MOLYBDENUM TOTAL SERVICES

TZM Molybdenum Physical Properties

TZM is an acronym for titanium-zirconium-molybdenum, and is typically manufactured by powder metallurgy or arc-casting processes. It is an alloy that has a higher recrystallization temperature, higher creep strength, and higher tensile strength than pure, unalloyed molybdenum. Available in rod and plate form, it is often used for hardware in vacuum furnaces, large x-ray equipment, and in creating tools. While incredibly versatile, TZM is best utilized between 700 and 1400°C in a non-oxidizing environment. Our TZM is of the highest quality and conforms to ASTM B386 type 364 and B387 type 364 standards.

To learn more about TZM Molybdenum and its various properties, give us a call, 1-800-626-0226, or email us at sales@molybdenum.com.

Element	Content (%)
Molybdenum, Mo	99.40
Titanium, Ti	0.5
Zirconium, Zr	0.08
Carbon, C	0.02

TZM Molybdenum Physical Properties:

Density	lb/in^3	0.37
	gm/cm^3	10.22
Melting Point	°F	4753
	°C	2623
Thermal Conductivity	Cal/cm2/cm°C/sec	0.48
Specific Heat	Cal/gm/°C	0.073
Coefficient of Linear Thermal Expansion	micro-in/°F x 10^{-6}	2.50
	micro-in/°C x 10^{-6}	5.20
Electrical Resistivity	micro-ohm-cm	6.85

Phone: 1-800-626-0226 :: 630-325-1001
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TZM Molybdenum Mechanical Properties:

Tensile Strength	KSI (Mpa)-RT	110 (760)
	KSI (Mpa)-500°C	-
	KSI (Mpa)-1000°C	-
Elongation	% in 1.0".	15
Hardness	DPH	220

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