Protect your bearings and your bottom line with SKF large diameter seal solutions

Advanced seal design keeps lubricants in, contaminants out and costs down

Benefits
- Reduced operating costs by:
  - Reducing lubricant consumption
  - Extending bearing and seals service life, resulting in reduced replacement costs
  - Reducing waste disposal costs
- Increased uptime by increasing bearing and seal service life
- Reduced hazardous waste

Rolling mill bearings have a tough life and need protection. Seals form the first line of defence. When they fail to perform optimally, results can range from costly, excessive lubricant consumption and more hazardous waste to clean up to failed bearings, unplanned shutdowns and lost productivity.

The SKF solution
The SKF rubber clad design option of the well-proven heavy-duty range of metal cased large diameter seals provides a solution for applications with considerable surface roughness in the housing bore. A durable elastomer is applied to the seal metal case outside diameter to accommodate imperfections in the housing bore surface, improving service life and performance of both equipment and seal. The rubber outside diameter also reduces the risk of damage during installation and removal.

The range includes sealing lip designs with garter springs for secure oil retention and an optimized springless lip design for grease-lubricated applications. Both provide effective contaminant exclusion even in the harshest rolling mill environments.

Available in a wide range of designs and sizes, both metric and inch, SKF large diameter seals help rolling mills to extend bearing and seal service life and performance in virtually any application.

For more information about SKF products and solutions for the metals industry, contact your SKF representative.
Applying SKF knowledge engineering to improve machine reliability and efficiency in the metals industry

Few environments can match the demands placed on equipment used in the metals industry, from continuous casters and vessels to travelling cranes and ventilation systems. SKF engineers work closely with steel mills to meet application challenges and deliver the benefits they need to stay competitive.

These benefits include increased machine reliability, extended maintenance intervals and reduced costs, increased productivity, reduced energy use and optimized life cycle costing. Below is just one example of how SKF knowledge engineering helped a metals industry customer improve efficiency and profitability.

SKF cuts grease consumption, extends seal life and will save mill over €125 000 per year

US Steel Serbia d.o.o. wanted to improve maintenance and lubrication practice on their work roll chocks. Grease costs were €385 500 per annum and, working together with SKF, reasons for this were identified. SKF then proposed a solution to reduce these costs.

SKF started outfitting the mill stand bearings with its large diameter seals and the improvements were dramatic. Seal consumption fell significantly as replacement intervals increased to every second chock inspection. The water content of the grease was also reduced, thereby creating more favourable conditions for the work roll bearings.

When the mill is fully converted to SKF seals, it is estimated that grease consumption will be cut by nearly 50 percent and bearing service life will be extended due to improved operating conditions. Expected cost savings on grease alone will be at least €125 000 per year.