

# 110Cr35W2 – IS 7226: 1974– Technical Datasheet

## 1. Chemical & Mechanical Properties

Property	Value / Range
C (%)	1.10 – 1.20
Mn (%)	0.30 – 0.60
Si (%)	≤ 0.35
Cr (%)	0.20 – 0.50
W (%)	2.0 – 2.5
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 105WCr6 (1.2210)	DIN EN ISO 4957	1.00 – 1.10	0.30 – 0.50	Si 0.15 – 0.35; Cr 0.40 – 0.60; W 1.70 – 2.10	0.030	0.030	—; HB ≈ 250 (annealed)
AISI W1 (Water-hardening tool steel)	ASTM A681	0.90 – 1.10	0.20 – 0.50	Si 0.15 – 0.35; Cr ≤ 0.25; W ≤ 0.15	0.025	0.025	—; HB ≈ 201 (annealed)
JIS SKS3	JIS G 4403	1.10 – 1.20	0.30 – 0.60	Si 0.10 – 0.35; Cr 0.30 – 0.60; W 1.70 – 2.20	0.030	0.030	—; HB ≤ 229

### 3. Common Applications

- Precision clock & watch mainsprings
- High-wear strip requiring tungsten

### 4. Standard Conformance

Cold-rolled strip conforming to IS 7226 : 1974.

### 5. Disclaimer

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