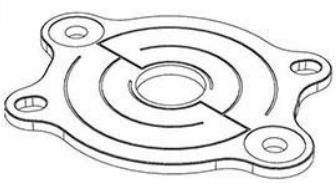
Pyrolytic Boron Nitride Composite Heating Element

You can rest assured to buy Nextgen Pyrolytic Boron Nitride Composite Heating Element from our factory. We hope to establish friendly cooperative relationship with your company with high quality products, reasonable price, considerate service and create a better future hand in hand. As both PG (Pyrolytic Graphite) and PBN (Pyrolytic Boron Nitride) are extremely pure (99.99% or even higher) and very stable in vaccum or inert atmosphere, the PBN-PG composite heating element could be very durable and keep the chamber clean. Nextgen Advanced Materials supplies PBN/PG Composite Heating Element with high quality and fast delivery. Customization is available too.

Product Description

Find a huge selection of Pyrolytic Boron Nitride Composite Heating Element from US at Nextgen Advanced Materials INC. Provide professional after-sales service and the right price, looking forward to cooperation. High purity and high-performance pyrolytic boron nitride are used as the substrate for the PBN (Pyrolytic Boron Nitride) heating elements. Pyrolytic graphite (PG) is placed on the surface of PBN components by the CVD method as conductor and heater. Depending on different requirements of usage, the PG heating element could be covered by another layer of PBN or just stay open.

As both PG and PBN are extremely pure (99.99% or even higher) and very stable in a vacuum or inert atmosphere, the PBN-PG heating elements could be very durable. It could be heated to 1600℃ in a very short time without emission of any gas component, the chamber is clean when using PBN/PG heaters. These heating elements are ideal products for the semiconductor industry and applications that require high temperature, high vacuum, and high purity.



PBN/PG Composite Heating Element Specification

Item		Unit	value	value
lattice constant		μ m	a:2.504×10-10 c:6.692×10-10	
density		g/cm3	2.0-2.19	
resistivity		Ω·cm	3.11×1011	
tensile strength（ab）		N/mm2	153.86	
bend strength	c	N/mm2	243.63	
	ab	N/mm2	197.76	
elastic modulus		N/mm2	235690	
Thermo conductivity			“a” direction	“c” direction
	(200℃)	W/m·k	60	2.6
	(900℃)	W/m·k	43.7	2.8
dielectric strength （ at room temperature）		KV/mm	56	

Heater Size

Diameter	0.5” ~4”
Power	150~3000W
Max. Working Temp.	2400 ℃