

C40 – IS 7226 : 1974– Technical Datasheet

1. Chemical & Mechanical Properties

| Property | Value / Range |
|--|---------------|
| C (%) | 0.35 – 0.45 |
| Mn (%) | 0.60 – 0.90 |
| Si (%) | 0.15 – 0.35 |
| S max (%) | 0.040 |
| P max (%) | 0.040 |
| Hardness HRB (max, Annealed) | 83.4 |
| HV equiv (Annealed) | 160 |
| Hardness HRC (max, Annealed + Re-rolled) | 28 |
| HV equiv (Re-rolled) | 290 |

2. Equivalent / Alternative Grades

| Grade | Standard | C% | Mn% | Key Alloy | S max% | P max% | Key Mech |
|------------------|------------|-------------|-------------|-----------|--------|--------|------------------------------|
| SAE 1040 | ASTM A29 | 0.37 – 0.44 | 0.60 – 0.90 | Si ≤ 0.35 | 0.040 | 0.040 | 620; HB 180 – 217 |
| JIS S40C | JIS G 4051 | 0.38 – 0.43 | 0.60 – 0.90 | Si ≤ 0.35 | 0.040 | 0.040 | 610; HB 180 – 220 |
| EN C40E (1.1189) | EN 10083-2 | 0.37 – 0.44 | 0.50 – 0.80 | Si ≤ 0.40 | 0.025 | 0.025 | 600 – 800 (QT); HB 170 – 235 |

3. Common Applications

- Stampings, washers, small springs, general engineering strip

4. Standard Conformance

Cold-rolled strip conforming to IS 7226 : 1974.

5. Disclaimer

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