

# 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

All chemical compositions, mechanical properties, dimensions and other technical data presented on this page are provided by Raunaq Steels Trading Pvt. Ltd. for **general reference only**. While we endeavour to ensure that the information is as accurate and up-to-date as possible, **no warranty, express or implied, is given** as to its completeness, correctness or fitness for any particular purpose. Raunaq Steels Trading Pvt. Ltd. **accepts no liability** for any loss or damage arising directly or indirectly from the use of, or reliance upon, the information contained herein.

For **authoritative** and **legally binding** specifications, users must refer to the **official publications** of the relevant standards—such as the BIS, ASTM, EN or JIS standards—available through their respective websites or published documents.