

# 70C6 – IS 2507: 1975– Technical Datasheet

## 1. Chemical & Mechanical Properties

Property	Value / Range
C (%)	0.65–0.75
Mn (%)	0.60–0.90
Si (%)	0.10–0.35
S max (%)	0.050
P max (%)	0.050
Tensile Strength (MPa)	1 200 – 1 400
Yield Strength (MPa)	≥ 1 000
Hardness (HB)	320 – 400
Elongation (%)	7

## 2. Equivalent / Alternative Grades

Grade	Standard	C %	Mn %	Key Alloy	S % max	P % max	Typical $\sigma_u$ / HB
SAE 1070	ASTM A29	0.65–0.75	0.60–0.90	Si ≤ 0.35	0.040	0.040	$\sigma_u$ 820 – 980; HB 235 – 293
JIS SK70	JIS G 4401	0.65–0.74	0.60–0.90	Si ≤ 0.35	0.030	0.030	$\sigma_u$ 840 – 980; HB 240 – 290
EN C70S (1.1221)	EN 10132-4	0.65–0.75	0.50–0.90	Si 0.10–0.35	0.025	0.025	$\sigma_u$ 820 – 1000 (+LC); HB 235 – 300

## 3. Common Applications

- Suspension springs
- Agricultural machinery springs

## 4. Standard Conformance

Cold-rolled spring-steel strip conforming to IS 2507 : 1975.

## 5. Disclaimer

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