

NTN®

Keep production rocking and rolling.



Our global position in aggregates is rock solid.

OEM partners worldwide—including 4 out of 6 of the world's largest cement and aggregate companies—count on us to engineer more long-lasting reliability and durability into their critical aggregate mining equipment. It's relationships like these that have helped us become a world leader in countries around the globe, including the fastest-growing markets in Asia and Africa, to name a few. And with over 50 years of mining experience, our deep understanding of your unique challenges gives us the insight we need to help you achieve greater throughput, less unplanned downtime and easier preventative maintenance.



NTN ULTAGE® EF800 Spherical Roller Bearings

Specially engineered for
use in shaker screens,
helping increase service
life by 75%





Built smarter to work harder.

It takes specialized bearings to ride out the punishment that mining equipment dishes out—punishment that most bearings aren't made to handle. Good news: NTN bearings aren't made like most bearings.

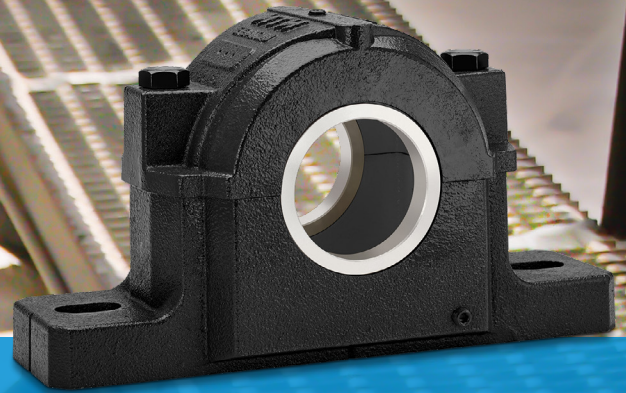
That's because NTN is at the forefront of bearing innovation, applying our deep industry knowledge to design and engineer solutions that make a real difference to your quarry's productivity—while reducing unplanned failures and overall equipment lifecycle costs.

**IN HARSH
CONDITIONS
NOTHING
OUTSHINES NTN**

SHAKER SCREEN VIBRATION. HEAVY SHOCK LOADS. CONTAMINATION THREATS.

Even with the constant abrasion that can break down seals and lead to compromising contamination, NTN bearings are built for the long haul. That's because they include unique features designed to prevent contamination, extend lubrication life and handle heavy loads—so you can take these challenges in stride.

Others meet standards. We crush them.



ULTAGE®

Faster. Cooler.
Stronger. Better.

NTN engineers never stop pushing the boundaries of performance. Case in point: Our new-generation ULTAGE® series—crafted for added durability and reliability to address your most pressing pain points like tough working conditions and high seasonal demand. NTN tapered and spherical bearings are specifically designed to withstand the around-the-clock abuse that aggregate mining equipment puts on them.

Delivering the ultimate in performance, NTN ULTAGE® combines special alloys capable of 200°C continuous ambient temperatures with an optimized roller complement and retainer design—enabling the highest load capacity and allowable speed for a given bearing type and size.

If you know the aggregates business, you already know NTN. Quarries all over the world trust our bearings to withstand the harsh punishment of their shakers, crushers and conveyors, all while keeping their production running strong. Our newest innovations pile onto that reputation by taking performance to new heights—delivering the quietest, coolest and highest-capacity bearings in the market.



**NTN ULTAGE® SAF
Heavy Duty Mounted Units**

Heavy duty, premier quality and performance spherical roller bearings fitted into an all new designed housing that withstands 18% higher loads and 20% higher speeds than standard bearings



**ULTAGE® Spherical
Roller Bearings**

Deliver up to 40% higher capacity, 75% longer service life, lower operating temperatures and corresponding higher operating speeds outperforming competitors for increased throughput on your key applications



**ULTAGE® EF800 Spherical
Roller Bearings**

Built with features like special tolerance control and a single-piece brass cage for added roller retention, vibration resistance and increased load and speed capacity



**ULTAGE® Tapered
Roller Bearings**

Provide higher load capacity, higher speed and longer service life through an optimized internal design and roller crowning—perfect for use in crusher applications

NTN's experience runs deep.

You deserve a partner with proven expertise on how to mitigate the heavy demands your conveyors put on their bearings. That's what you'll find in NTN, where we have decades of experience crafting a variety of reliable and dependable solutions—both standard and customized—specifically for the handling of heavy materials and other quarry-specific applications.



NTN SPAW/SPW Mounted Roller Bearing Units

A major upgrade from standard SAFs in conveyors and bucket elevators



NTN Ultra-Class Mounted Roller Bearing Units

A heavy duty replacement for mounted ball bearings found in conveyors

Our selection leaves others in the dust.

SPHERICAL ROLLER BEARINGS

NTN ULTAGE® Premium EF800 Series

Built to withstand violent shaker screen applications with special features that offer greater tolerance control and vibration resistance

- **EXTREME HEAVY DUTY**
Heavy-duty cages and large rollers to increase resistance to vibration, allow for higher loads, and improve tolerance
- **IMPROVED BEARING LUBRICATION**
Improved roller and cage design to allow for better lubrication, minimal friction, and consistent and even grease flow
- **UNIFORM BEARING MOUNTING**
Higher precision tolerances to allow for easy mounting and improved resistance to heavy loads

NTN ULTAGE® EM/EA 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 crushers and grinders

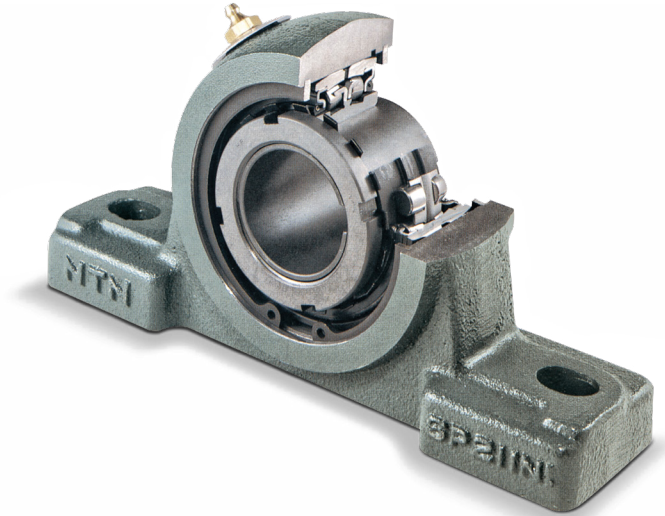
- **SUPERIOR DESIGN**
Optimized internal geometry for higher load capacity, longer bearing life, and improved misalignment capabilities
- **PREMIUM FEATURES**
High-quality steel, unique heat treat and precision surface finish create a more durable bearing with improved capacity and speed ratings

TAPERED ROLLER BEARINGS

NTN ULTAGE® Tapered Roller Bearings

Developed with mining OEMs to last longer in low-lubrication, high-vibration applications such as crushers, mining trucks and draglines

- **IMPROVED DESIGN**
Optimized roller crowning, special heat treatment and super-finished rollers and raceways improve bearing life, running accuracy and load ratings



MOUNTED BEARING UNITS

NTN SPAW/SPW Mounted Roller Bearing Units

Perfect for applications like conveyors, which handle heavy loads, feature long shafts and require high contamination resistance

- **EXTREME HEAVY DUTY**
Premium housing, contact seal and end caps to help stand up to high impact, severe temperature, and contamination
- **EASY INSTALLATION**
Bearing comes fully assembled with factory grease and set clearance for box to shaft mounting

NTN ULTAGE® SAF Heavy-Duty Mounted Units

Surpassing previous limits for conveyor systems and material handling equipment

- **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 ease disassembly
- **PREMIUM FEATURES**
Machined H7 housing with integrated flat spots and ports to reduce vibration and noise and allow for external monitoring and lubrication

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)



Ready to dig in when you are.

For all your on-site service and support needs with 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.



NTN BEARING CORPORATION OF AMERICA • 1600 E. Bishop Court • Mount Prospect, IL 60056-7604, U.S.A.
Tel: 847-298-7500 • Fax: 847-294-1205 • www.ntnamerica.com

16NTNAGGRB