

## TZM Molybdenum

TZM Molybdenum is an alloy of 0.50% Titanium, 0.08% Zirconium and 0.02% Carbon with the balance Molybdenum. TZM Molybdenum is manufactured by either P/M or Arc Cast technologies and is of great utility due to its high strength/high temperature applications, especially above 2000°F.

### TZM Molybdenum Physical Properties

<b>Density</b>	lb/in <sup>3</sup>	0.37
	gm/cm <sup>3</sup>	10.22
<b>Melting Point</b>	°F	4753
	°C	2623
<b>Thermal Conductivity</b>	Cal/cm <sup>2</sup> /cm°C/sec	0.48
<b>Specific Heat</b>	Cal/gm/°C	0.073
<b>Coefficient of LThermal Expansion</b>	micro-in/°F x 10 <sup>-6</sup>	2.50
	micro-in/°C x 10 <sup>-6</sup>	5.20
<b>Electrical Resistivity</b>	micro-ohm-cm	6.85

### TZM Molybdenum Mechanical Properties

<b>Tensile Strength</b>	KSI (Mpa)-RT	110 (760)
	KSI (Mpa)-500°C	--
	KSI (Mpa)-1000°C	--
<b>Elongation</b>	% in 1.0".	15
<b>Hardness</b>	DPH	220
<b>Modules of Elasticity</b>	KSI	46000
	Gpa	320

### TZM Molybdenum Specifications

ASTM B386 type 364 / B387 type 364

AMS 7817

