

























































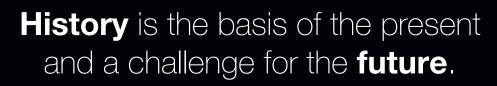








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## **Applications of ZKL bearings**

In its more than sixty-year history, ZKL is a proven and reliable manufacturer and supplier of certified bearings for an entire range of industrial businesses. The manufactured series of standard and specialized ZKL bearings meets stringent demands of technically advanced customers and a wide array of industrial fields. Examples of fields, where ZKL supplies their products include:

## **Automobile industry**

This engineering sector comprises a wide variety of applications. This relates not only to bearings of large sizes and types, but also a tubing programme for gaseous and liquid media. Due to its serial nature of production, the automobile industry places a large emphasis on achieving reproducible high quality of parts, and ZKL is able to meet these demands. Another category includes transmissions of specialized superstructures for trucks. This particularly includes cement mixing trucks.

#### Applications:

- Transmission mounts for light-weight vehicles and trucks
- ball bearings
- tubing for cooling and braking systems, A/C systems and all other liquid media distribution systems
- flanged output drive shaft bearings for drum installation
- wheel bearings of planetary gearboxes

Customers: SKODA, AUDI, VW, BONFIGLIOLI, SAUER-DANFOSS, ZTS SABINOV, and others







#### Applications:

- hot-flue blowers
- pumped-storage power plant valve seats
- wind-power installations

- globe mill bearings
- turbine bearings
- pump bearings

Customers: CEZ, DALKIA, and others







## Rubber industry

The field of rubber processing and production is an essential component of industrial production. Specific conditions in this field equally required new advances in ZKL bearing design, which guarantee high technical parameters and extensive, error-free operation, with minimal maintenance.

#### Applications:

calender train bearings

rubber processing machines and facilities

Customers: BUZULUK, MITAS, CONTINENTAL, BARUM, and others







## **Transportation**

ZKL Trust adjusts the design, testing, and servicing of bearings to full meet transportation customer demands. Mutual cooperation during the development phase is but one of the ways that meet the increasing demands of our customers. This cooperation also led to the development of TBU units for high-speed rail vehicle chassis. These bearings may be fitted with speed, acceleration, and temperature sensors. This information contributes to improved safety and reliability of railway operations.

## Applications:

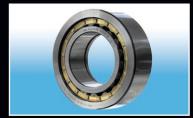
railway vehicle axle bearings

drive motor mounts

#### **Customers:**

 ${\tt PARS\ NOVA,\ SKODA\ TRANSPORTATION,\ SKODA\ ELETRIC,\ MOVO,\ DEUTSCHE\ BAHN,\ TBA,\ and\ others}$ 







## **Power industry**

The power industry is a key field of a national economy. ZKL Trust is a key supplier of bearings for use in the power industry. In cooperation with energy facility manufacturers, we developed new solutions and designed new bearings capable of reliable and durable operation during even the severest conditions with a high safety rating.

# Metallurgical engineering

One of the basic materials in the majority of industrial companies is steel. Its wide array of use, practically in all of the key fields, ranging from steel structures to conveyors equipment, makes it one of the most valuable raw materials. ZKL also develops its rolling-contact bearings for use in the steel industry. Meeting the intense operating demands in these technical applications is evidence of its quality and flexibility in providing bearings to this field.

#### Application

pilger mill bearings for production of seam-less pipes

contility train cylinder bearings

Customers: ISPAT NOVÁ HUŤ, SANDVIK, and others







# Processing and mining of raw materials

Bearings in mining machines often must support weighs of several tonnes. These bearings must also be resistant to severe alterations in temperature and other unexpected natural influences.

The extreme operating conditions in this industry often require highly specialized bearings. Our research and development, as well as permanent cooperation with machine manufacturers in this field, led to the development of specialized split journal bearings. A high added value of split journal bearings is particularly their easy and quick assembly, which is reflected in lower costs associated with machine failures.

### Applications:

- coal combines
- surface mining equipment
- gravel crushers
- shaker screens and shake-out grids

# Customers:

OKD, ARCELOR MITTAL, MOSTECKA UHELNA, VALE ACINDAR







paper roller bearings

vibrating machines

conveyors

# Heavy engineering

The standard of technical products has constantly improved thanks to innovation. Product innovation cycles are becoming significantly shorter and demands are thus increasing on new technologies. This trend is more and more apparent equally in the field of heavy-machine industry gearboxes. More precise methods of calculation and innovated technology have recently contributed to the reduction in gearbox mass. ZKL bearings have contributed to this advance by introducing cage-type bearings, which are the result of many years of research and testing, along with cooperation of prominent manufacturers of these devices.

### Applications:

heavy-machine industry gearboxes

eccentric press bearings

# Customers:

WIKOV, SMERAL, and others







