SKF automatic oil lubrication systems for conveying chains in food and beverage operations

Benefits

- **Longer service life** resulting from reduced chain wear
- **Improved productivity** by eliminating work stoppages for manual lubrication
- **Reduced energy consumption** through decreased friction
- **Greater operator safety** by reduced intervention for maintenance tasks
- **Better environmental hygiene** by reducing excess lubricant
- **Enhanced product quality** resulting from steadier chain movement

Typical applications

- **Ovens**
- **Proofer**
- **Conditioning Lines**
- **Slaughterhouses**

Eliminate manual chain lubrication, enhance cost control, productivity, safety and hygiene

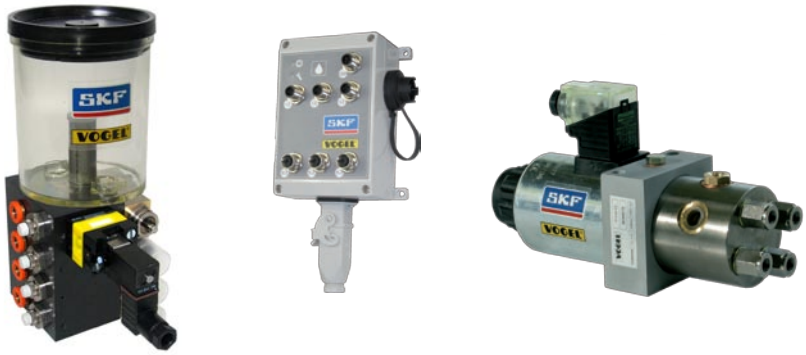
Conveying chains require continual lubrication to reduce high levels of friction that can result in chain wear, high energy consumption and unplanned production stops. In most plants, lubrication is applied manually – a task that requires the chains to continue running while production is stopped. Downtime is costly, presents environmental problems related to possible oil leakage, and can risk injury as operators lubricate while the chain is moving. Inadequate lubrication and irregular lubrication cycles lead to breaks in the chain or links, resulting in a need for frequent chain replacement.

SKF offers a range of automatic oil lubrication systems – available for both extreme and normal processing temperatures – that keep chains well lubricated and increase reliability. The systems include volumetric pumps which precisely deliver a metered volume of lubricant to the points of friction. A control unit is preset to the preferred timing for lubricant application. SKF can recommend the right oil lubrication system for specific application needs.

Photo courtesy of MECATHERM S.A

SKF automatic oil lubrication systems improve chain service life and productivity

By eliminating manual lubrication, SKF automatic oil lubrication systems also eliminate related downtime, safety risk factors, oil spillage, and costs for work stoppages and repairs. Instead, the systems create opportunities for enhanced productivity, reduced friction, decreased energy consumption, greater hygiene, reduced costs and better product quality resulting from steady chain movement.



The wide range of SKF oil units enables custom-design of lubrication systems for specific applications.

For more information about SKF products and solutions for the food and beverage industries, contact your SKF Authorized Distributor or local SKF representative.

Increase the return on your maintenance investment with SKF

The whole idea behind the SKF 360° Solution programme is to help you get more out of your plant machinery. Whether your goals include lowering maintenance costs, raising productivity, or improving safety, hygiene and sustainability, SKF can assist. Following is an example of the SKF 360° Solution programme at work in the food and beverage industries.

Bread manufacturer reduces downtime, costs and energy use with SKF automatic oil lubrication system

A bread manufacturer was experiencing frequent production interruptions in a critical conveyor chain. The problem was on a small roller chain on racks in the proofer, where the temperatures reached 35°C to 38°C, and humidity levels were very high.

The operator was using manual lubrication practices which resulted in inadequate chain lubrication leading to friction, chain wear and breaks. Because bread is a perishable item that cannot be inventoried, work stoppages had a major impact on product quality and costs for product loss, as well as expenses for labour and chain replacement. Hygienic problems were also created by oil leakage during manual lubrication.

SKF recommended the installation of a Vectolub automatic oil lubrication system. The system was installed by SKF over a two-day period. As a result, the manufacturer reduced the chain replacement frequency from 5 years to 10 years, decreased production slowdowns for maintenance tasks, and lowered energy consumption. Savings were achieved by reducing product losses and labour costs for manual lubrication. In addition, safety and plant hygiene were increased.

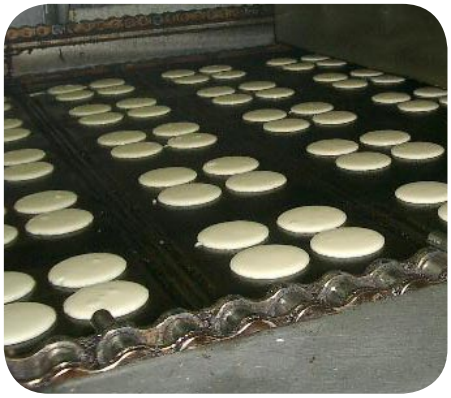


Photo courtesy of Pasquier Patisserie

SKF automatic oil lubrication systems provide regular lubrication cycles for steadier chain movement, resulting in better finished product quality

Summary*

Savings through reduced frequency of chain replacement/year . . . . . **€ 8 000**
(€40 000 every 5 years)

Savings in labour costs/year . . . . . **€ 1 800**

Total Savings/year . . . . . **€ 9 800**
(Excluding savings in elimination of unplanned downtime)

* All numbers are rounded off and based on customer estimates. Your particular cost savings may vary.

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