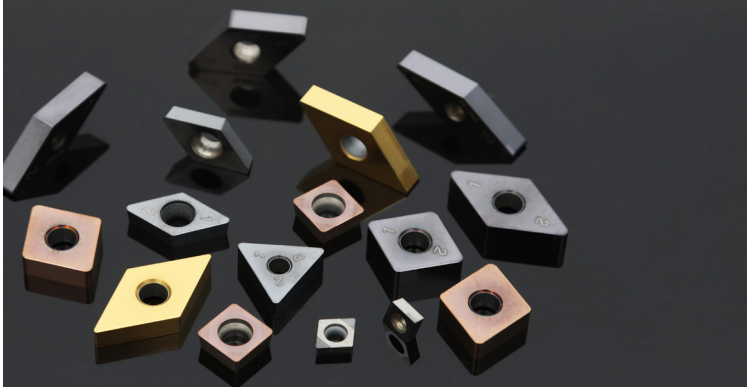


Bearing manufacturing



Indexable inserts for hard machining

Consider the application and tool together

Bearing manufacture combines cutting with grinding, superfinishing and dressing. This overview complements the detailed bearing brochure with the documented PCBN application in bearing steel. Bearing type and machined surface determine the appropriate tool family.

This edited overview provides an introduction to the tool family. Complete original tables and illustrations remain accessible through the source links. You can move from the described operation directly to a technical discussion of your application.

Applications and tool assignment

Application or feature	Tool and assignment
Bearing-ring bore and raceway	Vitrified CBN grinding wheels
Raceway finishing	CBN honing stones for superfinishing
Grinding-wheel profile	Diamond dressers
Continuous cutting of bearing steel	EBC16S PCBN grade in the source example

Tool features and benefits

EHWA describes removal performance, precision, surface quality and longer useful tool life for bearing tools. EBC16S is presented as a coated low-CBN-content PCBN grade for continuous cutting of SUJ2 and 100Cr6. The cutting examples remain separate from grinding and honing values so that the process assignment is clear.

Documented application example

Feature	Example value
Material	SUJ2
Cutting speed	220 m/min
Feed	0.15-0.22 mm/rev
Depth of cut ap	0.10-0.20 mm
Cut / coolant	Continuous / wet

Example 1 from the EBC16S data sheet, PDF page 1. These values belong to the illustrated application; they are not general settings for every bearing-steel operation.

From your application to a tooling solution

State bearing type, ring or rolling element, machined surface and heat-treatment condition. Drawing, hardness, tolerances and desired surface help selection between cutting and grinding processes. Comparisons assess working time and useful part count together with achieved quality.

Start with the information already available. An existing tool, a photo or a drawing is often a useful starting point. Also discuss your goal: replacing an existing design, improving surface quality or reducing tool changes and machining time. Comparisons record quality, time and useful output together; missing information can be added during the technical discussion.

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[Request tool selection](#)

Further original documents

- [Bearing manufacturing - Bearing](#) · Original PDF, 10 pages.
- [Bearing manufacturing - EBC16S-NEW-COATED-GRADE-FOR-BEARING-STEEL web](#) · Original PDF, 1 page.
- [Bearing manufacturing - 2.Tooling-Bearing-Glass](#) · Original PDF, 8 pages.

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