

ROBUST Series High-Speed Precision Bearings

Oil-air Lubrication Units

Features of the “Fine Lube”

1. High-speed capacity and low dynamic torque

Oil-air lubrication allows high-speed operations without excessive torque and temperature rise. Lubricators supply only a small amount of oil to each bearing—only the amount needed for safe lubrication. Quantity-constant pistons meter the oil gradually at precise intervals with high-reliability.

2. Oil is continuously supplied to bearings with compressed air

Although the oil is fed in intervals, it arrives at the bearing in a near constant stream due to the delivery mechanism of clean, dry, continuous compressed air.

3. Reduced temperature rise with air-cooling

With the amount of oil regulated, there is very little agitation resistance and temperature rise in the bearing. The constant flow of compressed air through the spindle also helps to reduce heat.

High-reliability. The high air pressure inside the spindle, from the oil transfer, stops coolant, cutting chips and other materials from entering the bearing. Unlike grease and other forms of oil lubrication, there is no deterioration of the lubricant, because only clean, fresh oil is used. These advantages make the NSK Fine Lube ideal for modern machine tools where coolant is used heavily.



Additional Related Catalogues



CAT.No.E124:
Precision Rolling Bearings for
Machine Tools



CAT.No.E1221:
Robust Series, High-Speed Precision
Angular Contact Ball Bearings for
Machine Tool Spindles



CAT.No.E1212:
Ball Screw Support Bearings
Made of EP Steel



CAT.No.E1392:
Precision Ceramic Angular
Contact Ball Bearings for High-
Speed Machine Tool Spindles



CAT.No.E1204:
For High-Speed Machine Tool
Spindles Neo-Bird Angular Contact
Ball Bearings