



Zirconia Toughened Alumina Ceramic Rod

As the professional manufacture, we would like to provide you Nextgen Zirconia Toughened Alumina Ceramic Rod. Zirconia Toughened Alumina (ZTA) Ceramic Rod has the advantages of both alumina and zirconia and has a wider range of applications. Nextgen Advanced Materials supplies Zirconia Toughened Alumina (ZTA) Ceramic Rod with high quality and fast delivery, and customized products

area also available.

Product Description

You can rest assured to buy customized Nextgen Zirconia Toughened Alumina Ceramic Rod from us. We strive to provide customers with satisfactory products and services through our own efforts. If you have questions about product use and functions, you can contact us 24 hours a day. We get in touch. Zirconia Toughened Alumina (ZTA) Ceramic Rod has the properties of corrosion resistance and good chemical stability.

Alumina has high hardness while zirconia has good toughness. Zirconia Toughened Alumina (ZTA) Ceramic Rod has the advantages of both alumina and zirconia and has a wider range of applications in machinery, electronics, petroleum, chemical industry, aerospace, and textile industries. Stanford Advanced Materials (SAM) can adjust the specific ratio of alumina and zirconia in Zirconia Toughened Alumina (ZTA) Ceramic Rod according to the actual requirements of users.



Zirconia Toughened Alumina (ZTA) Ceramic Rod Specification

	Condition	Unit	ZTA Substrate
			ZTA
Material	-	-	Al ₂ O ₃ /ZrO ₂
Color	-	-	White

Bulk Density		-	g/cm ³	4
Surface Roughness Ra		-	μm	0.2
Reflectivity		0.3-0.4mmt	%	80
		0.8-1.0mmt		90
Mechanical	Bending Strength	3-point method	MPa	700
	Modulus of Elasticity	-	GPa	310
	Vickers Hardness	-	GPa	15
	Fracture Toughness	IF method	MPa·m ^{1/2}	3.5
Thermal	Coefficient of Thermal Expansion	40-400°C	10 ⁻⁶ /K	7.1
		40-800°C		8
	Thermal Conductivity	25°C	W/(m·K)	27
		300°C		16
Specific Heat	25°C	J/(kg·K)	720	
Electrical	Dielectric Constant	1MHz	-	10.2
	Dielectric Loss Factor	1MHz	10 ⁻³	0.2
	Volume Resistivity	25°C	Ω·cm	>10 ¹⁴
	Breakdown Strength	DC	kV/mm	>15