

A-2 Data Sheet

*Chemical Composition (Nominal Values Weight %)

<u>C</u>	<u>Si</u>	<u>Cr</u>	<u>V</u>	<u>Mn</u>	<u>Mo</u>
1.0	0.3	5.3	0.2	0.6	1.1

*Composition shown is nominal. Actual chemical composition may vary.

Characteristics

A-2 is a cold work tool steel which provides a good combination of moderate toughness and moderate wear resistance.

Applications

A-2 is suitable for use in die sections, shear blades and punches.

Heat Treatment of A-2

Annealing

A-2 should be heated thoroughly to 1550°F in an atmosphere controlled furnace. Hold 2 hours, furnace cool at 25°F per/hr to 1100°F, then air cool to room temperature. A maximum hardness of 215 BHN should result.

Hardening

Preheat: 1200-1300°F, equalize temperature, hold 2 hours.
Austenitize: 1700-1750°F, equalize temperature, hold 30 minutes.
Quench: Positive pressure (2 bar minimum) quench to below 125°F.
Temper: Double temper at 400-800°F, equalize temperature, hold 2 hours minimum. Double temper recommended.
Typical hardness: 58-60 HRC.

Stress Relieving

Annealed material: Heat to 1000-1200°F, hold 2 hours, then air cool.
Hardened material: Heat to 25-50°F below heat treat tempering temperature, hold 2 hours, then air cool.

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Hardened material: Heat to 25-50°F below heat treat tempering temperature, hold 2 hours, then air cool.