

PCBN Tip

PCBN tip is a high-performance cutting tool, which is mainly synthesized from Polycrystalline Cubic Boron Nitride (Polycrystalline Cubic Boron Nitride) powder under high temperature and high pressure.

PCBN tips, they are often used to process the following materials: cast iron, hardened steel, high-speed steel, and cemented carbide. Due to its high hardness and high thermal stability, PCBN tips are widely used in high-speed cutting, precision machining and automated production lines.

We can also provide customized services, such as solid CBN inserts with dimple, chipbreaker inserts, coating inserts, wiper inserts.



Brake Disc Cutting Tools Solutions 

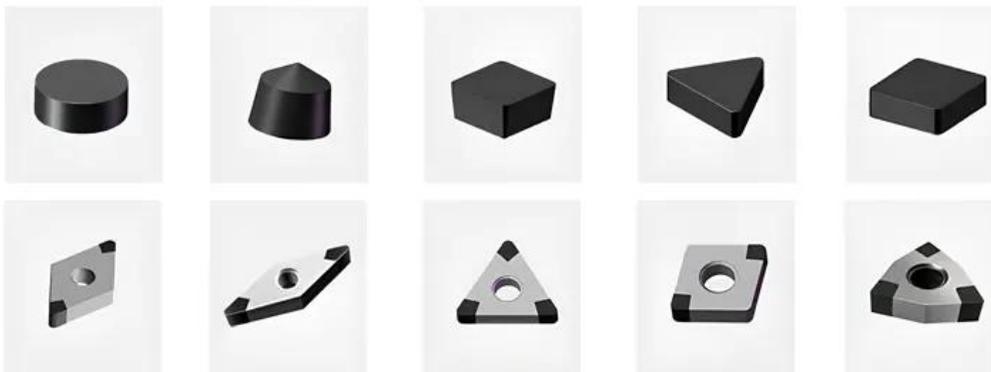
For Solid CBN inserts, SCBN TOOLS can also provide matching tool holders

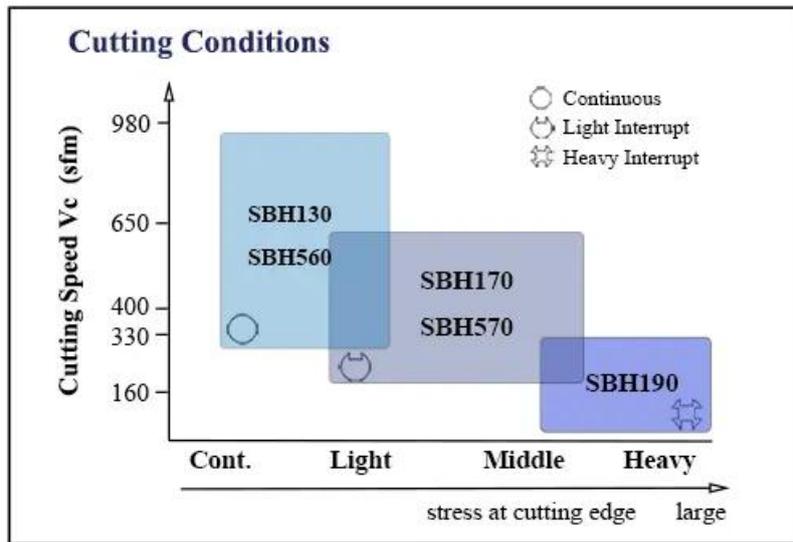


PCBN tip have the advantages of high hardness, high thermal stability, and high chemical stability. They are mainly used in precision machining fields such as turning, milling, and boring.

Grades and applications of solid CBN inserts & welded CBN inserts


CBN Grade	CBN Content	Granular μ m	Binder	Machining Condition	Machining Materials	Application Industry
SBN800	80%	5~10	Metal	Roughing, Semi-Finishing	Hardened Steel	Gears, Bearings, etc
SBN830	70%	1~5	Metal	Roughing, Semi-Finishing	Hardened Steel	Gears, Bearings, etc
SBN850	95%	5~15	Metal	Roughing, Semi-Finishing	Gray Cast iron	Brake Drum, Brake Disc Engine Block, Cylinder Liner, etc
SBN900	90%	15~25	Ceramic	Roughing, Semi-Finishing	Chilled Cast Iron, Cast Steel, High Manganese Steel	Rolls, Crusher Cone, Grinding Roller, etc
SBN950	85%	15~25	Metal	Roughing, Semi-Finishing	Chilled Cast Iron, Alloy Cast Iron, High Speed	Impeller, Pump Body, Pump Housing, Liner Roller, etc
SBN600	75%	5~10	Ceramic	Roughing, Semi-Finishing	Ductile Iron	Hub unit Drive Shaft, etc



PCBN insert grades for different machining conditions


CBN Grade	CBN Content	Granular μ m	Binder	Machining Condition	Machining Materials	Application Industry
SBH130	70~85%	1~2	Ceramic	Continuous, Light Interrupt	Hardened Steel	Gears, Bearings, etc
SBH170	55~60%	1~2	Metal	Light Interrupt, Mid Interrupt	Hardened Steel	Ball screw, Bearing, Transmission Shaft, Gears, etc
SBH190	65~70%	1~2	Metal	Heavy Interrupt	Hardened Steel	Ball screw, Bearing, Transmission Shaft, Gears, etc
SBH560	60~65%	1~2	Metal	Continuous, Light Interrupt	Hardened Steel	Ball screw, Bearing, Transmission Shaft, Gears, etc
SBH570	65~70%	1~2	Metal	Mid Interrupt, Heavy Interrupt	Hardened Steel	Ball screw, Bearing, Transmission Shaft, Gears, etc
SBK130	90%	1~5	Metal	Continuous, Interrupt	Gray Cast Iron	Cylinder liner, engine block, wheel hub, etc
SBK170	75%	1~2	Ceramic	Continuous, Interrupt	Ductile Iron	Bearings, Shaft Hub Unit Drive Shaft



Brazed CBN Inserts: CNGA1204、DNGA1504、TNGA1604、WNGA0804、VNGA1604

Solid CBN Inserts: CNGN1204、DNGN1504、TNGN1604、SNGN1204、RNGN1204、RCGV1207、RCGX1207、WNGN0804、SCGN0904

Tipped PCBN Inserts: CNGA1204、DNGA1506、TNGA1604、WNGA0804、VNGA1604、SCGW09T3、CCGW0602、DCGW11T3、VBGW1103、VCGW1604、TCGW0902、TPGW16T3

If you are a brake disc customer, please click the link above for more information. Compared with ceramic inserts, PCBN tip (SBN850) have more advantages in brake disc processing in terms of service life and wear resistance. The following inserts reflect our successful experience in brake disc processing.



For other ceramic inserts, we can customize the corresponding PCBN tip according to your drawings. For example: CNGX, SNGX, DNGX, VNGX, TNGX.

CBN Inserts (Grade:SBN850 Brand:SCBN TOOLS)



Ceramics



OUR FACTORY



PACKAGE AND SHIPPING

Henan WEGCL New Materials Co., Ltd.

