



## WMTI-16 Ceramic Core Material Properties Typical Analysis

**Applications:**  
For use with titanium alloys

Choosing the correct blend of material is a critical component to ensuring the successful performance of your ceramic cores in the investment casting process. The materials we use in our ceramic cores feature excellent alloy compatibility and consistent quality.

<b>Method:</b>	Injection Molded Core	
<b>Major Chemistry (Wt %):</b>	Zirconia	98+
	Silica	<1
	Alumina	<1
<b>Trace Elements (PPM):</b>	Pb - Lead	<10
	Bi - Bismuth	<0.5
	Ag - Silver	<10
	Sb - Antimony	<5
	Zn - Zinc	<50
	Sn - Tin	<1
	Fe - Iron	1000
<b>Physical Properties:</b>	Apparent Porosity	32%
	Water Absorption	9%
	Apparent Specific Gravity	5.60
	Bulk Density (g/cm <sup>3</sup> )	3.80
	Modulus of Rupture (MOR) (psi)	2900
	Thermal Expansion	0.9% @1149°C

Note: These values are not guaranteed and should be used only as indications of material properties. Core-Tech reserves the right to change, modify or eliminate analysis at any time.

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