

## Value Beyond the Part™

**Beyond exceptional product quality, selection and availability, AST's commitment to providing a full range of value-added services is what sets us apart from other bearing suppliers.**

**Engineering, Consulting and Design** - Professional engineering services to solve challenging design problems.

**Bearing Applications Engineering** - Selecting exactly the right product and specifications for your application.

**Bearing Lubrication and Relubrication** - Custom lubrication for optimum performance.

**Failure Analyses** - Understand why bearings prematurely failed to remediate and prevent future occurrences.

**Inspection and Verification** - AST has the equipment and experience to provide inspection and product verification services on the bearings we provide and on third party bearings.

**Micro Grade Grease Plating™** - Unique AST lubrication process for low startup and low running torque.

**Custom Packaging** - Packaging designed to improve your production and shipping efficiencies.

**Inventory Management** - Assistance with JIT delivery and numerous other Supply Chain Management issues.

## About AST Bearings

AST is a leading supplier of precision bearings and bearing related products across a large spectrum of customers — primarily OEMs and major distributors. In addition to our off-highway products, we also supply a wide range of industries such as aerospace, medical, food processing, green energy, robotics, high tech, industrial products and many more.

Since 1963, AST has been making our customers more competitive. We develop strong partnerships with our customers; these partnerships are based on understanding our customers' challenges and providing innovative solutions. AST embraces our role as a true product development partner. As precision bearing experts, AST recommendations go beyond bearing type, size and lubricant. Meticulously focusing on your application from the cutting edge of bearing technology, our engineering team uses advanced tools to ensure your best bearing choice.

For additional information, visit the company online at  
[www.ASTBearings.com](http://www.ASTBearings.com).

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To learn more, visit [astbearings.com](http://astbearings.com)

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**Value Beyond the Part™**

For the Off-Highway Industry

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**With extensive experience and expertise in the off-highway industry**, AST offers a line of high-quality, performance proven bearings for a variety of segments, including mining, construction, forestry, agriculture, trucking, drilling and more.

Durability and reliability are of the utmost importance in choosing off-highway bearings. Field failures can be devastating, and AST understands that its customers expect the highest quality components

to guarantee that equipment runs efficiently in extreme environments, dealing with moisture, temperature and contaminants.

Our team of engineers will work with you to choose the right part for your unique application, guiding you through a range of options, including sealing technology to protect from harsh operating conditions and cross-groove technology to promote lubricant distribution and expel contamination.

See below for a sampling of our most popular off-highway bearing products, and visit [www.ASTbearings.com](http://www.ASTbearings.com) for our full line of products.



## Products



Spherical plain bearings are used for applications requiring rotation and oscillation. The rotation takes place on a sliding surface so the limiting speed is slow.



Roller bearings have high-radial load capacity in comparison to ball bearings. They operate at moderate to high speeds. The lubrication method must be carefully considered during the design phase when using roller bearings.



Ball bearings can support moderate radial loads and moderate axial loads (parallel to the shaft). They can operate at high speeds. Ball bearings with shields or seals for protection can be lubricated to last for the operating life.



Bushings, or plain bearings, operate with sliding motion between the moving surfaces. Bushings are selected based on the velocity and the applied load. Maintenance-free bushings do not require additional lubrication to operate.



Rod ends consist of a spherical ball mounted in a housing, typically with male or female threads. They allow for oscillation/misalignment during slow rotation. Some rod end types require lubrication; other types are maintenance-free.



Tapered roller bearings offer the best combination of radial and axial load capacity. In addition, they provide dimensional stability under heavy loads being perfect for off-highway performance. They have a long life in harsh and contaminated conditions. Generally they are used for heavy-duty and moderate speed applications.



Mounted bearings (pillow block bearings, flange bearing units, and take-up bearings) are available in a variety of materials, mounting configurations and with various types of insert bearings. Each mounted unit acts as a system to position the bearing securely for reliable operation.