



Silicon Nitride Protect Tube for Thermocouples

Protection Tubes for Thermocouples made by Si₃N₄ have excellent corrosion resistance and high-temperature strength and can be used in garbage incinerators and melting furnaces with increased operating temperatures. Nextgen Advanced Materials supplies Silicon Nitride Protect Tube for Thermocouples with high quality and fast delivery. Meanwhile, the customization is

available.

Product Description

We can provide professional service and better price for you. If you interested in Nextgen Silicon Nitride Protect Tube for Thermocouples products, please contact with us. We follow the quality of rest assured that the price of conscience, dedicated service. Silicon nitride ceramic has the best thermal conductivity when used for aluminum melting. It's quick response to the temperature sensor in aluminum and other nonferrous metals melting.

It has excellent shock resistance. Light weight make it easier to operate and maintain. It can be used for many years. Silicon Nitride Protect Tube for Thermocouples is mainly used in the production of aluminum, copper, and zinc, as the lining material of the molten pool and electrolytic bath (reduction bath).



Specification

Density	3.21 g/cm ³
Compressive Strength	3000 MPa
Flexural Strength	800 MPa
Weibull-Modulus m	15
Fracture Toughness K _{Ic}	6.5 MPa m ^{1/2}

Young's Modulus E	320 GPa
Poisson Ratio	0.28
Hardness Vickers (HV 1)	16 GPa
Thermal Properties	
Maximum Temperature (Inert Gas)	1200°C
Maximum Temperature (Air)	1100°C
Thermal Conductivity @ 20°C	28 W/mK
Thermal Conductivity @ 1000°C	16 W/mK
Thermal Expansion (20–100°C)	2*10 ⁻⁶ /K
Thermal Expansion (20–1000°C)	3.510 ⁻⁶ /K
Thermal Shock parameter R1	600 K
Thermal Shock parameter R2	15 W/mm
Electrical Properties	
Resistivity at 20°C	10 ¹² Ωcm
Resistivity at 800°C	10 ⁷ Ωcm
Dielectric constant	6 MHz