 | 84.0 | 69.0 |
| 65 H | 2.50 | 76.6 | 75.3 | 4.5 | 7.93 | 126 | 8.05 | 124 | 84.4 | 69.0 |
| 80 L | 3.00 | 88.7 | 87.9 | 3.2 | 5.72 | 149 | 6.89 | 145 | 98.0 | 75.0 |
| 80 M | 3.00 | 89.5 | 88.0 | 4.0 | 8.36 | 119 | 8.53 | 117 | 98.0 | 75.0 |
| 80H | 3.00 | 89.5 | 88.0 | 4.8 | 9.90 | 101 | 10.10 | 96 | 98.0 | 75.0 |
| 100 L | 4.00 | 113.9 | 113.0 | 3.6 | 9.75 | 102 | 10.00 | 140 | 124.0 | 87.0 |
| 100 M | 4.00 | 115.0 | 113.1 | 4.5 | 12.20 | 82 | 12.50 | 80 | 124.0 | 87.0 |
| 100 H | 4.00 | 115.0 | 113.1 | 5.4 | 14.50 | 69 | 14.80 | 68 | 124.0 | 87.0 |
| 125 M | 5.00 | 140.8 | 138.5 | 4.8 | 15.90 | 63 | 16.40 | 61 | 151.0 | 96.0 |
| 125 H | 5.00 | 140.8 | 138.5 | 5.4 | 17.90 | 56 | 18.40 | 54 | 151.0 | 96.0 |
| 150 M | 6.00 | 166.5 | 163.9 | 4.8 | 13.90 | 53 | 19.50 | 51 | 178.0 | 96.0 |
| 150 H | 6.00 | 166.5 | 163.9 | 5.4 | 21.30 | 47 | 21.90 | 46 | 178.0 | 96.0 |

L = Light M = Medium H = Heavy

Tolerances

| A. Thickness | 2. Single Tube | C. Length |
|---|---|--|
| 1. Light Tubes + Not limited - 8% | (Medium & Heavy series) | 4 to 7 Meters unless otherwise specified |
| 2. Medium and +Not limited Heavy Tubes -10% | 3. For Quality per Load of 10 tonnes min. (Light series) | |
| D. Weight | 4. For Quantity per Load of 10 tonnes min. (Medium & heavy series) ± 7.5% | |
| 1. Single Tube + 10% (Light series) - 8% | | |

Hi-Tech Pipes Limited provides quick delivery of made to order customise ERW Pipes & Tubes / Black Steel Pipes & Tubes / Galvanized Pipes & Tubes especially made for use in Water, as Air & Steam. All Pipes & Tubes are manufactured in accordance with ASTM / IS / BS specifications.

Technical Data of Pipes Conforming to ASTM A-53 Gr. A & B SCH.40

| NSE Designator | DN Designator | Outside Diamener | | Wall Thickness | | Mess of Plain End Pipes | | Test Pressure | |
|----------------|---------------|------------------|-------|----------------|-------|-------------------------|-------|---------------|-------------|
| | | Inch | mm | inch | mm | Kg./Mtr | lb/ft | Grade A Mpa | Grade B Mpa |
| 1/2 | 15 | 0.840 | 21.3 | 0.109 | 2.77 | 1.27 | 0.83 | 4.8 | 4.8 |
| 3/4 | 20 | 1.050 | 26.7 | 0.113 | 2.87 | 1.69 | 1.13 | 4.8 | 4.8 |
| 1 | 25 | 1.315 | 33.4 | 0.133 | 3.38 | 2.50 | 1.68 | 4.8 | 4.8 |
| 1 1/4 | 32 | 1.660 | 42.2 | 0.140 | 3.56 | 3.39 | 2.27 | 8.3 | 9.0 |
| 1 1/2 | 40 | 1.900 | 48.3 | 0.145 | 3.68 | 4.05 | 2.72 | 8.3 | 9.0 |
| 2 | 50 | 2.375 | 60.3 | 0.154 | 3.91 | 5.44 | 3.66 | 15.9 | 17.2 |
| 2 1/2 | 65 | 2.875 | 73.0 | 0.203 | 5.16 | 8.63 | 5.80 | 17.2 | 17.2 |
| 3 | 80 | 3.500 | 88.9 | 0.216 | 5.49 | 11.29 | 7.58 | 15.3 | 17.2 |
| 3 1/2 | 90 | 4.000 | 101.6 | 0.226 | 5.74 | 13.57 | 9.12 | 14.0 | 16.3 |
| 4 | 100 | 4.500 | 114.3 | 0.237 | 6.02 | 16.07 | 10.80 | 13.1 | 15.2 |
| 5 | 125 | 5.563 | 141.3 | 0.258 | 6.55 | 21.77 | 14.63 | 11.5 | 13.4 |
| 6 | 150 | 6.625 | 168.3 | 0.280 | 7.11 | 28.26 | 18.99 | 10.5 | 12.3 |
| 8 | 200 | 8.625 | 219.1 | 0.322 | 8.18 | 42.55 | 28.58 | 9.2 | 10.8 |
| 10 | 250 | 10.750 | 273.0 | 0.365 | 9.27 | 60.29 | 40.52 | 8.4 | 9.9 |
| 12 | 300 | 12.750 | 323.8 | 0.406 | 10.31 | 79.70 | 53.57 | 7.9 | 9.2 |

Tolerance

| | |
|------------------|--|
| Outside Diameter | Pipe Size up to & including DN 40 +/- 0.4 mm Pipe Size ON 50 or Larger +/- 1% |
| Thickness | -12.5% (max) |
| Weight | +1- 10% |

Testing

| | |
|------------|--|
| Online NOT | For Pipes NPS 2 (DN 50) or larger Weld seam of each pipe shall be tested by Eddy Current Test For pipes up to 8 including DN 50 |
| Bend Test | Bending angle 90° Bending radius 12 times to the OD of Tube (no crack in body & weld) For pipes over DN 50 |
| Flattening | 1. Flatten up to 2/3 of OD for ductility of weld 2. Flatten up to 1/3 of OD for ductility of steel 3. Full Flattentin9 for testing of lamination |

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 | |

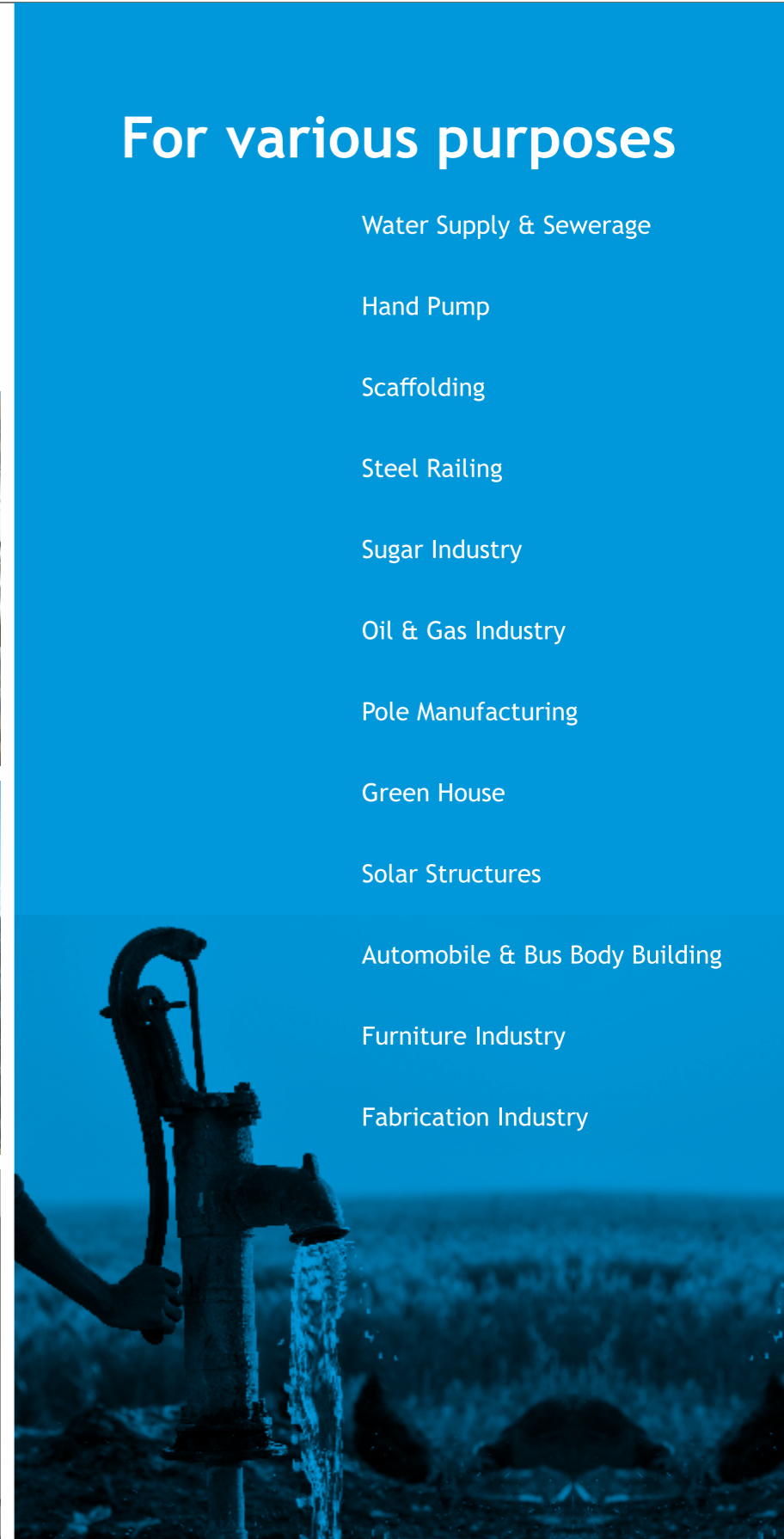
Chemical Properties

| | Composition, Max, % | | | | | | | | |
|---------|---------------------|-----------|------------|---------|--------|--------|----------|------------|----------|
| | Carbon | Manganese | Phosphorus | Sulphur | Copper | Nickel | Chromium | Molybdenum | Venadium |
| Grade A | 0.25 | 0.05 | 0.95 | 0.045 | 0.50 | 0.40 | 0.40 | 0.15 | 0.08 |
| Grade B | 0.30 | 0.05 | 1.20 | 0.045 | 0.50 | 0.40 | 0.40 | 0.15 | 0.08 |

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

Galvanizing

| | |
|---------|-------------------|
| Minimum | 0.490 Kg/Sq. Mtr. |
| Average | 0.550 Kg/Sq. Mtr. |



For various purposes

Water Supply & Sewerage

Hand Pump

Scaffolding

Steel Railing

Sugar Industry

Oil & Gas Industry

Pole Manufacturing

Green House

Solar Structures

Automobile & Bus Body Building

Furniture Industry

Fabrication Industry

Pre-Galvanised (GP) Pipes and tubes:

MS Galvanised Sheets are used to manufacture our GP Pipes which are highly durable, stable and adhere for a longer duration without any atmospheric corrosion.

Atmospheric and corrosive environment prevailing at individual sites are the guiding factors that determine the thickness of the coating to be provided to these pipe. The complete look & finish is controlled at our dedicated in-house galvanising facility.



GI (Hot Dip Galvanized) Pipes and Tubes:

The Steel Tubes which are covered with a layer of zinc metal are known as GI pipes and tubes. During the process of galvanising, the steel is immersed in a molten zinc bath ensuring a smooth and uniform barrier.

In order to seek long-term structural performance in the harshest of weather conditions, designers, builders and consumers have turned to using zinc-coated steel pipes.

Our GI pipes are highly corrosion resistant, light in weight, easy to handle during transport and easy to join.

Applications:

- Solar Mounting Structures
- Fencing
- Greenhouse Structures
- Electrical Conduit
- Cabling and Ducting
- Automotive (Bus Body)
- Gates and Grills
- Scaffolding

