

Lubricating pinion

Automatic lubrication of the open gear via lubricating pinion



Currently, the gear rims on wind energy stations (for azimuth and pitch) or tower cranes, construction and special equipment are greased manually. With the first revolutions, this lubricant is pushed into the base of the tooth or to the outside via the tooth flanks. The result is inaccurate distribution of the lubricant in the contact area, incorrect dosage, dripping of the lubricant and subsequent environmental contamination. The system will not be supplied with fresh grease until the next service check.

For automatic lubrication, **SKF Lubrication Systems Germany AG** has developed a lubrication pinion which helps to ensure dosing as required and pinpoint accuracy of lubricant in the contact area.

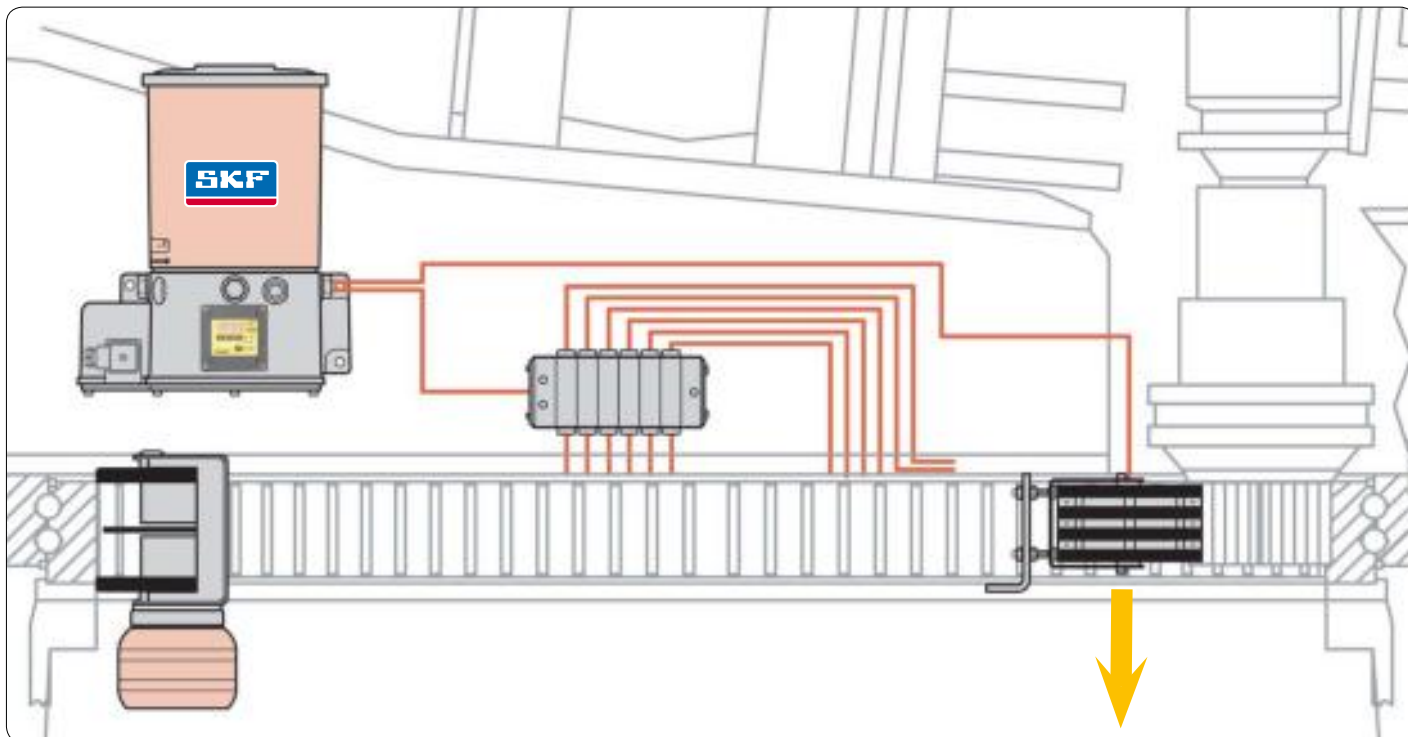
Special system advantages

- Precisely adjustable dosing as required
- Pinpoint accuracy of lubricant in the contact area
- Even lubricant distribution across the entire width of the tooth
- Durable
- Taylor-made solutions

resulting in:

- Reduced lubricant consumption
- Pinpoint accuracy of lubricant in the contact area
- Increased system availability
- Reduced operating costs
- Environmentally friendly operation

Functional description



The lubricant is pressed into the axle of the lubricating pinion with a grease pump, and is taken through a bore hole into the lubrication channel of the lubricating pinion tooth that is in the process of intermeshing with the gear rim. All the other teeth of the lubricating pinion are not lubricated during this phase. The lubricant passing out through the tooth flanks is pinpoint pushed into the contact area of the tooth flank and evenly distributed by means of the rolling movement of the lubricating pinion. The foam rubber layers ensure that the lubricant is evenly distributed across the entire width of the tooth. The metal gear wheels are resistant to wear and all lubricants and environmental influences.



Lubrication sequence



Lubrication begins. First of all, the lubricant spreads over the tooth flanks of the driving pinion. (The lubricating pinion is equipped with 2 foam rubber layers in this diagram.)



Moistening of the tooth flanks already begins at the height of the foam rubber layers, even before the lubricant reaches the base of the tooth.



The lubricant spreads over the tooth flanks. The spreading speed depends on the quantity of lubricant fed to the tooth flanks.

More products for open gear lubrication

Lubricant collector



Progressive distributors



Grease pumps



See important product usage information on the back cover.

Order No. 1-0302-EN

Subject to change without notice! (07/2009)

Important product usage information

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

Brochures

- 1-3036-EN WINDLUB Grease single line centralized lubrication system
- 1-0318-EN Grease centralized lubrication system with heating system for extreme low temperatures
- 1-3030-EN Reservoir pump units of the KFG series (S) (C) for industrial use
- 1-3034-EN Reservoir pump for rotary applications
- 1-3017-EN VPB-block progressiv feeders
- 1-3015-EN VPK-progressiv feeders
- 1-0303-EN Lubricant collector

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