

# IS 2002 Grade 3 – Technical Datasheet

## 1. Chemical & Mechanical Properties

Property	Value
Carbon (C)	≤ 0.25%
Manganese (Mn)	≤ 1.40%
Phosphorus (P)	≤ 0.06%
Sulphur (S)	≤ 0.06%
Silicon (Si)	≤ 0.50%
YS	≥ 350 MPa
TS	470 – 620 MPa
Elongation	≥ 20%
Impact	Optional or as per requirement
Hardness	N/A

## 2. Equivalent / Alternative Grades

Standard	Grade	C (%)	Mn (%)	P (%)	S (%)	Si (%)	Cu (%)	YS (MPa)	TS (MPa)	Elongation / Impact
EN 10025-2	S355JR	≤ 0.22	≤ 1.60	≤ 0.035	≤ 0.035	≤ 0.55	-	≥ 355	470 – 630	≥ 22% / 27J @ 20°C
ASTM A572	Gr 50	≤ 0.23	≤ 1.35	≤ 0.040	≤ 0.050	≤ 0.40	-	≥ 345	450 – 620	≥ 21% / 20J @ RT

## 3. Common Applications

- Structural steel components
- Construction and fabrication
- Heavy machinery parts

- Bridge components

#### 4. Standard Conformance

IS 2002: Specification for Structural Steel Sections – Hot Rolled Steel Channels, Angles, Tees, etc.

Grade Code Meaning:

Grade number represents approximate minimum yield strength in MPa.

#### 5. Disclaimer

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