



*World class
equipment
deserves world
class lubrication*

EcoPlus progressive lubrication

Ultimate solution for compact machines

Automatic lubrication is more effective than manual lubrication. Because the machine or vehicle is lubricated while it is in motion, the grease spreads better over the surface that has to be lubricated. In addition, the grease is applied in small doses with short intervals, providing optimal lubrication. Moreover, this results in a collar of grease on the outer edge of the pins and bushings, keeping out dirt, dust and water. Thus automatic lubrication offers many advantages:

- Longer service life of slewing bearings, pins and bushings
- Lower repair and maintenance costs
- Improved machine and vehicle uptime
- Higher productivity
- Higher residual value
- Up to 50% less grease consumption
- No possibility of accidents while greasing hard to reach lubrication points

With the EcoPlus, Groeneveld offers an attractively priced automatic lubrication system for numerous applications, such as small wheel loaders, mini-excavators and skid steer loaders. But also for loader cranes or taillifts. The unique cartridge concept makes refilling easy, and ensures that the correct quality of grease is always used.



Unique lubrication system with cartridge

Groeneveld's EcoPlus progressive lubrication system lubricates all greasing points of the machine consecutively. In its EcoPlus, Groeneveld combines the tested concept of progressive lubrication with a modern pump that has extensive possibilities for settings and diagnosing via a user-friendly display. The EcoPlus lubrication system is perfectly suited for smaller systems on earth-moving and construction equipment. The closed system is insensitive to dust, dirt and water.

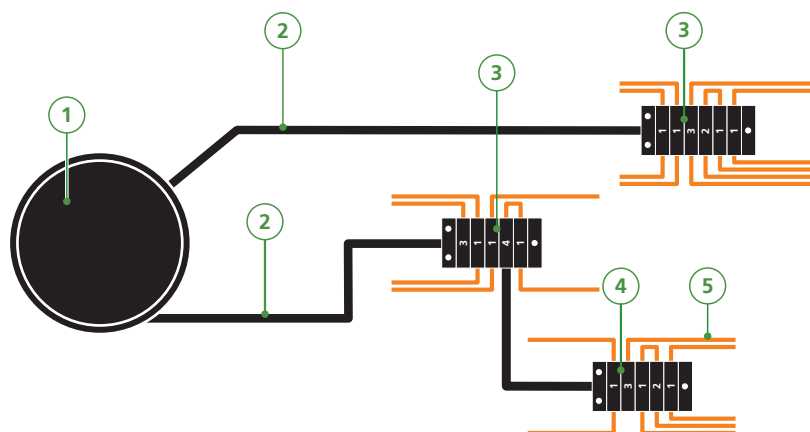
Unique characteristics

The EcoPlus is compact and yet offers sufficient grease capacity. Due to its compact size, there is always room to be found to install it on the machine. The 1.7-litre cartridge offers the right grease volume to meet lubrication needs and service intervals of modern compact machines. The EcoPlus is available in 12 or 24 Volt electric motor and features an 8-mm pump element as a standard, providing 0.26 cc of grease metering per cycle. A second pump element is available as an option, offering the possibility of creating an independent second lubrication circuit. The EcoPlus also features a low-level indicator as standard, as well as a pressure switch.

- Progressive lubrication system for NLGI 2 grease
- Strong electrical pump, 12V or 24V
- Accurate, pre-set viscosity independent grease metering at all temperatures
- Integrated easy-to-operate timer
- 1 or 2 pump elements with forced stroke
- Divider blocks of the highest quality
- Fully closed system, insensitive to moisture, sand and dust
- Grease metering and lubrication interval that can be programmed accurately
- Unique cartridge system for easy refill



System overview



The EcoPlus lubrication system has a maximum of two lubrication circuits and consists of the following main components:

1. Pump
2. Main line
3. Main divider block
4. Divider block(s)
5. Secondary lines



Divider blocks

Groeneveld's progressive divider blocks stand out because of their unique quality and almost unlimited combination possibilities. This allows exactly the right system to be assembled for each application, where each lubrication point always receives the correct amount of grease. Not too little, to prevent metallic contact (and thereby disturbing sounds), excessive wear and unexpected failure. And certainly not too much, because waste and needless environmental pollution does not belong in a good business practice. For its progressive systems, Groeneveld provides newly developed anti-corrosive divider blocks with a high quality zinc-nickel coating. This treatment withstands a 720-hour salt-spray test and thereby offers optimal protection against corrosion.



Easy to programme

The easy to program timer with integrated LCD display and intuitive touch pads makes setting the system extremely easy. Lubrication intervals can be set for 1 to 300 minutes, while the grease volume is defined by the number of revolutions of the pump. With regard to pre-set timed pumps, the big advantage is that the exact desired quantity of grease is always delivered, regardless of the viscosity and temperature of the grease. The number of pump revolutions can be programmed from 1 to 99 revolutions per grease cycle, which together with the forced stroke of the pumping elements results in an incomparable reliability and accuracy under all conditions.



User-friendly cartridge concept

The EcoPlus features a unique 1.7-litre cartridge, containing Greenlube NLGI-2 grease of the highest quality and the right specification for the most demanding applications. The cartridge is easy to replace without getting dirty. Verification of the correct functioning of the system is done by means of a pressure indicator. Because the cartridge concept guarantees the use of the correct GreenLube grease, Groeneveld offers a 3-year warranty on the EcoPlus pump.



Groeneveld and quality



Experienced and well-trained technicians at Groeneveld or one of our partners install the EcoPlus in a professional manner. A guarantee for years of trouble-free operation.



Groeneveld has its own production and assembly facilities and development centres, where product quality and process quality are paramount.

Groeneveld: A global player

Since its foundation in 1971 in Gorinchem, the Groeneveld company has developed into a global enterprise with approximately 600 employees. Groeneveld has around 30 branches, resulting in a worldwide coverage. In many countries, the company is also represented by independent distributors and dealers – all just as driven as our own organisation to offer added value to the customer's company.

Groeneveld is happy to assist you with the installation and service of your systems. Therefore it is good to know that Groeneveld has a global presence. Visit the Groeneveld website for contact details of the Groeneveld subsidiaries, distributors and service dealers.



Twin

Parallel lubrication system

Twin is a dual-line lubrication system that offers the perfect solution for example, large wheel loaders, agricultural equipment and spreaders, which often have long lines. The system works with relatively low pressure, allowing the preservation of the quality and structure of the grease. Twin is also characterized by a very accurate dosing per lubrication point, regardless of the ambient temperature.



Oilmaster

Always the correct level of oil

Groeneveld's oil management system ensures that the oil level in the engine is always at an optimal level. Checking the oil level manually is a thing of the past. This doesn't only saves time, but also ensures that there is never too little or too much oil in the engine, with all the costly and time-consuming consequences. The system is applied in numerous sectors throughout the world.



Greensight

Safety support system

Greensight is available as an obstacle detection system, as a camera system and as a combination of both. The implementation of ultrasound allows the system to detect obstacles in the pre-set zones very accurately. It can be expanded with sensors either on the sides or on the top of the vehicle or machine. The camera system offers an optimal view under all conditions.