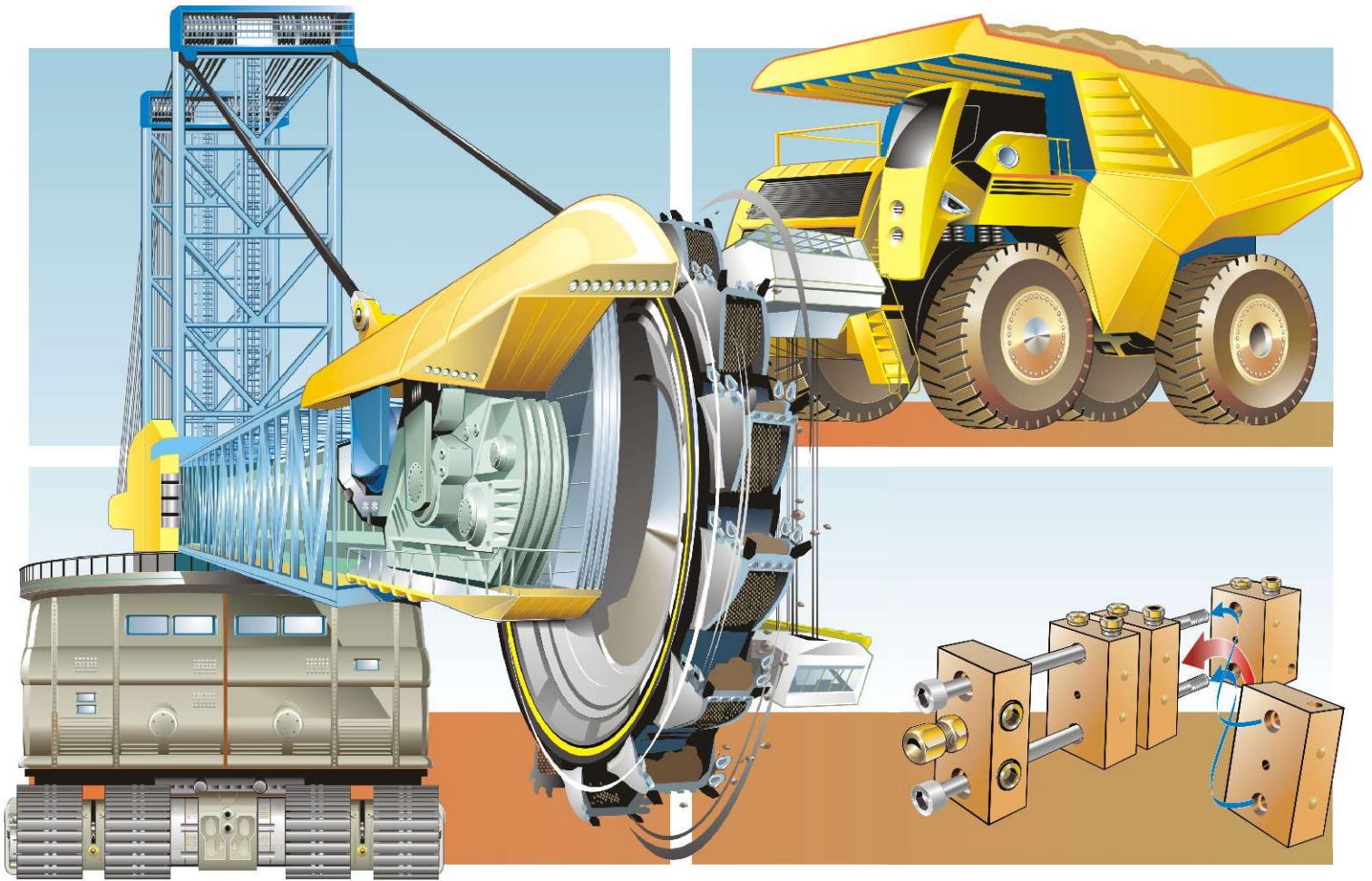


Technology  
you can  
rely on



# Central Lubrication Systems for Mining Machines



### The progressive system

The progressive system supplies the lubrication points in a fixed order. It can be operated optionally with oil or grease up to NLGI 2.

The progressive distributor works consecutively (progressive). Only after the first lube point has received the right lubricant quantity, the distributor continues running and delivers the next one.

The progressive system can be monitored easily and offers various extension possibilities.

BEKA progressive distributors distinguish themselves by modular flexibility instead of rigid block design. Caused by the tried-and-tested disc design, BEKA progressive distributors can be adapted to the individual demands like number of lube points or output at any time.



BEKA SX-D distributor box

### The individual sectional system

The sectional system is an extended progressive system. Large plants with a high number of lubrication points are divided into sections which are supplied by a pump station. The single sections can be controlled and monitored individually. Even differently stressed areas can be supplied as required.

The sectional system can be extended quasi without limits and offers the possibility to monitor each single lubrication point.



BEKA protective chamber: The whole lubrication technology is protected against dirt and damages.



**The single line system**

The lubrication pump of the single line system delivers the lubricant to the distributors. The line system can be branched as required. The single line system can be controlled by integrated or external control systems.

The single line system is characterized by easy installation, operation and maintenance and can be extended as required. It is tried-and-tested in large numbers all over the world.

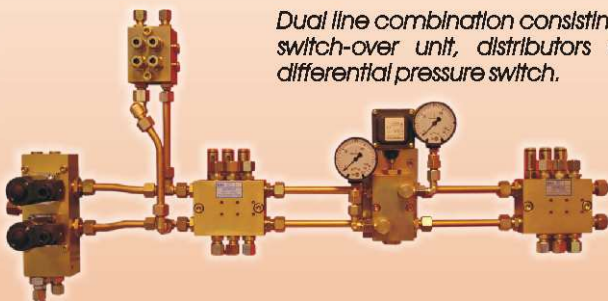


*BEKA injectors*

**The dual line system**

The dual line system is the classical solution for large plants. The lubricant can be transported over wide distances. The number of connected lubrication points has nearly no limits.

*Dual line combination consisting of switch-over unit, distributors and differential pressure switch.*



**Lubrication pumps in all sizes**

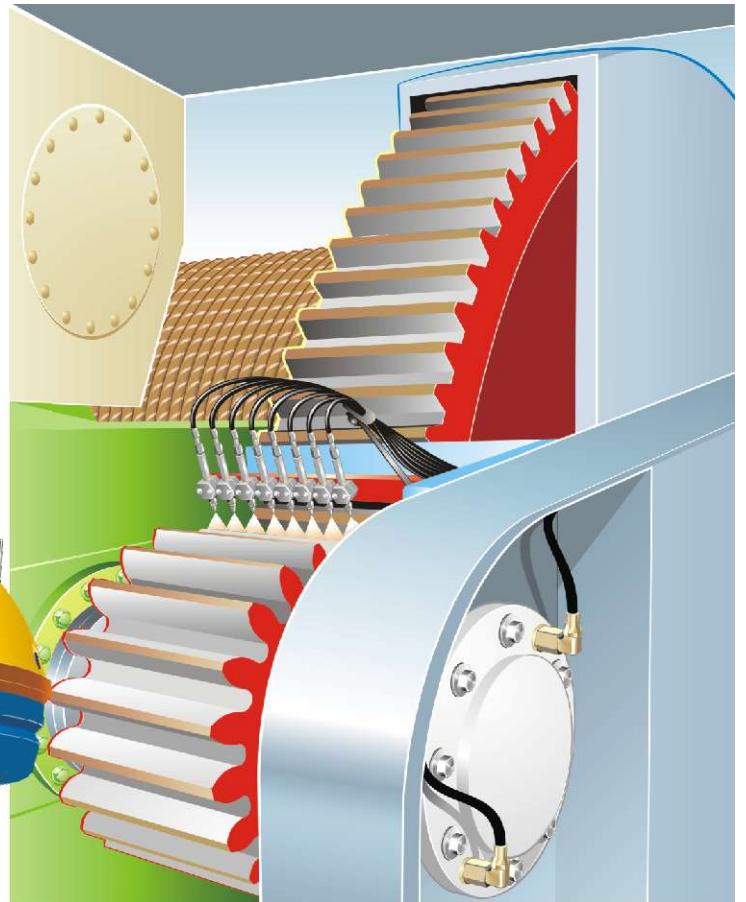
The BEKA product range offers an enormous diversity of lubrication pumps:

- With electrical, hydraulical or pneumatical drive
- With a wide range of reservoir capacities
- Barrel pumps with electrical, hydraulical or pneumatical drive
- Powerful filling pumps

All BEKA pumps distinguish themselves with highest quality and operational reliability. They are tried-and-tested all over the world.



*Barrel pump station type HFP*



## Gear rim lubrication with lubrication pinion

The lubrication system with lubrication pinion is a special solution for the lubricant supply of gear rims. Lubricant directly comes out of holes in the toothed flank of the lubrication pinion.

Caused by the design of the pinion, lubrication happens only during intermeshing. The lubrication pinion is suitable for grease up to NLGI 2.

### Advantages of the lubrication pinion:

- Rugged design, made of aluminium
- Adapted to the module of the gear wheel
- Reliable lubrication of the contact zone
- Suitable for grease up to NLGI class 2

*The lubricating pinion delivers lubricant only during intermeshing. This cares for reliable greasing of the highly loaded tooth faces.*



## The spray lubrication system

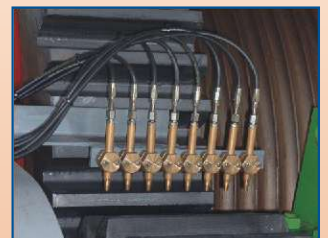
The spray lubrication system represents the clean and innovative alternative to conventional gear rim lubrication. The lubricant is transported and splitted by compressed air and then divided by patented mixing distributors. Spray nozzles care for the lubricant apply onto the tooth faces.

This highly-efficient and non-contacting technology even works with very little rotary motions. Caused by the special technology, spray lubrication is even suitable for lubricants with high solids content.

### Advantages of the spray lubrication system:

- Precise lubricant apply onto the tooth faces
- Only the friction areas are lubricated
- Very low lubricant consumption
- No over-lubrication

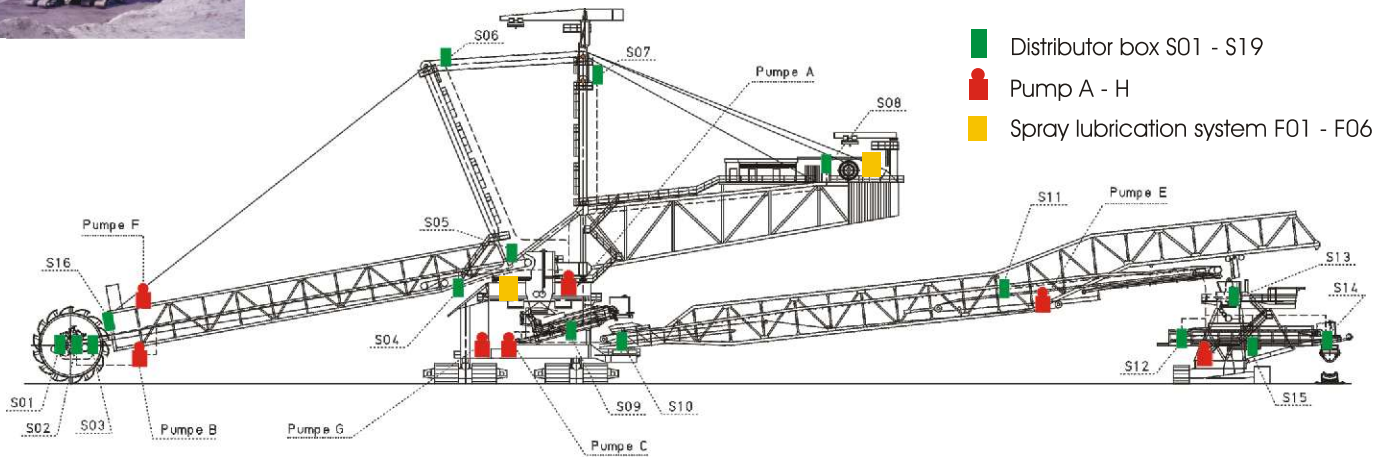
*Spray lubrication system installed at a winch drive*





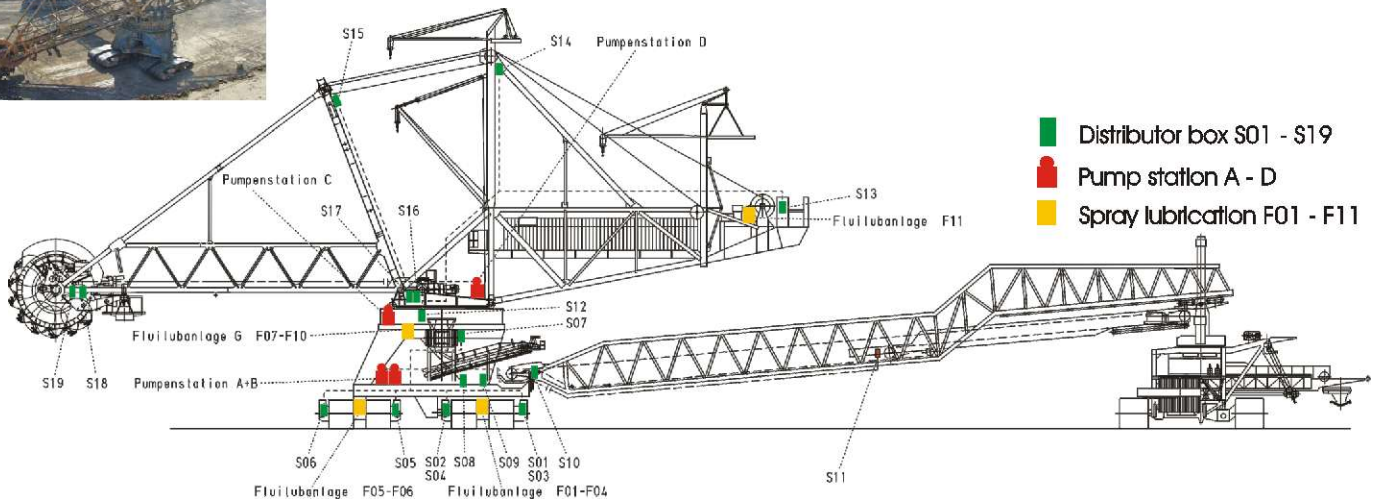
**Excavator SchRs 1320/4x30**  
653 lubrication points

3x hydraulic barrel pump (200 kg) with dual line and sectional system  
2x high pressure pump FKGM-EP (8 kg) with progressive system  
1x high pressure pump F-Super3 (48 kg) with progressive system  
6x spray lubrication system



**Excavator K2000**  
1005 lubrication points

5x hydraulic barrel pump (200 kg) with sectional system  
1x high pressure pump F-Super3 (48 kg) with progressive system  
13x spray lubrication system



**Spreader ZPDH 6300.1-CZ**  
342 lubrication points

3x hydraulic barrel pump (200 kg) with dual line and sectional system  
1x high pressure pump F-Super3 (48 kg) with progressive system  
1x high pressure pump F-Super3 (48 kg) with pinion lubrication  
2x spray lubrication system

