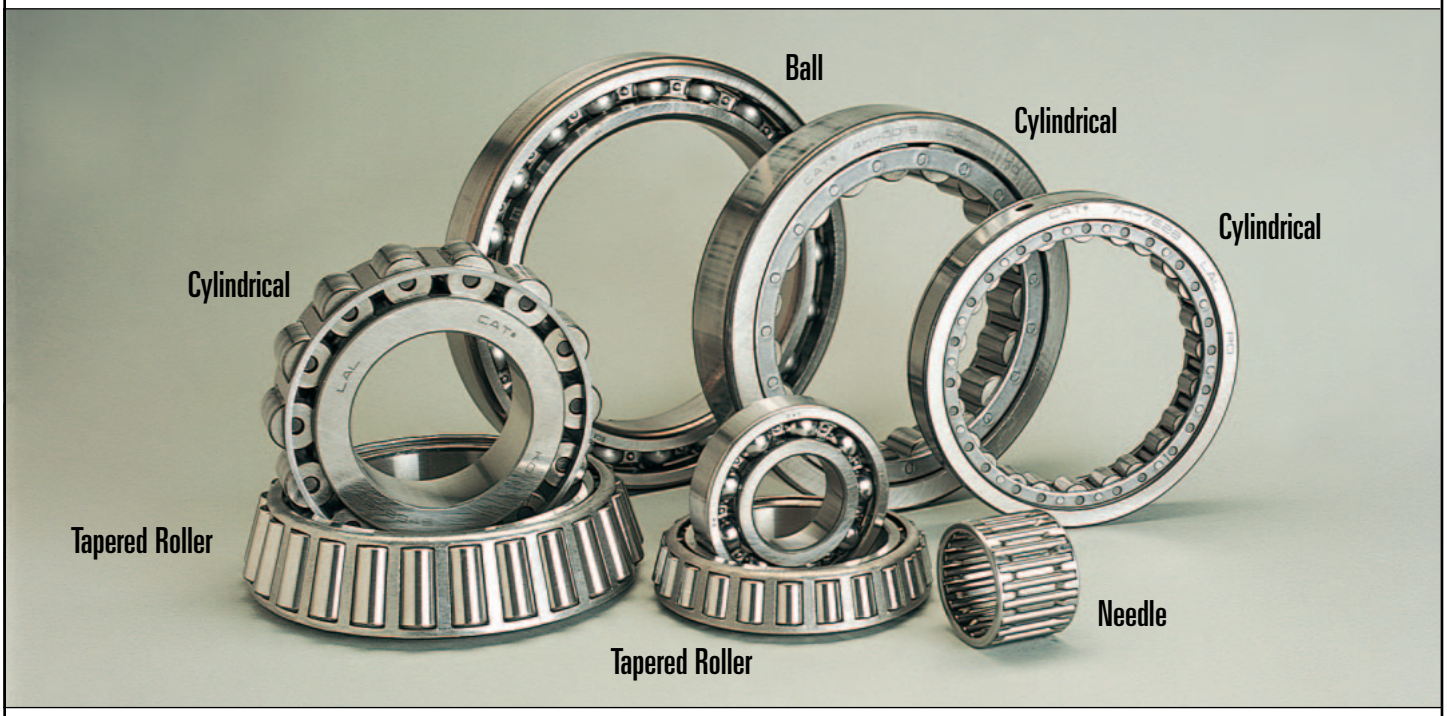
Cat® Bearings



Total system design for application-driven performance

- Just because two bearings have the same industry part number doesn't mean they're the same. Outside diameter, heat treatment, surface finish, internal clearance, or profile may differ—and because bearings position other components, these differences are critical. Improper fit can lead to premature, expensive gear failure and damage of other components.
- Cat bearings are designed for specific applications based on load, operating speed, temperature range, size, and past performance. They're also "matched" to last as long as other Cat drive train components, reducing the number of repairs required, along with downtime and operating costs.
- Installing other brands of bearings compromises balanced wear life—wasting the extra life Caterpillar designs into its drive train components.

Exclusive Cat technology for 2x the bearing life

- Cat debris-resistant bearings provide up to twice the life of other bearings in demanding applications, thanks to proprietary heat treat processes and special material characteristics that create a high-strength surface—blunting the stresses caused by contaminants in oil and preventing cracks from developing.
- Cat textured bearings feature a unique surface finish that eliminates "frosting" caused by the metal-to-metal contact that can occur in slow-speed, high-load applications. The result is better lubrication and twice the bearing life in Cat machine applications.

Caterpillar. The difference counts.™

Cat Dealers define world-class product support. We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investments.

CATERPILLAR®

Cat Bearings—Genuinely Better

Application-specific design

MODEL	% SPECIAL BEARINGS
777D	75%
793C	79%
966G	65%
972G	67%
992G	71%

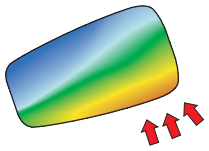
Above are just a few examples of where Caterpillar utilizes highly specialized bearings.

Industry number comparison



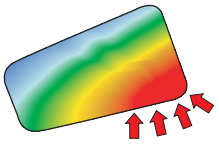
CAT BEARING	INDUSTRY STANDARD
"X" bar cage	Pin cage design
Strong design	Used in very slow speed applications
Used in high speed/torque applications	Group roller design
	Premature wear will occur as a result of roller contact

CAT ROLLING ELEMENT



Optimized Load Distribution

OTHER ROLLING ELEMENT



High Edge Stress

Optimized roller profile for maximum performance and life

Bearings are exposed to three types of loading conditions: standard loading in normal applications, heavy-duty loading in high-performance applications, and misaligned loading in applications where the load is distributed unequally over the bearing surface. Cat bearings feature a specialized roller profile to minimize the stresses experienced by the roller in these multiple loading conditions. Less stress leads to significantly longer life and greater reliability.

Convenient kits for affordable repairs

To save you time and money during scheduled maintenance, we offer several bearing kits with all the parts necessary for bearing replacement. Each kit features genuine Cat bearings imprinted with the Caterpillar part number to ensure you get the correct components for your application. Available off-the-shelf worldwide, Cat bearing kits cost a fraction of what you'd pay for the individual parts.

For more information about Caterpillar bearings and our complete line of drive train components for all Cat machines and applications, give us a call.

Caterpillar® bearings have key quality differences most other bearings do not, including:

Special material technology

Caterpillar spends significant amounts of time and money on research and development to ensure every Cat bearing meets specific design and application requirements. This commitment has led to new technologies like Cat debris-resistant and textured bearings—available exclusively through Cat Dealers.

Cat specifications

Cat bearings are designed for specific applications and functions based on the loads, operating speeds, temperature ranges, and sizes of the Cat machines in which they operate—information other bearing manufacturers don't have. Cat bearings designed and manufactured for Cat machines perform better and last longer.

Case-hardened heat treatment

Cat bearings are manufactured using proprietary heat treat processes to ensure maximum life. Cat roller element bearings, for example, are case carburized—a highly specialized process that puts a hard shell around the bearing material, provides a tough bearing core, and extends wear life.

Optimum surface finish

Cat bearings feature appropriate surface finishes to reduce rolling resistance and ensure proper oil film thickness. The result is longer bearing life matched to the life of other drive train components, reducing repair costs and downtime.

Precise tolerances

Cat bearings are designed to ensure proper alignment and precise fit, eliminating the chance of premature gear failure due to inexact tolerances—resulting in increased machine availability and lower costs.

CATERPILLAR®

PEHJ0032 www.CAT.com Printed in the U.S.A.
© 2003 Caterpillar