

Centralized Lubrication Systems for Construction Machinery



- Reduce downtimes
- Reduce wear
with automatic lubrication

Why use centralized lubrication on your DOOSAN construction machinery?

Because you can save yourself a lot of trouble and costs!

A centralized lubrication system provides bearings with a continuous supply of lubricant at certain intervals, and it does so when the machinery is in operation and all the bearings are moving.

Automatic centralized lubrication

- improves the machinery's availability!
- increases bearing life at least fourfold!
- makes drastic cuts in maintenance and repair costs!
- saves expensive downtimes in terms of both machinery and personnel!
- saves as much as 40% on lubricant!
- protects the environment!

Why SKF centralized lubrication?

Because its simply not centralized lubrication like all the others!



The KFGS/KFGS generation of pumps with integrated control system. Rugged design together with the latest technology.

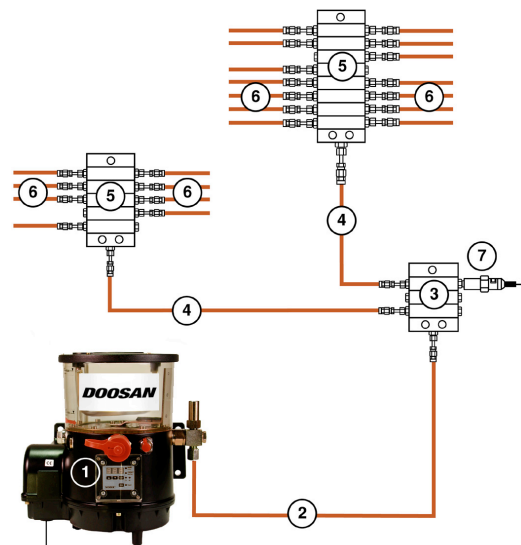
- SKF uses proven, rugged components.
- Universal yet simple control concept
 - set by pushbuttons
 - data shown on display
 - elapsed-hours counter
 - fault-hours memory
 - filling level monitor (optional)
 - PIN code protectionz
 - no laptop needed for programming
- SKF has decades of know-how and experience in the construction-machinery sector.
- First-class installation quality – with attention paid to the machine manufacturer's technical specifications – ensures high dependability.
- Our service, the way we understand it, means optimum customer support – before and after the purchase!

And this is how it works

- The integrated control electronics switch the lubricant pump on at the end of the preset interval time.
- The pump delivers lubricant through the main lines to the feeders for the duration of the preset contact time.
- The progressive feeders divide up the lubricant delivered by the piston pump in exactly the design ratio. So every connected bearing receives exactly the amount of lubricant it needs.
- Sustained forcing of the feeder ensures the greatest possible dependability.

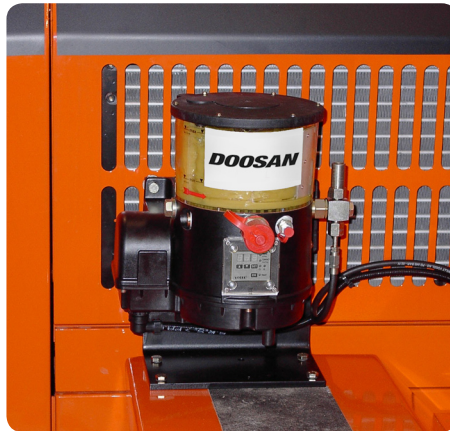
Diagram of a progressive centralized lubrication system

- ① Pump
- ② Main lines
- ③ Master feeders
- ④ Secondary lines
- ⑤ Secondary feeders
- ⑥ Lines leading to the lube points
- ⑦ Cycle switch

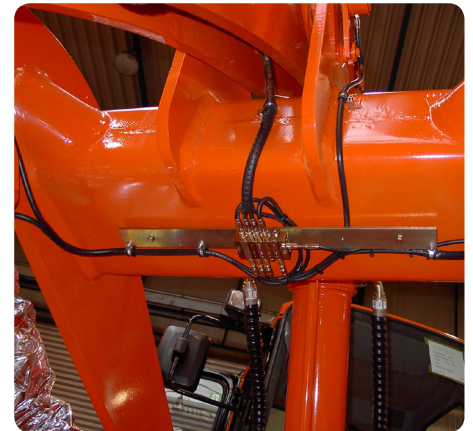


Installation of components and laying of lines

- **All components installed to last!**
The lubricant pump together with its safety valve and integrated control unit is installed at a secure and easily accessible place on the machinery.
- **Professionals do the laying!**
Feeders and lines are installed on the machinery where they are well protected. The places at which the components are installed and attached are chosen with an eye to the machinery manufacturer's technical specifications.
- **The universally applicable plug-in connector system – for plastic and steel tubing**
Its novel seal and collet concept is insensitive to dirt, easy to install and detachable at the touch of a finger.
- **The system's functioning is displayed!**
A green illuminated pushbutton in the cab shows the centralized lubrication system is functioning. The pushbutton can also be used if necessary to trigger additional lubrication.
- **Optional monitoring of the centralized lubrication system by a sensor!**
In this case a cycle switch monitors the system. Malfunctions are shown by a yellow indicator light (optional feature) in the cab



KFGS piston pump with 2 kg grease reservoir and filler socket installed on a DOOSAN DL 250 wheel loader.

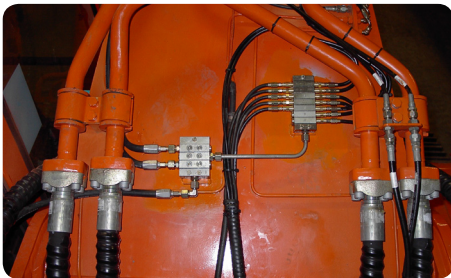


VPKM-5 progressive feeder installed on mounting plate on the cross member.

Installation of outside lines

Since machinery is exposed to the roughest and toughest environmental conditions in everyday use, the choice of the right material

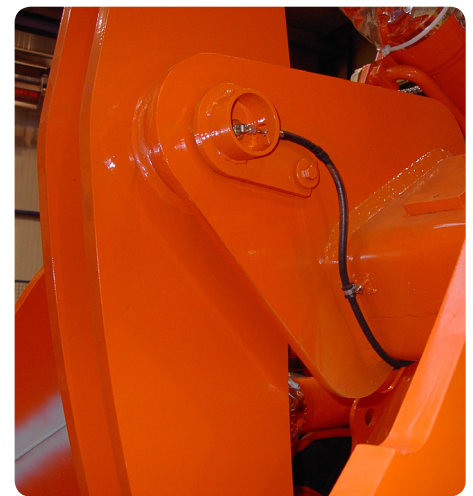
for the lines and optimal laying are specially important tasks!



*Hydraulic excavator DX 480
Exact metering of lubricant via VPM-3 master feeder and VPKM-7 boom feeder - installed on boom foot to facilitate maintenance.*



The shielded, galvanized-steel lubricant line at the tip of the hydraulic excavator's stick assures high dependability.



A welded ring at the lube point for the reversing lever / cross member on the DL 250 wheel loader protects the line connections from damage

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Subject to change without notice! (07/2009)

SKF Lubrication Systems Germany AG

Hockenheim plant

2. Industriestrasse 4 · 68766 Hockenheim · Germany

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

www.skf.com/lubrication

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