



DC-04

Ceramic Core Material Properties Typical Analysis

Applications:
For equiaxed, DS, and single
crystal casting; ferrous, nickel and
cobalt-based superalloys

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.

Method:	Injection Molded Core	
Major Chemistry (Wt %):	Silica	82
	Zircon	18
Trace Elements (PPM):	Pb - Lead	<10
	Bi - Bismuth	<0.5
	Ag - Silver	<10
	Sb - Antimony	<5
	Zn - Zinc	<25
	Sn - Tin	<5
	Fe - Iron	150
Physical Properties:	Apparent Porosity	28%
	Water Absorption	16%
	Apparent Specific Gravity	2.44
	Bulk Density (g/cm ³)	1.76
	Modulus of Rupture (MOR) (psi)	3500
	MOR with CT Impregnation	4800
	MOR with Resin Impregnation	5600
	Thermal Expansion RT to 2650° F	0.2%
	Cristobalite	10%