



120Cr35 – IS 7226 : 1974– Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value / Range
C (%)	1.10 – 1.30
Mn (%)	0.30 – 0.60
Si (%)	≤ 0.25
Cr (%)	0.20 – 0.50
S max (%)	0.030
P max (%)	0.030
Hardness HRB (max, Annealed)	97.5
HV equiv (Annealed)	220
Hardness HRC (max, Annealed + Re-rolled)	35
HV equiv (Re-rolled)	350

2. Equivalent / Alternative Grades

Grade	Standard	C%	Mn%	Key Alloy	S max%	P max%	Key Mech
DIN 100Cr2 (1.3520)	DIN EN ISO 683-17	0.95 – 1.10	0.25 – 0.45	Si ≤ 0.40; Cr 0.30 – 0.50	0.025	0.025	1080 – 1270 (QT); HB 300
AISI 52100 (100Cr6)	ASTM A295	0.93 – 1.05	0.25 – 0.45	Si 0.15 – 0.35; Cr 1.40 – 1.60	0.025	0.025	1570 (oil-QT); HB 207 (annealed)
JIS SUJ3	JIS G 4805	0.95 – 1.10	0.25 – 0.45	Si ≤ 0.35; Cr 0.80 – 1.10	0.030	0.030	1480 – 1660; HB ≤ 207

3. Common Applications

- Thin bearing races, instrument springs requiring high C

4. Standard Conformance

Cold-rolled strip conforming to IS 7226 : 1974.

5. Disclaimer

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