



Silicon Nitride Bearing Balls

As the professional manufacture, we would like to provide you Silicon Nitride Bearing Balls. Silicon Nitride is an ideal material for making balls. Nextgen Advanced Materials supplies the Silicon Nitride Balls with high quality and fast delivery. Meanwhile, the customization is available.

Product Description

As the professional manufacture, we would like to provide you high quality Nextgen Silicon Nitride Bearing Balls. And we will offer you the best after-sale service and timely delivery. Silicon Nitride is a high-melting-point ceramic material that is extremely hard and relatively chemically inert. The material is prepared by heating powdered silicon between 1300 °C and 1400 °C in an atmosphere of nitrogen. Then the powder of silicon nitride can be sintered to designed shape. Silicon Nitride is an ideal material for bearings. Ceramic bearings have good wear and corrosion resistance, and great mechanical strength under high temperature.

Si₃N₄ bearings have already been applied in automobiles, rockets high-speed engines, equipment working in a corrosive environment and some performance model cars. Compared with steel, high-performance ceramic balls have better mechanical properties under high temperature and could survive from most the corrosive chemicals. As the price of ceramic materials decreased, it could have more applications.



Specification	
Item	Parameter
Density(g.cm-3)	3.3
Young's Modulus(GPa)	320
Bend Strength(MPa)	750
Thermal Expansion Coefficient (x 10-6/°C)	3.2
Fracture Toughness	7
Maximum Temperature (°C) for application	1150
Dielectricity Constant	9