

# NSK MINING UPDATE

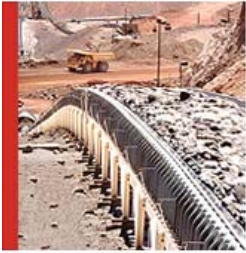


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MAXIMIZE UPTIME

JANUARY/FEBRUARY 2009

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## THREE WAYS TO MAXIMIZE CONVEYOR UPTIME



Did you know that contamination and low lubrication levels account for 80% of premature bearing failures?

As one of the most demanding industries for contaminated environments, the mining industry offers a unique challenge due to the need to lubricate bearings in a contaminated environment where dust and debris are always a factor. From conveyor belts, to electric motors, to pumps, there are a multitude of components with the potential to interrupt uptime and reduce productivity.

Conveyors, for example, are at the heart of every mining operation and it is essential that conveyors run for long predictable periods of time to ensure productivity, efficiency and safety. When a conveyor goes down for either planned or unplanned maintenance, there is no time to waste. Productivity and profits are quickly compromised when raw materials aren't reaching their destinations in a timely manner.

### WHERE CONVEYORS FAIL

A belt conveyor consists of a structural framework, an endless belt which is guided on idlers, a motor and gearbox, and various pulleys. Which of these is the primary point of failure? Pulley bearings and motor and gearbox bearings are generally the areas most susceptible to contamination and lubrication issues and subsequently are the most likely to experience premature failure.

### REDUCE BEARING FAILURES

1. Molded oil bearings are a superior option for conveyor applications that are operating in environments with significant risk of contamination. They eliminate the need for re-lubrication and are appropriate for contaminated environments as they are sealed units that not only negate leakage risks, but also provide protection from contamination.

2. Bearing specifications: Bearing durability is the number one priority in the harsh conditions found in mining applications. Brass and steel cages are solid options to ensure that bearings are able to withstand shock and offer high load capacity. Because contamination can result in peeling paint or general corrosion that will compromise bearing life and possibly lead to machinery damage, heat-treated products are especially recommended in mining applications.

3. Preventative maintenance: Ensure that staff are well versed in maintenance procedures and schedules for the bearings currently in use. Additionally, the proactive assessment of failed bearings upon replacement aids in the identification of potential problems before they result in machinery failure. Cracks, wear, fretting and flaking are all symptoms that can be identified on failed bearings and point to specific machinery defects or improper bearing selection or installation.

Getting the most out of your equipment ensures that your business runs smoothly and efficiently. When you think about keeping your equipment in the best possible condition with quality components and industry-specific solutions, Think NSK.

Call us at **1.877.994.6675** for a consultation or visit our website [www.ca.nsk.com](http://www.ca.nsk.com) for more information.

Visit [www.nskmaxuptime.com](http://www.nskmaxuptime.com) today!



## FEATURED PRODUCT

### SPHERICAL ROLLER BEARINGS FOR VIBRATING EQUIPMENT

#### Features

- High capacity design
- One piece machined brass cage
- Guide ring
- Symmetrical rollers with contoured surfaces
- Special tolerances and radial clearance
- Tough Steel™ option

#### Why Choose Spherical Roller Bearings?

- Increased fatigue life
- Reduced wear and lowered internal temperature
- Increased limiting speed
- Extended life under conditions with hard particle contamination

Click [here](#) to find out more!

## SUCCESS STORY

- A major mining company had a costly problem on an important piece of process equipment. The company requested NSK to assist in an attempt to reduce their unexpected downtime and address increased production requirements. For NSK solution [click here](#).

## TRAINING

#### ➤ On-site Training

#### ➤ Maintenance Seminars

For the 2009 training dates & locations please [contact](#) your local NSK Representative.