



SKF Centralized Lubrication Systems for bearings, gears and linear motion components

Benefits

- **Reduced downtime** through improved machine reliability
- **Enhanced productivity** through greater machine availability
- **Simplified maintenance** given the lubrication systems' flexibility and adaptability
- **Extended bearing service life** through reduced wear
- **Enhanced safety** by eliminating manual lubrication
- **Reduced environmental impact** through reduced grease usage and waste

Typical applications

- **Preparation machines** (washers, fillers, dryers, grinders, mixers)
- **Conveyors**
- **Packaging machines** (shrink wrappers, carton folders, blisters)
- **Palletizers**



Photo courtesy of Krones Inc.

Simplify lubrication maintenance, and improve reliability, productivity and safety

Food and beverage manufacturing environments are hard on processing equipment. Around-the-clock runs, humidity and heat all impact machine performance. Machine reliability can be compromised, as harsh environments make it difficult to maintain adequate lubrication for optimum bearing, gear and linear motion component performance.

Frequent cleaning of machines leads to grease washout, requiring continual re-lubrication. Added to this difficulty is the use of both manual and automatic systems, which contributes to high manpower costs, risk of unplanned downtime, and excessive use of lubricant.

SKF centralized lubrication systems include a range of flexible automated solutions for bearings, gears or linear motion components. They virtually eliminate the effects of inadequate lubrication, including wasted time and cost. All include a programmable pump unit, feeders to automatically deliver and control the lubricant amounts and intervals. Optionally, this can be linked to an existing PLC to identify possible lubrication system failures.

Suitable for a variety of lubricant types, including SKF lubricants and food compatible grease, the SKF range includes:

SKF MonoFlex

Single-line lubrication systems

Versatile system for small-to-medium-sized machines, which dispenses lubricant to individual lubrication points in precise amounts.

SKF ProFlex

Progressive lubrication systems

This system progressively serves each outlet with a defined amount of lubricant – generally grease – with the additional possibility of detecting plugged lubrication points.

SKF DuoFlex

Dual-line lubrication systems

For medium-to-large machines with many lubrication points, long lines and harsh operating conditions. The dual-line system can supply more than 1 000 lubrication points from a single pump unit source.

SKF centralized lubrication systems have proven to improve reliability in a variety of preparation and post-processing applications.



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.

Cereal processor reduces unplanned downtime and maintenance costs with SKF ProFlex lubrication system

A cereal processor was experiencing unplanned downtime in a cereal drum dryer due to inadequate bearing lubrication. The operating environment was highly humid, and the existing lubrication system was compromised by a broken and blocked line that restricted lubricant flow. In addition, the existing system provided no alert indicating lubrication system failure.

An SKF ProFlex progressive lubrication system was installed on the drum dryer. The system was equipped with a digital control system allowing lubrication amounts and frequency to be preset. All system components were housed in a stainless steel enclosure to meet food processing requirements. In addition,

the system included a proximity switch that alerted operators in the event of a lubrication system problem.

Through the system, proper amounts of grease were delivered to the dryer, eliminating waste related to excess lubrication. Lubricant consumption was reduced by 50%. Production availability was increased as unplanned downtime for bearing failure was decreased. In addition, by eliminating manual re-lubrication, the plant gained health, safety and hygiene benefits, and reduced environmental impact related to grease usage and disposal. The customer made a return on investment in 8 months, achieving the following savings:



The plant gained health, safety and hygiene benefits, and reduced environmental impact related to grease usage and disposal.

Summary* over 8-month period

Reduced work related to manual lubrication	€2 470
Elimination of unplanned downtime	€13 900
Elimination of planned downtime (for lubrication)	€27 800
Reduced lubricant consumption	€2 370
HSE incidents cost savings	€19 300
Total savings	€65 840

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

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