

NSK bearings of Mining & Construction

Mining operations are important to the improvement and preservation of our daily living, providing resources used to create electricity, roads, and communities. Mines are typically located far from where most people work, often in mountainous or arid regions, and can be found as much as 2,000 meters below ground. The equipment used is varied and can be operated continuously, 24 hours a day for 7 days a week. The mining process starts with the breaking up of the rock face and continues through the processing of the minerals, utilizing such technology as cutting equipment, screening machinery, stockpiling equipment and conveying equipment.

Much like mining operations, construction operations play a pivotal role in the improvement of society. The construction industry safely and effectively makes our lives more comfortable and efficient. From skyscrapers to highways to sewers, construction machinery, such as excavators, dozers, and cranes, help to build a better future.

The operating environments for bearings in the mining and construction industries can be extremely severe. One or more of the following can arise:

- ?heavy loads combined with shock loads
- ?light loads with high speed rotation
- ?heavy loads with low speed rotation

Along with sustainability, productivity and reliability are necessities for success in the mining and construction fields. If any of this equipment breaks down, there can be serious implications for production. Moreover, the recent trend towards ever-larger equipment means that repair work can become quite a major undertaking. NSK customers require bearings that can withstand these severe operating environments -- bearings that are tough, long-lasting and offer high reliability. In order to meet these requirements, NSK fuses the very latest bearing design technologies with its core technologies for materials, lubrication, and analysis. As a result, NSK is able to supply its customers with bearings that offer both long life and high reliability. In this way NSK contributes to increased productivity and lower maintenance costs, while maintaining a sustainable and environmentally friendly operation in the rigorous mining and construction environments.

New products and technologie

- **NSK Develops HST Long-life, High-reliability Cage-equipped Thrust Ball Bearing for Agricultural Machinery**

NSK Experience & Technology

Mining and construction equipment is in operation at various sites all around the world. Reliability, sustainability, and productivity are important and necessary qualities in these respected industries. NSK has the experience and technology to meet these demanding requirements. From standard bearings that have the world's largest capacity to specialized bearings showcasing the latest innovation, NSK can provide the proper response to the many demands of the mining and construction industries. Such innovative products include:

NSKHPS™ High Performance Standard Bearings for Industrial Machinery Spherical Roller Bearings

In addition to utilizing the latest cage design features and special surface treatments, these bearings use the most advanced materials. As a result, their bearing load capacity has been greatly increased and their life expectancy has been extended.

EW/EM Series Cylindrical Roller Bearings

NSK has developed a well balanced, integrated, roller-guided machined cage, which allows for the increase in both roller size and the number of rollers. As a result, NSK has been able to introduce a series of new generation, high-load capacity cylindrical roller bearings with exceptional characteristics in the areas of capacity and long life.

NSK continues with its development efforts day-in and day-out in order to maintain its position as the supplier of the world's highest capacity bearings. Our experience in global mining and construction applications, expertise in bearings and bearing components, and innovative technology allow NSK to provide customers with continuous service and the proper solutions. When a bearing solution is needed in the mining or construction industries, turn to NSK.