

# 65C6 – IS 2507: 1975– Technical Datasheet

## 1. Chemical & Mechanical Properties

Property	Value / Range
C (%)	0.60–0.70
Mn (%)	0.60–0.90
Si (%)	0.10–0.35
S max (%)	0.050
P max (%)	0.050
Tensile Strength (MPa)	1 100 – 1 300
Yield Strength (MPa)	≥ 950
Hardness (HB)	300 – 380
Elongation (%)	8

## 2. Equivalent / Alternative Grades

Grade	Standard	C %	Mn %	Key Alloy	S % max	P % max	Typical $\sigma_u$ / HB
SAE 1065	ASTM A29	0.60–0.70	0.60–0.90	Si ≤ 0.35	0.040	0.040	$\sigma_u$ 770 – 930; HB 225 – 277
JIS S65C	JIS G 4051	0.62–0.68	0.60–0.90	Si ≤ 0.35	0.040	0.040	$\sigma_u$ 785 – 930; HB 230 – 280
EN C67S (1.1231)	EN 10132-4	0.65–0.75	0.50–0.90	Si 0.10–0.35	0.025	0.025	$\sigma_u$ 780 – 980 (+LC); HB 220 – 290

## 3. Common Applications

- Engine valve springs
- High-stress flat springs

## 4. Standard Conformance

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

## 5. Disclaimer

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