

CrMoV

Chrome-Moly-Vanadium Steel

CrMov is a low alloy ferritic steel. Also known as a creep resisting alloy, this material is used in elevated temperature environments. Base materials for the alloy provide creep rupture properties up to 580°C. Developed in the 1970s, this material is typically used in fasteners and other parts for power plants.

Nominal Composition %

- Carbon 0.17 0.25
- Si Silicon ≤ 0.40
- Mn Manganese 0.40 0.80
- P Phosphorous ≤ 0.030
- s Sulfur ≤ 0.030
- All Aluminum ≤ 0.030
- **Cr** Chromium 1.20 1.50
- Molybdenum 0.55 0.80
- Ni Nickel 0.60
- Vanadium 0.20 0.35

Percent by weight, maximum unless a range is listed.

Standard Inventory Specifications

- B50A179B3
- B50A164B2
- B5F5B31
- B50A249
- B50391B

Forms Stocked

CrMoV Bar Stock

Thickness Stocked

• 4.000" – 27.750" thick

Applications

- Steam turbines
- Valve casings
- · Cast materials
- Boilers and pressure vessels
- Drills
- Connecting rods
- · Gear wheels
- Power generation
- · Petrochemical industry



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Physical Properties

Property	Value - Metric	Value - Imperial
Density	7.806 g/cm ³	0.282 lb/in ³

Mechanical Properties and Processes

Property	Value
Modulus of Elasticity	29000 ksi
Melting Process	Electric arc
Forming Process	Hot rolled or forged