



Pyrolytic Boron Nitride Machined

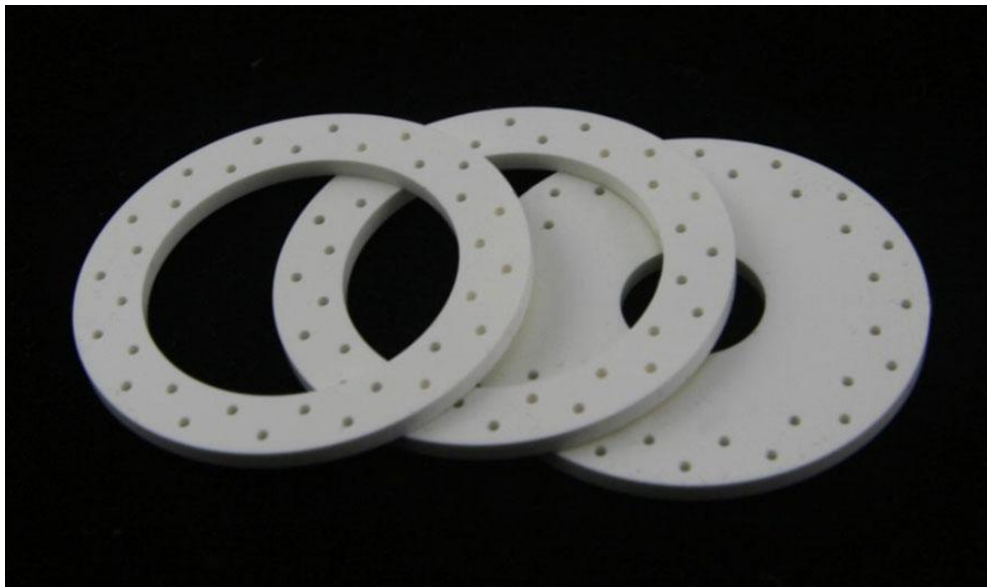
You can rest assured to buy Nextgen Pyrolytic Boron Nitride Machined from our factory. wish to be a long-term partner with you. PBN (Pyrolytic Boron Nitride) Machined Product is synthesized on the mold by CVD process, with BCl_3 and NH_3 at high temperature and low pressure. PBN products are extremely pure (99.99% or even higher) and very stable in a vacuum or inert atmosphere.

Nextgen Advanced Materials supplies PBN (Pyrolytic Boron Nitride) Machined Product with high quality and fast delivery. Customization is available too.

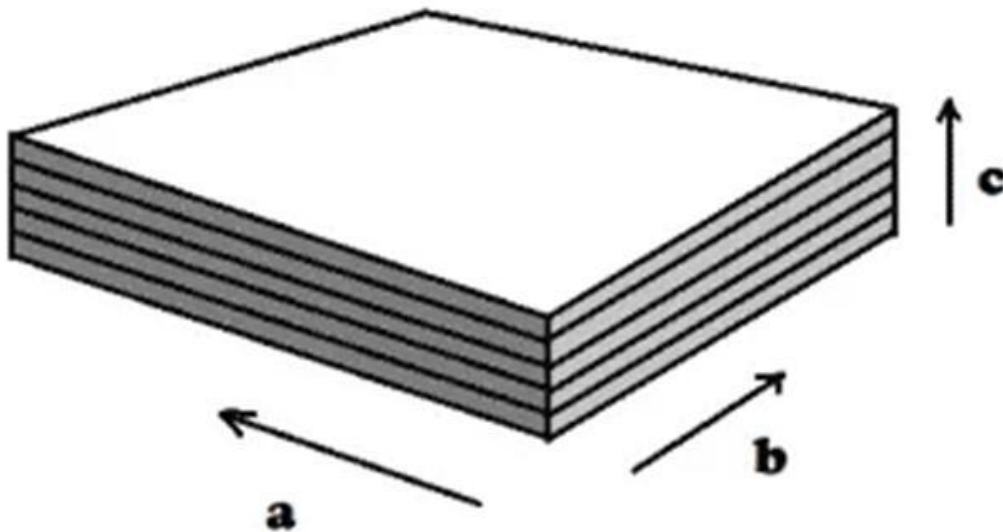
Product Description

As the professional manufacture, we would like to provide you Nextgen Pyrolytic Boron Nitride Machined . Our products have a good price advantage and cover most of the European and American markets. We look forward to becoming your long-term partner. As PBN and graphite are machinable materials, we could offer customized manufacturing services and deliver all kinds of products based on graphite with PBN coating. These including trays, furnace components, heating elements, vaporizing pots, rods, bars, sheets, tubes and more. Our experienced experts are pleased to help to locate best solutions for your development process.

Compared with normal boron nitride ceramic, pyrolytic boron nitride (PBN) has raw materials with a much higher purity level. PBN sheets, discs and other pyrolytic boron nitride products are synthesized on the mold by chemical vapor deposition (CVD) process, with BCl_3 and NH_3 .



PBN Machined Product Specification				
Item	Unit	value		value
lattice constant	μm	a:2.504x10 ⁻¹⁰	c:6.692x10 ⁻¹⁰	
density	g/cm ³	2.0-2.19		
resistivity	$\Omega\cdot\text{cm}$	3.11x10 ¹¹		
tensile strength (ab)	N/mm ²	153.86		
bend strength	c	N/mm ²	243.63	
	ab	N/mm ²	197.76	
elastic modulus	N/mm ²	235690		
Thermo conductivity			"a" direction	"c" direction
	(200°C)	W/m·k	60	2.6
	(900°C)	W/m·k	43.7	2.8
dielectric strength (at room temperature)	KV/mm	56		



Compound Formula	BN
Molecular Weight	24.82
Melting Point	2973 °C
Density	2.1 g/cm ³ (h-BN); 3.45 g/cm ³ (c-BN)
Solubility in H ₂ O	Insoluble
Refractive Index	1.8 (h-BN); 2.1 (c-BN)
Electrical Resistivity	13 to 15 10 ^x $\Omega\cdot\text{m}$