

# STK / ST42 – Technical Datasheet

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## 1. Chemical & Mechanical Properties

Property	Value
Carbon (C)	≤ 0.21%
Manganese (Mn)	≤ 1.60%
Silicon (Si)	≤ 0.55%
Phosphorus (P)	≤ 0.045%
Sulphur (S)	≤ 0.045%
Yield Strength	≥ 275 MPa
Tensile Strength	410 – 560 MPa
Elongation	≥ 22 %

## 2. Equivalent / Alternative Grades

Standard	Grade	YS	TS
EN 10025-2	S275JR	275	410-560
ASTM A36	A36	250	400-550

## 3. Common Applications

- General structural fabrication
- Pipes & hollow sections
- Bridges and buildings

#### 4. Standard Conformance

DIN 17100 (withdrawn) and IS 226 legacy grade; replaced by EN 10025 S275JR.

#### 5. Disclaimer

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