

Chain lubrication for farm machinery



Automated chain lubrication pays off

- Less wear
- Greater operational reliability
- Lower risk of failure



Chain lubrication

Chains are among the most important power transmission elements in farm machinery, and they must be carefully maintained. The traditional, manual method of lubrication carries a risk of inadequate lubrication. This results in premature wear and impairs the chain's operation.

The costs associated with a chain failing due to insufficient lubrication are both inconvenient and usually very substantial. It does not have to be this way, though. You are always on the safe side with automated SKF chain lubrication systems, which reliably provide driving chains with optimum lubrication.

Chains and chain wheels like it smooth

Automated systems periodically relubricate the driving chains while the farm machine is operating. Just how this works is shown using a hydraulically driven SKF chain lubrication system as an example. Our system utilizes the farm machine's hydraulic system to build up the pump pressure required for lubrication. Screw-in restrictors are optionally employed to divide the lubricant and can be used to regulate the flow rate.

The metered oil is fed directly to the chain through pipes which have lubricating quills or lubricating brushes at their end.

The lubricating brushes ensure that the lubricant is applied equally across the entire width of the roller, which provides an optimum supply of creeping lubricant to chain link plates and pins and chain rollers.

As soon as the chain drive is turned off, which also relieves the hydraulic system, the spring-loaded main metering piston of the hydraulically driven oil lubrication pump is pushed to its initial position. The metering chamber is pre-filled with oil again and is thus ready for the next metering stroke.

All standard lubricating oils with a mineral or synthetic base can be used.

CAUTION

For all systems described in this brochure, see important product usage information on the back cover.

Fields of application

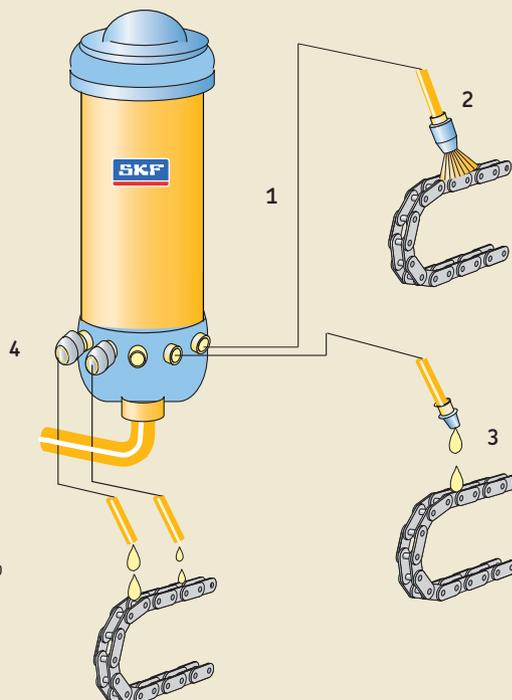
- Spreaders
- Loading wagons
- Self-loading forage wagons
- Silage wagons
- Tipper trailers with hydraulic tailgate
- Etc.

Advantages of automated SKF chain lubrication systems

- An economical system that pays for itself Efficient resource handling
- No unnecessary environmental pollution
- Exact adherence to lubrication intervals
- Exact metering of lubricant
- Extension of chain service life
- Increase in operational reliability
- Increase in wear resistance
- Reduction in risk of failure

SKF recommends that biodegradable oils be used for reasons of environmental compatibility.

Working example



- 1 SP/EY28 oil lubrication pump
- 2 Lubricating brush
- 3 Lubricating quill

Optional:
4 Flow rate-specific SKF VD1 screw-in restrictors

Three systems, one signature

You can select the SKF system which you want to use, depending on the design of your farm machine. Hydraulic, pneumatic or mechanically operated oil lubrication pumps – all SKF systems have high operational reliability in common, even under extreme operating conditions and harsh ambient conditions.

There is a simple reason for this: The mature designs, the compact forms, the materials used and the precision manufacture of the systems bear the signature of a company with more than 80 years of experience in the field of lubrication. The sturdy and reliable systems from SKF are characterized by their excellent value for the money.

They are easy to operate, easy to install and, thanks to their compact construction, can be used in almost all farm machines. Our employees will be glad to help you find your individual solution for chain lubrication.

Hydraulic oil lubrication pump



SP/EY28

Technical data

Order number SP/EY28
 Drive hydraulic
 Reservoir capacity . . 1,0 l
 Drive pressure 60 to max. 200 bar
 Drive volume > 1,5 l/min.
 Delivery volume
 per stroke 4,5; 6,0 or 7,0 cm³ ¹⁾
 Lubricant outputs . . . 1 to 9
 Pumped medium . . . mineral, synthetic and
 environment.compatible
 oils; operating viscosity
 20 to 1.500 mm²/s

¹⁾ Other specifications available on request

See brochure 1-5001-EN for information on metering using additional restrictors.

Pneumatic oil lubrication pump



POEP-15-1.0

Technical data

Order number POEP-15-1.0
 Drive pneumatic
 Reservoir capacity . . 0,5; 1,0; 1,7 l
 Drive pressure 3 to 10 bar
 Delivery volume
 per stroke 15 cm³
 Pumped medium . . . mineral, synthetic and
 environment.
 compatible oils;
 operating viscosity
 20 to 1.500 mm²/s

See brochure 1-5001-EN for information on metering using external metering elements.

Mechanically actuated oil lubrication pump



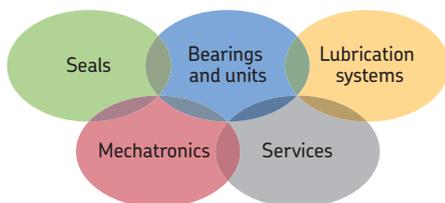
112-312-010 with KW1 (reservoir)

Technical data

Order number 112-312-010
 Reservoir KW1
 Drive mechanical, e.g. by
 excenter
 Reservoir external 1,0 l ¹⁾
 Delivery volume
 per stroke 0,2 to 1,1 cm³
 Pumped medium . . . mineral, synthetic and
 environment.
 compatible oils;
 operating viscosity
 20 to 1.500 mm²/s

¹⁾ Other specifications available on request

See brochure 1-5006-EN for information on the complete setup with pressure regulating valve and metering using external restrictors



The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry world-wide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

! Important information on product usage

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

Not all lubricants can be fed using centralized lubrication systems. SKF can, on request, inspect the feedability of the lubricant selected by the user in centralized lubrication systems. Lubrication systems and their components manufactured by SKF are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution, vapors or such fluids whose vapor pressure exceeds normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Para. 2, may only be filled into SKF centralized lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from SKF.

Additional brochures for further information

1-0103-EN	<i>Fittings and Accessories</i>
1-1110-EN	<i>Manually or pneumatically actuated piston pumps</i>
1-5001-EN	<i>Lubricant distributors</i>
1-5006-EN	<i>Circulating Lubrication Systems (Oil)</i>
1-9201-EN	<i>Transport of Lubricants in Centralized Lubrication Systems</i>

SKF Lubrication Systems Germany GmbH

Hockenheim Plant
2. Industriestrasse 4
68766 Hockenheim
Germany

Tel. +49 (0)6205 27-0
Fax +49 (0)6205 27-100

This brochure was presented by:

© SKF is a registered trademark of the SKF Group.

© SKF Group 2014

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB LS/P2 10648 EN · July 2014 · 1-0974-EN

Certain image(s) used under license from Shutterstock.com

