ALLOY CRMOV

CrMoV (Chromium-Molybdenum-Vanadium) steel is a high-performance alloy known for its exceptional strength, toughness, and resistance to heat and wear. By combining chromium for corrosion and oxidation resistance, molybdenum for high-temperature strength, and vanadium for grain refinement and durability, CrMoV alloys deliver outstanding stability under extreme mechanical and thermal stress. These properties make CrMoV steels ideal for demanding applications such as power-generation components, pressure vessels, turbine parts, high-temperature tooling, and other critical industrial systems that require long-term reliability in harsh environments.

Products & Sizes
Bar
4.000" - 27.750"

CrMoV Chemical Composition

	Element	Min	Max
C	Carbon	0.17	0.25
Si	Silicon	≤ 0.40	-
Mn	Manganese	0.40	0.80
P	Phosphorus	≤ 0.030	-
S	Sulfur	≤ 0.030	-
Al	Aluminum	≤ 0.030	-
Cr	Chromium	1.20	1.50
Mo	Molybdenum	0.55	0.80
Ni	Nickel	-	0.60
V	Vanadium	0.20	0.35

Industry Standards

- B50A179B3
- B50A164B2
- B5F5B31
- B50A249
- B50391B

Industry Applications

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

Physical Properties

- Density: 0.282 lb/in^3

Mechanical Properties

- Modulus of Elasticity: 29,000 ksi
- Melting Process: Electric Arc
- Forming Process: Hot Rolled or Forged