

Dimple CBN Inserts for Cast Iron Brake Disc

In the field of automotive parts manufacturing, CBN inserts are leading the transformation of cast iron brake disc machining due to their superior performance. Common material grades for gray cast iron brake discs: G3000, FC350, GG40, FG400.

In the past, ceramic inserts were frequently used to machine brake discs. However, ceramics have certain drawbacks when used in the machining of cast iron brake discs.

Ceramic Inserts



CBN Inserts



Compared to traditional ceramic inserts, CBN inserts offer significant advantages in brake disc machining:

1. Ceramics are often used for finishing conditions, while CBN can be used for **both roughing and finishing**, without changing insert during processing, which greatly improves efficiency;
2. CBN have better wear resistance, and have longer tool life of **5-7 times** that of ceramics, but the price is not 5-7 times that of ceramics, CPC(cost per component) is low;

3. CBN can directly replace equivalent ceramics with various dimples needed in brake disc processing, like CNGX, DNGX, VNGX, TNGX, SNGX and so on.

Select inserts of **SCBN TOOLS** Brand for machining brake discs not only ensures high-quality products but also provides professional technical support. SCBN TOOLS has launched the **SBN850** grade, dedicated to providing customers with high-performance tooling solutions that make every braking operation safer and more reliable.

We can provide solid CBN inserts, tipped CBN inserts, brazed CBN inserts. In addition, we also provide customized services, such as solid CBN inserts with dimple, chipbreaker inserts, coating inserts, wiper inserts.



SCBN TOOLS provides a full range of inserts for brake disc machining.

1. CBN Grooving Inserts: LBMP, GBMP, VGGN, LPGN

2. Dimple Inserts:

VNGX160712, VNGX160716, VNGX160735

CNGN120404, CNGN120408, CNGN120412, CNGN120416

CNGN120704, CNGN120708, CNGN120712, CNGN120716

SCGN090404, SCGN090408, SCGGN090412, SCGN0904W

SNGN120404, SNGN120408, SNGN120412, SNGN120712, SNGN120716

CNGX120408, CNGX120412, CNGX120416, CNGX120712, CNGX120716

DNGX120412, DNGX120716, DNGX120712, DNGX150712, DNGX1500716

SNGX120408, SNGX120412, SNGX120416, SNGX120708, SNGX120712, SNGX120716

The steps for machining brake discs using CBN are:

1. Rough turning of the outer diameter and end face
2. Semi-finish turning of the outer diameter and end face
3. Finish turning of the outer diameter and end face
4. Milling of the end face groove