

Molybdenum



Molybdenum is a refractory metal that is very useful in many industrial processes and applications that would not be possible with many of the more common metals and alloys. Refractory metals and alloys are extraordinarily resistant to heat and have unique physical properties.

Because of these properties Molybdenum is useful in many high temperature applications where high melting points are required. Molybdenum also exhibits good strength at elevated temperatures making moly useful in furnace, aerospace, and similar applications. And Molybdenum's good thermal and electrical conductivity and low coefficient of expansion make it a useful metal in electronic/electrical and glass-to-metal sealing applications.

Density	lb/in ³	0.369
	gm/cm ³	10.30
Melting Point	°F	4760
	°C	2625
Thermal Conductivity	Cal/cm ² /cm°C/sec	0.35
Specific Heat	Cal/gm/°C	0.061
Coefficient of Thermal Expansion	micro-in/°F x 10 ⁻⁶	4.90
	micro-in/°C x 10 ⁻⁶	2.70
Electrical Resistivity	micro-ohm-cm	5.17
Recrystallization Temp.	°C	1100

Tensile Strength	KSI (Mpa)-RT	150 (1035)
	KSI (Mpa)-500°C	75 (515)
	KSI (Mpa)-1000°C	25 (175)
Elongation	% in 1.0"	--
Hardness	DPH	230
Modules of Elasticity	KSI	45000
	Gpa	310