

your global specialist

Special knowledge

## Cement Plants

Automatic lubrication systems in use



# Automatic lubrication systems

## Trouble-free operation

Cement plant profitability is directly related to equipment reliability. One of the main requirements for reliable operation is frequent greasing to prevent the entry of contaminants inside bearings. Since many of the lubrication points in cement plants are dangerous and hard to access, they are not lubricated as often as required. This causes accelerated wear of mechanical components and often leads to premature bearing failure. Extreme operating conditions such as high temperature, vibrations, shock loads, high loads, and contaminants such as dust, dirt and water demand frequent and reliable lubrication in order to prevent costly downtime.

Automatic lubrication systems from Klüber Lubrication are successfully being used in many cement plants worldwide. They are economical, meet the technical demands and also drastically improve work place safety, a key concern in the cement industry.



# Economical reasons

Lubrication without the need to stop production increases the efficiency of your equipment. Automatic lubrication systems from Klüber Lubrication save time because they minimize lubrication maintenance runs. The time it takes to do the change-outs of automatic lubrication systems per year is considerably less than the time spent with manual greasing.

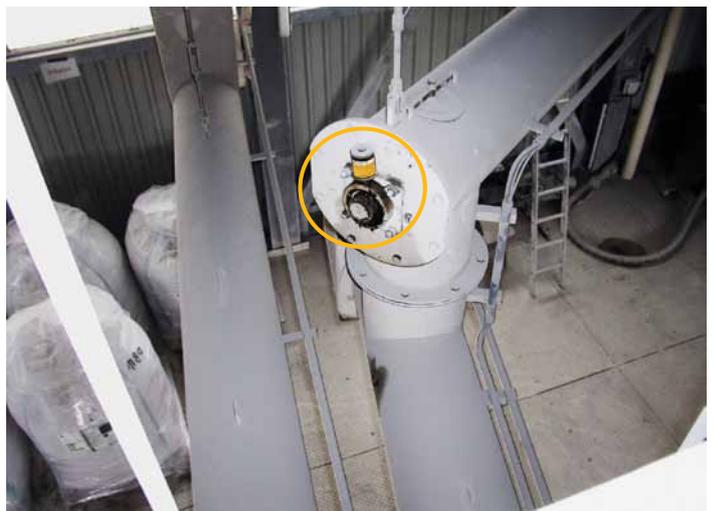
Do more with less: Instead of manually lubricating 100 lubrication points on your conveyor equipment every 14 days, you only need to do ONE easy change-out every six months with automatic lubrication systems – without any tools. Especially during peak production, the time saved with automatic lubrication systems from Klüber Lubrication can be effectively used for more important tasks.



(above left) **Mixing bed**  
Automatic re-lubrication on the bearings of conveyor belts can be done without the need to stop production. This reduces machine downtimes to a minimum.

(below left) **Palletizer**  
Automatic sliding guide lubrication ensures trouble-free operation even under extreme conditions. Repair costs and downtimes are drastically reduced.

(below right) **Mixer**  
Working platforms to lubricate bearings that are located in hard to reach places (approx. 3 m high) must only be erected once a year. Automatic lubrication saves time and reduces safety hazards.



## Technical reasons

Automatic lubrication systems ensure an uninterrupted supply of sufficient, fresh lubricant to all lubrication points. In addition, they effectively seal lubrication points and bearing seals to prevent the entry of water, dirt and dust. Even hard to access, moving, or hidden lubrication points that are often neglected are permanently lubricated without interrupting production.

**Another advantage:** The time saved with automatic lubrication systems from Klüber Lubrication can be invested in other value-adding maintenance tasks, including regular inspections of equipment and lubrication systems, basic condition monitoring, oil sampling and filtration.



(above left) **Bearings**

Bearings are effectively sealed aggressive cement dust and other contaminating substances.

(below left) **Cement mill**

Klübermatic lubrication systems on turning parts of the cement mill. Permanent lubrication during mill operation at 15.5 rpm.

(below right) **Screw conveyor**

Screw conveyors just below hall ceilings are extremely difficult to access. Klübermatic lubrication systems ensure uninterrupted, troublefree operation with permanent re-lubrication.



# Safety reasons

Employees in cement plants are constantly exposed to safety hazards: aggressive cement dust that irritates eyes and skin, extreme temperatures and environmental conditions, and the usual dangers experienced when working around rotating machine parts.

Reduced exchange intervals of automatic lubrication systems and remote mounting, away from potential hazards, minimize the time that employees spend in dangerous areas. And planned exchange intervals make it easier to observe the required safety precautions.



(above left) **Belt conveyor / gravity take-up pulley**

A fall can be devastating! Belt pretensioners are difficult to access and cannot be lubricated while the machine is running. Automatic lubrication systems from Klüber Lubrication minimize the time workers spend in these dangerous areas. This drastically reduces safety risks.

(below left) **Fans**

Maintenance personnel are exposed to extreme dust and noise. Automatic lubrication systems minimize this exposure and make it possible to schedule exchanges while the machines are down.

(below right) **Mill**

With automatic lubrication systems, workers are exposed much less to the loud noise and aggressive dust around mills. Klübermatic lubrication systems rotate with the equipment and ensure safe bearing lubrication.



# Klüber Lubrication – automatic lubrication systems

## Klüber lubrication systems for cement plants

Klüber products have been used successfully in cement plants worldwide for many decades. Reliable automatic lubrication ensures trouble-free operation for machinery and equipment in all areas of production – from quarrying to packing.

## Take advantage of the benefits lubrication systems from Klüber Lubrication offer:

- 24 hour operation
- Simple installation
- Easy, tool-free installation
- Requires little mounting space
- Tough systems - either battery operated or machine controlled
- Customized supply of fresh lubricants to lubrication points

## Questions?

Visit our home page [www.klueber.at](http://www.klueber.at) or contact our experts directly. Just send an e-mail to [engineering@at.klueber.com](mailto:engineering@at.klueber.com).

## Applications for automatic lubrication systems

Air installations  
Blowers & Fans  
Conveyor systems  
Extruders  
Mills  
Mixing beds  
Motors  
Palletizing  
Pumps  
Raw materials production  
Rotary kilns  
Seat-belt tensioner  
Silos



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Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this brochure at any time without notice.

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## Klüber Lubrication – your global specialist

Our passion is creating innovative tribological solutions. Through personal support and consultation, we help our customers to be successful, around the globe, in every industry and in every market. By utilising complex engineering concepts and experienced, competent employees, we have mastered the growing demand for high-performance, cost-effective special lubricants for over 80 years.



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