

## CBN Cutter

CBN cutter 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.

CBN cutter, 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, CBN cutter 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**

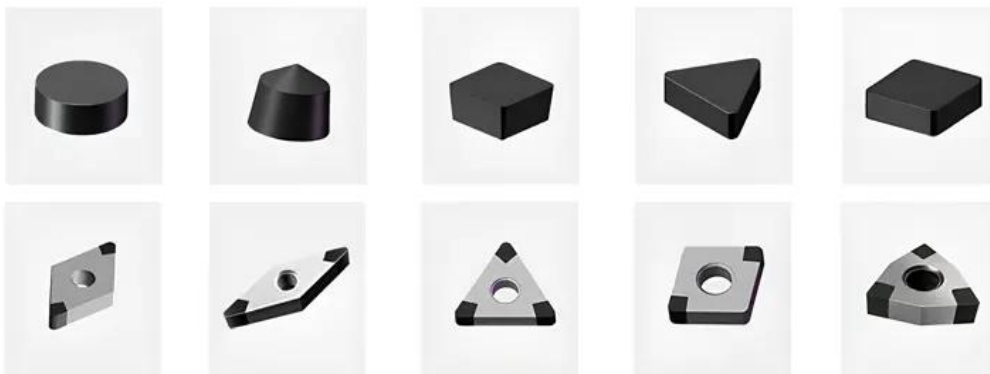


CBN cutters have the advantages of high hardness, high thermal stability, and high chemical stability. They are mainly used in precision machining fields such as turning, milling, and boring.

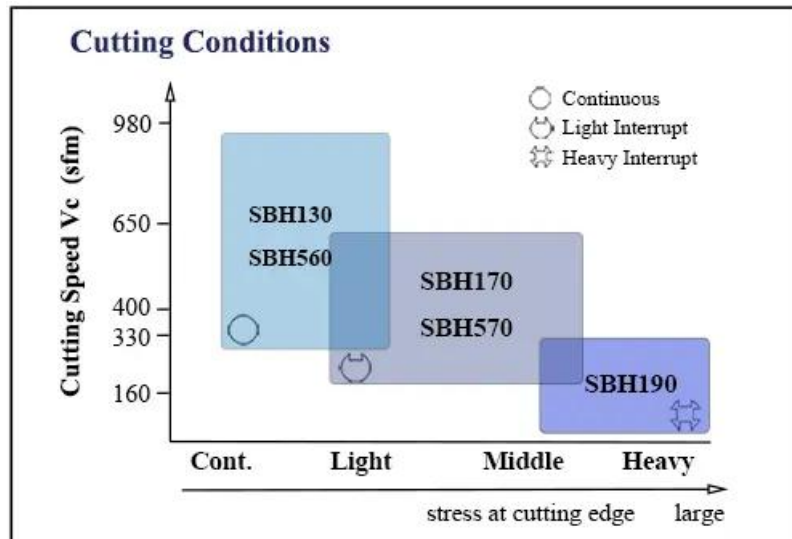
### Grades and applications of solid CBN inserts & welded CBN inserts



| CBN Grade | CBN Content | Granular $\mu\text{m}$ | 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 $\mu\text{m}$ | 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, CBN cutters (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 CBN cutter 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.

