

# INNOVATION

## ROBUST™ Series of Ultra high-Speed ACBB



NSK's ROBUST™ Series of Ultra high-Speed Angular Contact Ball Bearings for the machine tool main spindles. These bearings offer improved thermal robustness, low heat generation, & improved seizure rates ensuring that machine tools can operate at ultra-high speeds, increasing manufacturers productivity & reduced energy cost.



### Product Features

- › ROBUST™ design with NSK's optimised geometry.
- › New SHX steel material option.
- › Rolling element material can be steel or ceramic.
- › Lightweight, high strength PEEK cage options.
- › Spinshot™II lubrication system for the ultra high speed.

### Product Benefits

- › Lower temperature rise compared with conventional precision bearings.
- › 20% faster than conventional precision bearing, up to 80% faster using new SHX material.
- › Temperature robustness - durable under fluctuating temperature conditions.
- › Improves seizure & wear resistance due to NSK's proprietary SHX bearing steel.
- › Fatigue life of SHX material is 4 times that of conventional bearing steel.
- › Ultra high-speed with position preload using Spinshot™II lubrication system (2.5 Million dmn (= Bearing mean diameter (mm) X speed (rpm))).
- › Spinshot™II lubrication system reduces air noise.
- › Air / Oil systems (3 to 4 dB quieter).

### Condition Description:

- High precision machining
- Ultra high speed
- High temperature

### Applications:

- › Machine Tool

