

NTN®

**Squeeze more
profit from every
billet and bloom.**



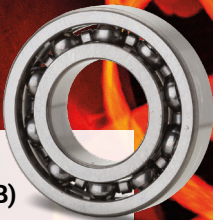
We have everything you need to keep rolling.

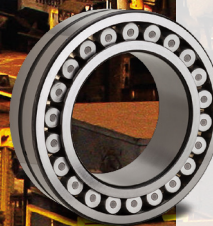


If you know metals, you know the durable bearings of NTN. For more than 35 years, we've been delivering long-term value and exceptional product quality to the industry in OEM equipment installed worldwide. Built specifically for the intense heat and extreme conditions of your operation, our quality bearings are backed by a team of metals experts who can help with design, training and support—everything you need to keep running longer, faster and stronger.

Deep Groove Ball Bearings (DGBB)

With a variety of features, our DGBBs are designed with TMB special heat treatment material to increase life in the high-speed and high-torque conditions of wire winder machines and guide boxes.





ULTAGE® Spherical Roller Bearings (SRB)

Heat-stabilized up to 392°F and offering 18% higher load capacity, 75% longer lifespan and 30% less frictional torque than standard bearings, making them ideal for mill drive gearboxes and runout table rolls.



ULTAGE® Cylindrical Roller Bearings (CRB)

Case-carburized with a micro-pitted surface finish for added durability, and run through our Austenite Strengthening process for a 50% increase in lifespan in mill drive gearboxes or mill stand roll necks.



ULTAGE® SAFD Split Housing Mounted Roller Bearings

Withstands 18% higher loads and 20% higher speeds than standard bearings, and is enclosed in a customizable, reinforced housing ideal for supporting runout table rolls.

TAKING ON THE BIGGEST BEARING KILLERS

SEVERE CONTAMINATION. INTENSE HEAT. EXTREME VIBRATION.

Even under the harsh rolling conditions that push most bearings to failure, NTN bearings are built for the long haul. That's because our premium bearings include unique design features to minimize contamination, extend lubrication life and handle extreme loads/temperatures—so you can keep running strong.

We're right at home in the most punishing applications.



ULTAGE®

Faster. Cooler.
Stronger. Better.

NTN engineers never stop pushing the boundaries of performance. Case in point: our ULTAGE® series—crafted for added durability and reliability to address your need for maximum possible output and durability, and specifically designed to withstand the intense heat, vibration and abuse that milling equipment puts on them.

Delivering the ultimate in performance solutions, the NTN ULTAGE® line combines special alloys capable of withstanding up to 392°F ambient temperatures and an optimized roller complement and retainer design—enabling higher load capacity and allowable speed compared to standard designs.

We design our bearings to withstand the harshest punishment metal mills can dish out in rehear furnaces, guide boxes, roughers and finish mill stands, all while keeping production running strong and profitably. Our new-generation ULTAGE® series takes NTN performance to new heights—setting a new standard as the hardest-working, highest-capacity bearings on the market.



ULTAGE® Tapered Roller Bearings (TRB)

Providing higher load capacity, higher speed and longer service life for:

- Mill Drive Gearboxes
- Mill Stand Roll Necks
- Universal Mills



ULTAGE® Spherical Roller Bearings (SRB)

Delivering superior performance for increased throughput in:

- Mill Drive Gearboxes
- Runout Tables
- Crop Shears



ULTAGE® Cylindrical Roller Bearings (CRB)

Offering unmatched capacity and high-speed rotational performance for applications including:

- Mill Stand Roll Necks
- Mill Drive Gearboxes
- Wire Wrappers



ULTAGE® SAFD Pillow Blocks

Heavy duty mounted units deliver unmatched heat resistance in tough applications like:

- Continuous-Process Line Rolls
- Rollout Tables
- Line Shaft Supports

Bringing your team up to speed.

At NTN, we are your partner for success. And we know that achieving more uptime and improving plant safety starts with educating your people. That's why NTN offers customers training programs covering bearing selection, installation and maintenance. With both online and on-site training options available, it's easier than ever to give your people the know-how they need to be their best.



In stock, on time and just a call away.

When a critical component in your operation is compromised, you need the right replacement fast, with no hassles. So it's good to know that as one of the biggest bearing manufacturers in the U.S., we have a wide network of distributors who provide our customers 24/7 product support and availability. You can rest assured that unplanned downtime will be kept to a minimum and you can be back up and running quickly.

Meet the lineup that's setting new standards.

NTN ULTAGE® EA/EM SPHERICAL ROLLER BEARINGS

Designed with optimized internal geometry for the highest load capacity in the market, along with a 75% longer lifespan over standard bearings in mill drive gearboxes

- **SUPERIOR DESIGN**
Optimized internal geometry for higher load capacity, longer bearing life, and improved misalignment capabilities
- **PREMIUM FEATURES**
High-quality steel, unique heat treat and precision surface finish create a more durable bearing with improved capacity, speed ratings and temperature stability up to 200°C (392°F)
- **VARIETY OF OPTIONS**
Stocked inventory and capabilities of producing most ISO variants with a breadth of cage and clearance options

NTN ULTAGE® TAPERED ROLLER BEARINGS

Developed to last longer in low-lubrication, high shock loading applications such as mill stand roll necks and mill drive gearboxes

- **IMPROVED DESIGN**
Optimized roller crowning, special heat treatment and super-finished rollers and raceways improve bearing life, running accuracy and load ratings
- **INCREASED DURABILITY**
Engineered improvements allow increased limiting speeds and extended maintenance intervals
- **BUILT TOUGHER**
Specialized case carburization reduces the effects of shock loading and increases life when debris intrudes roller path

NTN ULTAGE® CYLINDRICAL ROLLER BEARINGS

Delivering the highest standard in load capacity and high-speed performance for mill stand roll necks and mill drive gearboxes

- **TOP PERFORMANCE**
Accommodates heavy radial loads, rapid acceleration and high speeds of long product mill applications
- **VARIOUS ARRANGEMENTS**
Engineered to allow interchangeability of inner rings and outer ring assemblies
- **IMPROVED STRENGTH**
Internal geometry modifications allow for higher reliability and extend maintenance intervals



NTN DEEP GROOVE BALL BEARINGS

Designed to withstand the abuse of high-speed, high-torque applications for guide boxes applications

- **EXTENDED LIFE**
TMB material and heat treatment options provides higher load, lighter weight, and ultimately longer bearing life
- **MAXIMUM PROTECTION**
Various seal options, engineered to keep contamination out and keep lubrication in
- **VARIOUS CONFIGURATIONS**
Variety of internal and external design options available to maximize production

NTN ULTAGE® SAFD MOUNTED UNITS

Outlasting the shock-loaded elements for table roll and shaft support applications.

- **EXTREME HEAVY DUTY**
Premium housing, bolts and base provide maximum structural integrity to help withstand high impact and severe temperatures
- **MAINTENANCE FRIENDLY**
Serialized cap and base, hardened steel ball guide and dowel rods ensure superior fit during installation and simplifies disassembly
- **FLEXIBLE CONFIGURATION**
Accommodates tapered bore insert bearings with adapters and stabilizing rings

CONSTANT VELOCITY JOINT

With rubber boots that provide superior seal performance and no greasing, our CVJ excels in high-temperature, high-humidity environments.

- **EXTENDED SERVICE INTERVAL**
Seal structure and environment conditions enable prolonged maintenance-free operation
- **QUICKER INSTALL**
No axis alignment required with self-aligning feature
- **CORROSION PROTECTION**
Optional SUS middle shaft steel pipe is designed to provide excellent corrosion defense

Beyond Bearings

Training. Installation Support.
Troubleshooting. And more.

When you choose NTN, your team is equipped with all the necessary tools and resources to get the job done right. From installation to problem solving, we'll be there with the hands-on support you need to take on your toughest challenges. This includes extra services such as:



Technical Training Unit

On-site, mobile training unit offering specialized, hands-on instruction from NTN engineers



Product Training School

Three days of in-depth instruction from NTN engineers at headquarters
(go.ntnamerica.com/trainingschool)



eKnowledge

WEB-BASED TRAINING PROGRAM

Six online product training modules covering different bearing types and nomenclature
(www.ntnamerica.com/eknowledge)



NTN Bearing Finder

Customizable search tool featuring exhaustive data sets, comprehensive part interchanges and interactive CAD drawings
(bearingfinder.ntnamerica.com)



Let's get your solution rolling.

For all your on-site service and support needs including proper product selection, installation training and troubleshooting/problem solving, contact your local NTN Sales Representative or call 1-800-323-2358.

For additional technical questions, email eng@ntnamerica.com.



METALS MANUFACTURING



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