1. **Hot Rolled Steel Beams (Joists)**
2. **SCOPE :-**

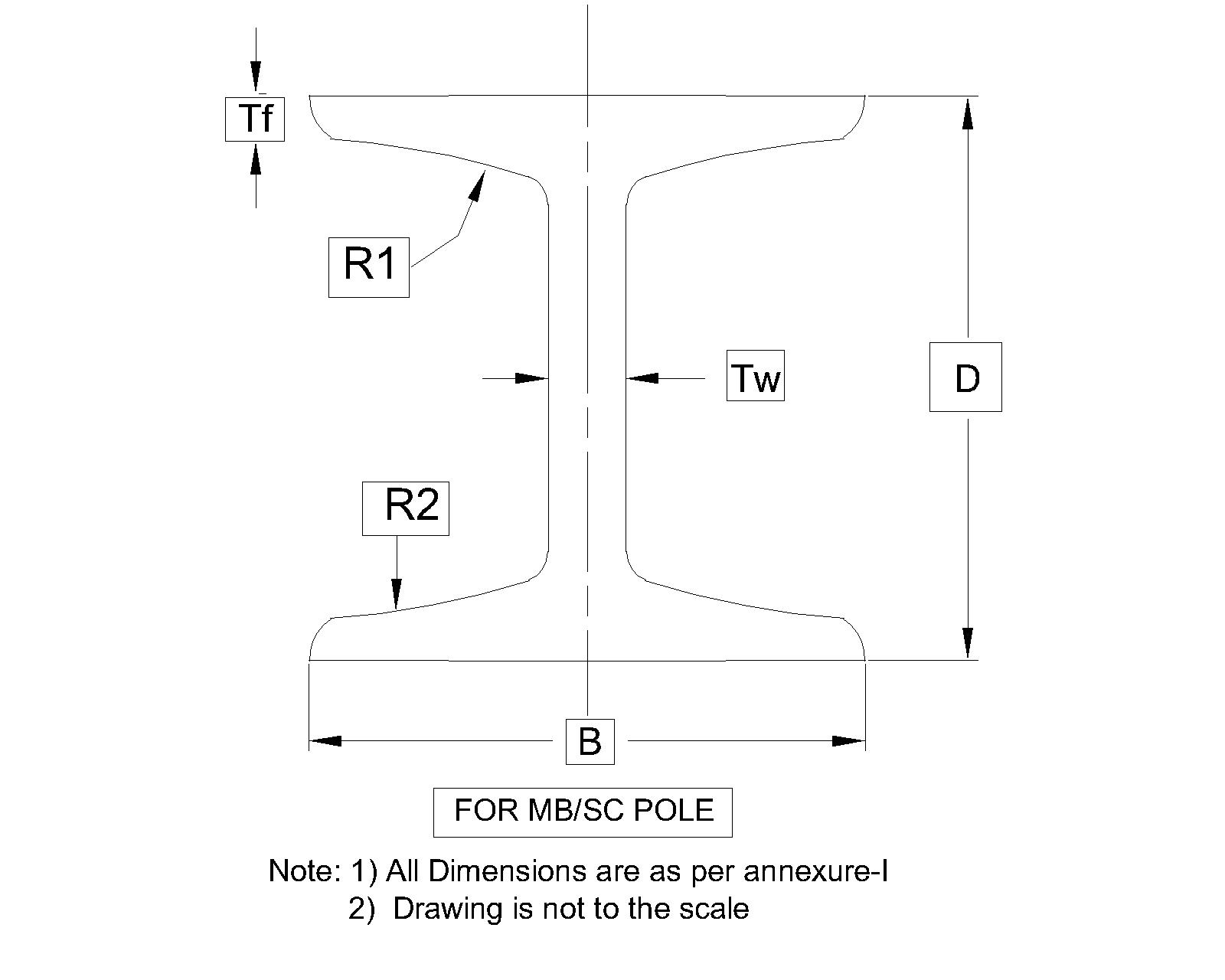
Specification covers the manufacture, testing at works and supply of various sizes of Hot rolled steel beams.

1. **APPLICABLE STANDARDS:**

The Mild shall be conforming to IS:2062 – 1992 GRADE ‘ A ‘ modified upto date or its equivalent international standard for steel materials, document for which shall be made available at the time of inspection to the Employer’s representative. The dimensions of Hot Rolled Steel Beams shall be conforming to IS: 808 / 1989 amended upto date andtolerance as per IS : 1852 modified upto date.

1. **GENERAL REQUIREMENTS :**

Material shall be supplied as per the sizes and technical details as per following requirements and drawing.



**ANNEXURE-I**

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| **Sr.No.** | **Particulars** | **Requirement as per Specification** | |
| MB | SC |
| 1 | Designation (DxB) ( mm x mm ) | 175X85 | 152X152 |
| 2 | Length of joist-Meter with +100 mm tolerance | 9m | 11m / 13m |
| 3 | Weight (kg/M) | 19.6 | 37.1 |
| 4 | Sectional area (A) (Sq.cm. ) | 25.0 | 47.4 |
| 5 | Depth of section ( D ) (mm) | 175 | 152 |
| 6 | Width of flance ( B ) (mm) | 85 | 152 |
| 7 | Thickness of flance (Tf) (mm) | 9 | 11.9 |
| 8 | Thickness of Web (Tw) (mm) | 5.8 | 7.9 |
| 9 | Radius of fillet or root (R1) (mm) | 10 | 11.7 |
| 10 | Radius of tow (R2) (mm) | 5 | 3 |
| 11 | Moment of Inertia   1. I xx ( cm⁴)   (ii) I yy ( cm⁴) | 1260  76.7 | 1970  700 |
| 12 | Radius of Gyration GR xx (cm) | 7.13 | 6.45 |
| 13 | Modulus of Section  (i)Z xx (cm³ )  (ii)Z yy(cm³ ) | 144  18 | 259  91.9 |
| 14 | Tolerance in dimensions plus/minus | ---------As per IS: 1852--------- | |