

#### **HAYLEY DEXIS**

### SCHAEFFLER BEARINGS FOR THE RAW MATERIALS INDUSTRIES

Avoiding unnecessary plant downtime is what drives us in the development and manufacture of innovative and high-quality rolling bearing solutions. Through intensive dialogue with research and development partners as well as with manufacturers, operators, and business partners, Schaeffler ensure that INA and FAG bearings are perfectly designed for the adverse operating and ambient conditions in industries that process raw materials. Though we don't just stop at the bearings, our understanding of industrial applications has helped us to develop products and services that perfectly complement our range of bearings and keep machines running longer.

### **JOINT OBJECTIVES**

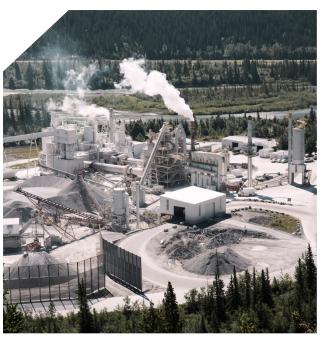
Schaeffler, along with HAYLEY DEXIS, support end-users with a comprehensive range of solutions and services including installation, operation, monitoring, maintenance, and reconditioning. Together, we share joint objectives to help businesses save on maintenance costs, optimise their system availability and, of course, avoid unplanned downtime.

# CEMENT MANUFACTURING APPLICATIONS

Let's take a deeper look into a cement plant - along with all the challenges customers might face. In the main, there are four stages in the manufacture of cement: (1) crushing and grinding the raw materials, (2) blending the materials in the correct proportions, (3) burning the prepared mix in a kiln, and (4) grinding the burned product. A typical cement plant's equipment will consist of crushers, vibrating screens, rotary kilns, roller presses, vertical mills, ball mills, as well as conveyor systems and auxiliary equipment.

For the majority of these application areas spherical roller bearings are predominantly used. With this is mind Schaeffler has been developing this range for many years, and now offer spherical roller bearings with end profiled rollers which have significantly reduced wear and an increased service life.

Migration to these bearings reduces edge contact pressure from abrasive material wear by 20%. Operating life is therefore extended, saving users both time and money in replacing bearings.



Cement plants and other environments handling raw materials are some of the toughest for bearings.

Many of the bearings within the cement plant need to cope with heavy radial loads, impact loads and shaft deflections coupled with an intensive dusty environment. Schaeffler therefore offers many bearings in its X-life seal of quality. In addition to spherical roller bearings for crushing machines, many other standard bearing types are used and Schaeffler's standard housing portfolio includes split and unsplit plummer block housings.

# BEARING HOUSINGS FOR CEMENT PLANTS

Since the upper part of the housing is removable in the split design, installation and maintenance is much easier. Unsplit plummer block housings should be selected if harsh environmental conditions and enormous stress on the bearing arrangement are to be expected. Schaeffler

also offers special housings when standard housings can no longer satisfy all requirements in particular complex applications. The new generation of SES plummer block housings replace the SNV and SNG portfolio.

As SES housings are based on the industry standard it is easy to switch and Schaeffler can offer an extended range of designs with optimum lubricant supply. The housings are robust so ideally suited to aggressive environmental conditions. The housings are also supplied with predefined mounting positions for condition monitoring and lubrication devices.

## SOLUTIONS FOR THE TOUGHEST ENVIRONMENTS

Vibrating screens come with their own challenges including fretting corrosion between the bearing and shaft, as well as stress on the bearing cages. This is due to vibrations and radial acceleration of the screen. Here again Schaeffler has developed spherical roller bearings with Durotect CK coating, as well as ARCANOL LOAD lubricants with EP additives.

In roller presses, high grinding forces and shock loads are the norm. Due to the harsh operating conditions in the cement industry, contaminants quickly invade the manufacturing or replacement process.

Multi-row cylindrical roller bearings as well as spherical plain bearings are ideal for these applications.

Machines need to run smoothly. Schaeffler's lifetime solutions ensure that they keep doing that. Our product range supports maintenance teams and plant managers, as well as providing everything they need to ensure uninterrupted operation in their plants.

### **CONTACT US!**

Speak to your local branch today about any of your bearing requirements.

You can find their details by using our online Branch Finder tool:

www.hayley-group.co.uk/branch-finder



