

Super Precision Bearings for Machine Tools

Outstanding speed, rigidity, and precision deliver improved machine tool performance while reducing energy loss and placing less burden on the global environment.



NSK's key technologies meet the demand for high performance precision bearings and environmental preservation.

Tribology, the study of friction and wear, is a core NSK technology that not only saves energy and resources by decreasing friction and wear on machines, but also prevents machine malfunction and thereby improves reliability. NSK has established four key technologies around this central expertise as the foundation for developing environmentally sound products. These are: analysis technology toward comprehensively reducing energy loss; evaluation technology for precisely meeting market needs; lubrication technology for reducing energy loss and making higher performance compatible goals and material technology to extend product life.

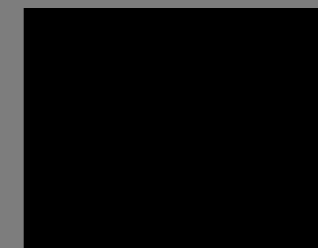
Analysis Technology

NSK developed its own software, Bearing Analysis In NSK (BRAIN), which enables digital simulations of friction-related movement and performance by applying



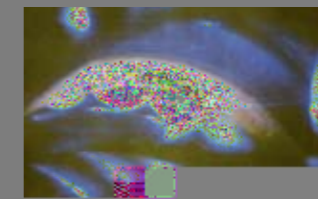
Evaluation Technology

NSK has established an evaluation technology that spans a wide range of applications by employing advanced technologies such as nano-order runout measurement using ultrahigh-precision measuring instruments. Our evaluation technology contributes to the development of cutting-edge products that correspond with increasingly sophisticated market needs.

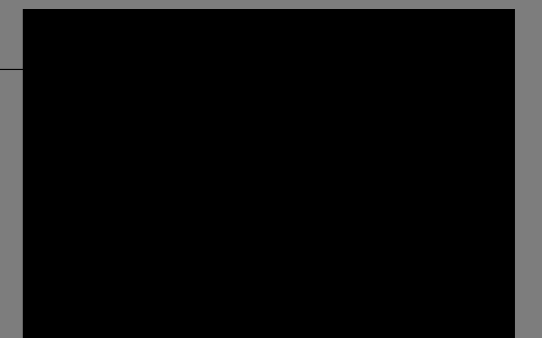
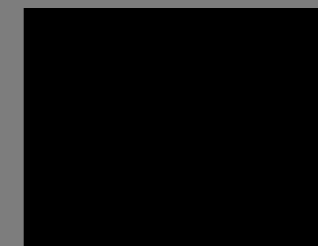


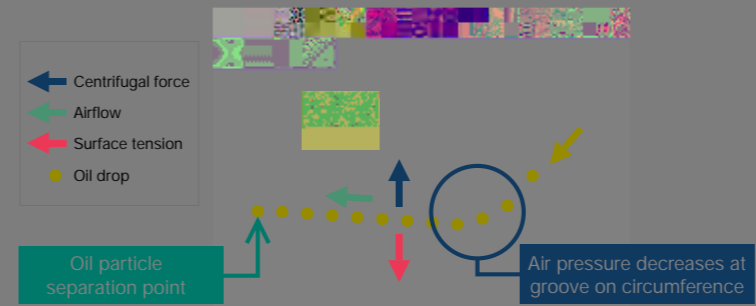
Lubrication Technology

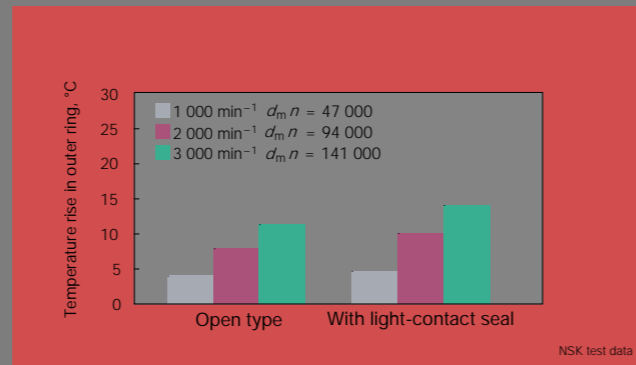
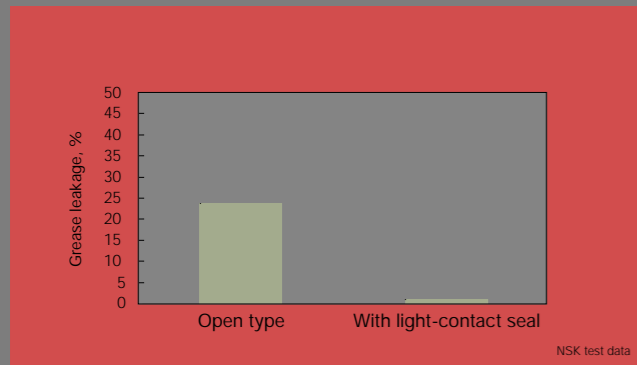
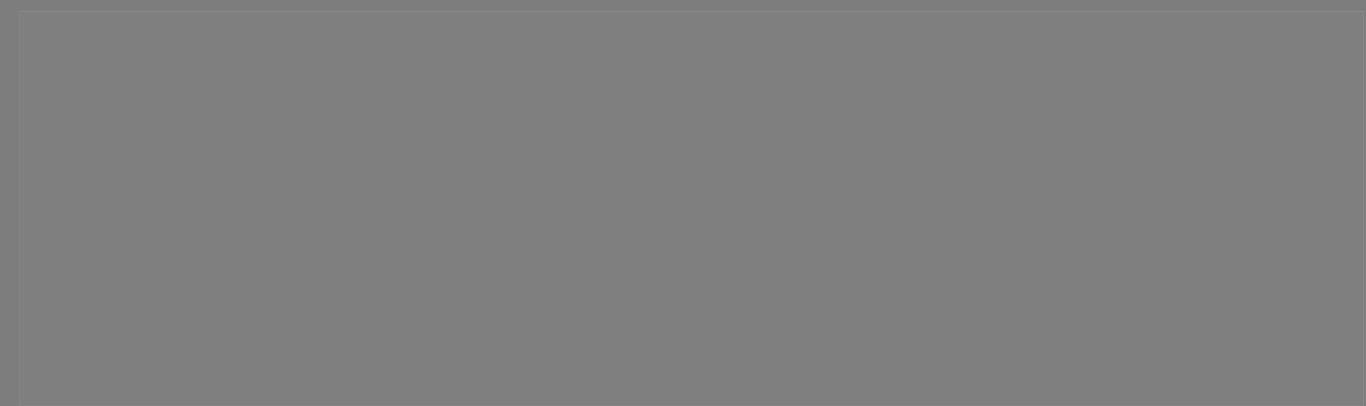
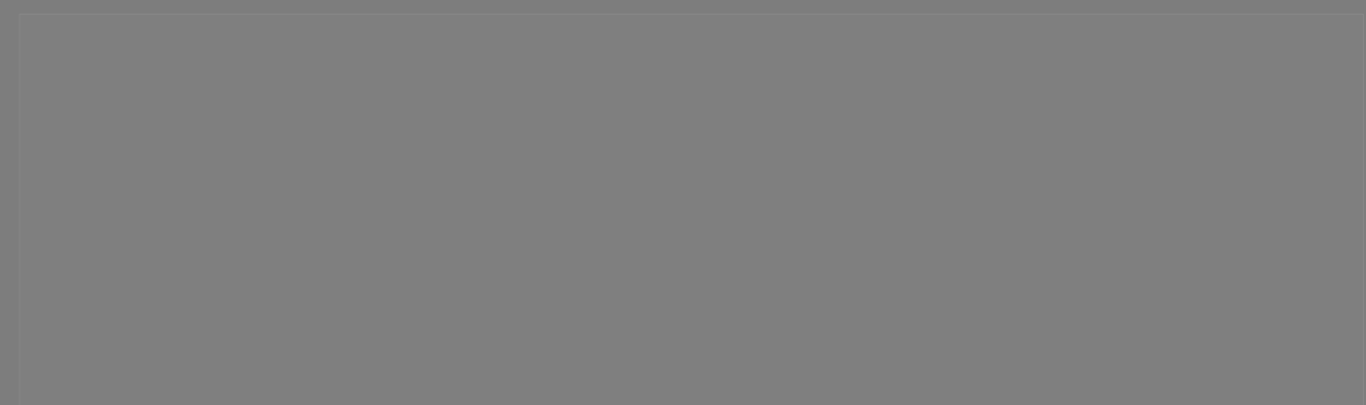
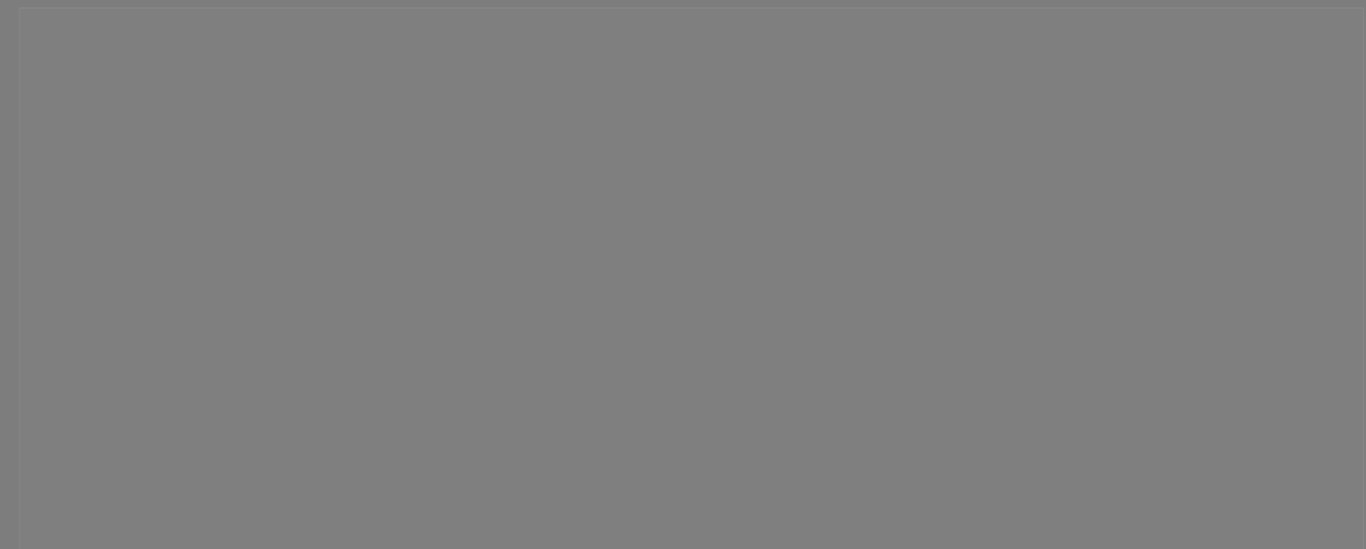
Through the relentless application of tribology, NSK's key technology, NSK has pursued lubrication technologies that allow machines to deliver maximum performance. NSK's accomplishments in these efforts contribute to saving energy and resources, thereby conserving the global environment.



Material Technology









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NSK Ltd. has a basic policy not to export any products or technology des