

# 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 <sub>es</sub> (max)	0.45
Tensile Strength $\sigma_u$ (MPa min)	490
Yield Strength $\sigma_y$ (MPa min)	310
Elongation A <sub>5</sub> (%)	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

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