

IS 10748 Grade 5-Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value
C (max %)	0.25
Mn (max %)	1.30
P (max %)	0.040
S (max %)	0.040
C _{es} (max)	0.45
Tensile Strength σ_u (MPa min)	490
Yield Strength σ_y (MPa min)	310
Elongation A ₅ (%)	15
Bend Test (ID)	3t

2. Equivalent / Alternative Grades

Grade	Standard	C max %	Mn max / range %	P max %	S max %	YS / TS / El%
Closest JIS SPHT4	JIS	0.30	1.00	0.040	0.040	YS —; TS 490; El 15-22

3. Common Applications

- API line-pipe skelp, medium-grade structural tubing
- Automotive longitudinal members, roll-formed profiles

4. Standard Conformance

Conforms to IS 10748 : 2004 (Second Revision) including Amendment 1 : 2012.

5. Disclaimer

All chemical compositions, mechanical properties, dimensions and other technical data presented on this page are provided by Raunaq Steels Trading Pvt. Ltd. for **general reference only**. While we endeavour to ensure that the information is as accurate and up-to-date as possible, **no warranty, express or implied, is given** as to its completeness, correctness or fitness for any particular purpose. Raunaq Steels Trading Pvt. Ltd. **accepts no liability** for any loss or damage arising directly or indirectly from the use of, or reliance upon, the information contained herein.

For **authoritative** and **legally binding** specifications, users must refer to the **official publications** of the relevant standards—such as the BIS, ASTM, EN or JIS standards—available through their respective websites or published documents.