PREMIUM BEARINGS FOR COAL MINING EQUIPMENT
UNDERGROUND COAL MINING

Underground coal mining presents its own set of maintenance challenges. Of course it’s a dirty, harsh environment where uptime is critical—we’ve all heard that before. But no one wants to descend hundreds of feet into the earth worrying about whether or not their equipment will make it through the day. Space is tight and light is low, making access to repairs difficult.

At the core of every mining operation is a complex array of mining machines from compact, yet powerful, continuous miners in underground mining to the larger-than-life draglines found in surface mining. Even with some of the most complex equipment in the industry today, mining is still, at its core, a fairly simple process. Specifically, underground coal mining can be broken down into three basic components: mining, transport and removal.

First, using a continuous miner, the coal must be removed or mined from the coal seam. Next, it’s loaded onto shuttle cars for transport and finally, it’s loaded onto conveyors for removal to the surface. These three basic processes are critical for the success of every underground coal mining operation. Preventative maintenance on these processes is crucial or failures can occur—especially bearing failures.

Fortunately, NTN has bearings for each of these processes. With experience in mining, construction, agriculture and heavy-duty truck markets, NTN has the products capable of performing in the dirty, harsh environments of mines as well as exceeding reliability and life requirements.
- Domestically produced case-carburized tapered and cylindrical roller bearings
- E-type spherical roller bearings with the highest dynamic and static load ratings in the industry
- Ultra-Class™ and heavy-duty spherical roller bearing mounted units, with exclusive design features for the harshest of conditions
- As one of the world’s largest manufacturers of constant velocity joints (CVJs), NTN offers a line of both custom and off-the-shelf CVJs as well as extensive technical support
- Complete wheel bearing kits for the 10SC and 21SC shuttle cars

**CONTINUOUS MINER**
- Cutter Head Drum
- Planetary Gearing
- Gathering Pots
- Crawler Unit

**FEEDER BREAKER**
- Breaker Head
- Conveyor Drive
- Tail Pulley
- Crawler Unit

**SHUTTLE CAR**
- Wheel & Drive Units
- Conveyor drive

**HIGHWALL MINER**
- Cable Reel
- Crawler Drives
- Auger System
- Cutter Head

**LONGWALL MINER**
- Cutter Head
- Ranging Arm
- Conveyor drive

**ROOF BOLTER**
- Crawler Unit
- Drill Heads
- Cylinders

### 21SC Wheel Unit Kit

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### 10SC Wheel Unit Kit

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*Metric kits also available upon request

For Technical questions: eng@ntnamerica.com

For more information on NTN’s comprehensive line of underground coal mining products, contact NTN at 1-800-323-2368.
ABOUT NTN

Founded in 1918, NTN is one of the world's largest producers of premium quality ball and roller bearings, long recognized for the most stringent quality standards in the industry. With plants around the globe and a strong domestic manufacturing network, over 80% of the products sold by NTN in North America are made by one of the seven plants the company operates in the USA and Canada. In addition, NTN's strategically located warehouses and Verified Value Added™ Program ensures its customers continually receive the best value in quality bearing solutions.

For more information on NTN, please visit www.ntnamerica.com.

NTN By The Numbers:

- 5,785: Number of Tapered Roller Bearing Part Numbers NTN produces
- 3: NTN is the third largest bearing manufacturer in the world
- 2,750: U.S. Employees
- 24/7: NTN offers customer service 24 hours a day and 7 days a week
- 3,722: Number of Specialized Roller Bearing Part Numbers NTN produces
- 75%: Increase in minimum life duration of SNR Premier Spherical Roller Bearings over competitor product
- 80%: Of NTN product sold in North America is made in North America

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