75C6 – IS 2507: 1975– Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value / Range
C (%)	0.70–0.80
Mn (%)	0.60–0.90
Si (%)	0.10–0.35
S max (%)	0.050
P max (%)	0.050
Tensile Strength (MPa)	1 250 – 1 450
Yield Strength (MPa)	≥ 1 050
Hardness (HB)	330 – 410
Elongation (%)	6

2. Equivalent / Alternative Grades

Grade	Standard	C %	Mn %	Key Alloy	S % max	P % max	Typical σu / HB
SAE 1075	ASTM A29	0.70–0.80	0.60–0.90	Si ≤ 0.35	0.040	0.040	σu 860 – 1030; HB 245 – 311
JIS SK75	JIS G 4401	0.75–0.80	0.60–0.90	Si ≤ 0.35	0.030	0.030	σu 880 – 1030; HB 250 – 312
EN C75S (1.1248)	EN 10132-4	0.70–0.80	0.50–0.90	Si 0.10–0.35	0.025	0.025	σu 880 – 1100 (+LC); HB 250 – 320

3. Common Applications

- High-performance leaf springs
- Saw blades, clutch springs

4. Standard Conformance

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

5. Disclaimer

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