The Complete System Program for Mining Machines
The progressive system

The progressive system supplies the lubrication points in a fixed order. It can be operated either 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 metered quantity. The progressive system can be monitored easily and offers various extension possibilities.

BEKA progressive distributors distinguish themselves through modular flexibility instead of rigid block design. Due to the tried-and-tested disc design, BEKA progressive distributors can be adapted at any time to the on-site demands such as number of lube points or output.

The 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. Each section can be controlled and monitored individually. Even different application zones can be supplied as required.

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

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

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.

The dual line system

The dual line system is the classical solution for large plants. The lubricant can be transported over long distances. The number of connected lubrication points is virtually unlimited.

Lubrication pumps in all sizes

The BEKA product range offers a big diversity of lubrication pumps:

- With electric, hydraulic or pneumatic drive
- With a wide range of reservoir capacities
- Barrel pumps with electric, hydraulic or pneumatic drive
- Powerful filling pumps

All BEKA pumps distinguish themselves through the highest quality and operational reliability. They are tried-and-tested all over the world.
**Gear Rim Lubrication with Lubrication Pinion**

**Spray Lubrication System**

*The lubrication system with a lubrication pinion is a reliable solution for the lubrication of gear rims. The lubricant is applied directly via ports in the toothed flanks of the lubrication pinion. By design of the pinion, lubrication only takes place during the 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 2

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

*The spray lubrication system represents the clean and innovative alternative to conventional gear rim lubrication. The lubricant is transported as an oil-air mixture via compressed air and then divided by patented mixing distributors. Spray nozzles apply the oil-air mixture onto the tooth faces.*

**Advantages of the spray lubrication system:**
- Precise lubricant application 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.*
Mining machines with central lubrication technology
Examples of application

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

- 3 hydraulic barrel pumps (200 kg) with dual line and sectional system
- 2 high pressure pumps FKG-EP (8 kg) with progressive system
- 1 high pressure pump F-Super 3 (48 kg) with progressive system
- 6 spray lubrication systems

- Distributor box S01 - S19
- Pump A - H
- Spray lubrication system F01 - F06

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

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

- Distributor box S01 - S16
- Pump station A - E
- Spray lubrication F01 - F02

**Dump truck**
27 lubrication points

- 1 electric barrel pump Stream E (41 l/60 lbs) for single-line system
- 1 external control unit tronic-e

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Projecting, production, documentation, installation and service:
Competence from one hand!