High Precision Bearings

for Helicopter Applications

Custom Bearing Manufacturing

NES specializes in manufacturing precision aerospace bearings for high reliability applications aircraft engines, including gearboxes, transmissions, swashplates, tail rotors, actuation systems, and support equipment. NES provides application and design engineering backed up by ISO9001:2008 and AS9100C certified manufacturing capability for short run custom deep groove, angular contact, and split inner ring ball bearings, cylindrical roller bearings and needle roller bearings.



Bearing Materials

NES uses a wide range of bearing materials to overcome application demands. Typical ring materials include 440C, Cronidur® 30, XD15NW, 52100, M50, M50 NiL, Pyrowear® 675, and superelastic NiTiNOL 60. Available rolling element materials are 440C, 52100, Cronidur® 30, M50, and Silicon Nitride (ceramic). High strength precision machined cages are manufactured from bronze, steel, silver plated bronze or steel, Nylon 6/6, PEEK, Vespel®, and Torlon®.

Bearing Inspection and Testing

NES is also home to North America's largest independent bearing inspection and testing facility providing bearing PMA reverse engineering services and bearing life testing in support of bearing qualification, failure investigation, product and process development.