



*World class
equipment
deserves world
class lubrication*

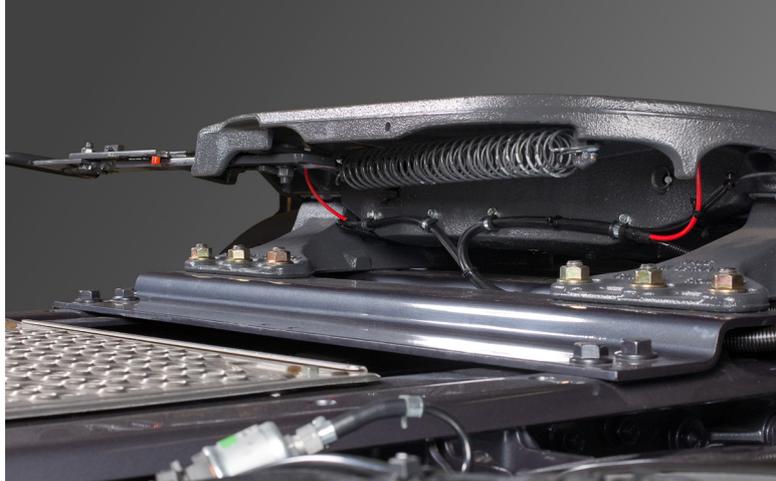
SingleLine automatic lubrication **The solution for trucks and trailers**

Automatic lubrication is more effective than manual lubrication. Because the 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 lubrication points, keeping out dirt, dust and water.

Thus automatic lubrication offers many advantages:

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

For decades, the Groeneveld SingleLine automatic lubrication system has been the ultimate lubrication system for transport applications. Independent of ambient temperature and grease viscosity, the system will apply exactly the pre-set amount of grease at each lubrication point. Long lines and large numbers of lubrication points do not pose a problem for this high quality system. The system is available in both an electrical and pneumatic version.



Care-free automatic lubrication

The combination of a strong and reliable pump, a wide range of unique metering units and a solid organisation that is able to recommend the correct SingleLine configuration for any application, makes the SingleLine a highly suitable system for heavy transport equipment and buses. But also for industrial applications, waste collection vehicles and port equipment. The system works with a relatively low pressure, preventing separation of the grease. The patented volumetric metering units ensure that the grease metering per lubrication point can be perfectly adjusted to the demand of the part to be lubricated.



Unique characteristics

- Optimum lubrication and sealing of all lubrication points
- Easy to install and to extend
- Thanks to the relatively low work pressure, the quality of the grease is preserved
- The unique metering units offer an exact and adjustable amount of grease per lubrication point
- Filler coupling with filter in order to prevent contamination of the grease during filling
- Optionally equipped with a level indicator in the grease reservoir with an active warning.
- Quick couplings allow easy expansion of the system
- Also available in stainless steel



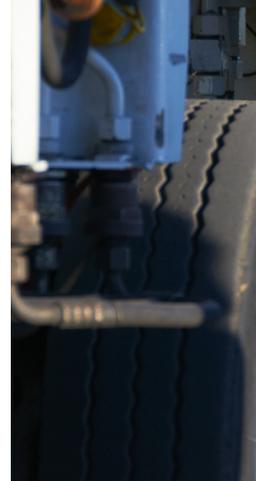
Follower plate

The follower plate will ensure that all the grease in the reservoir is used, that the grease level is visible and that ageing of the grease through oxidation is prevented, so that the quality of the grease is preserved.



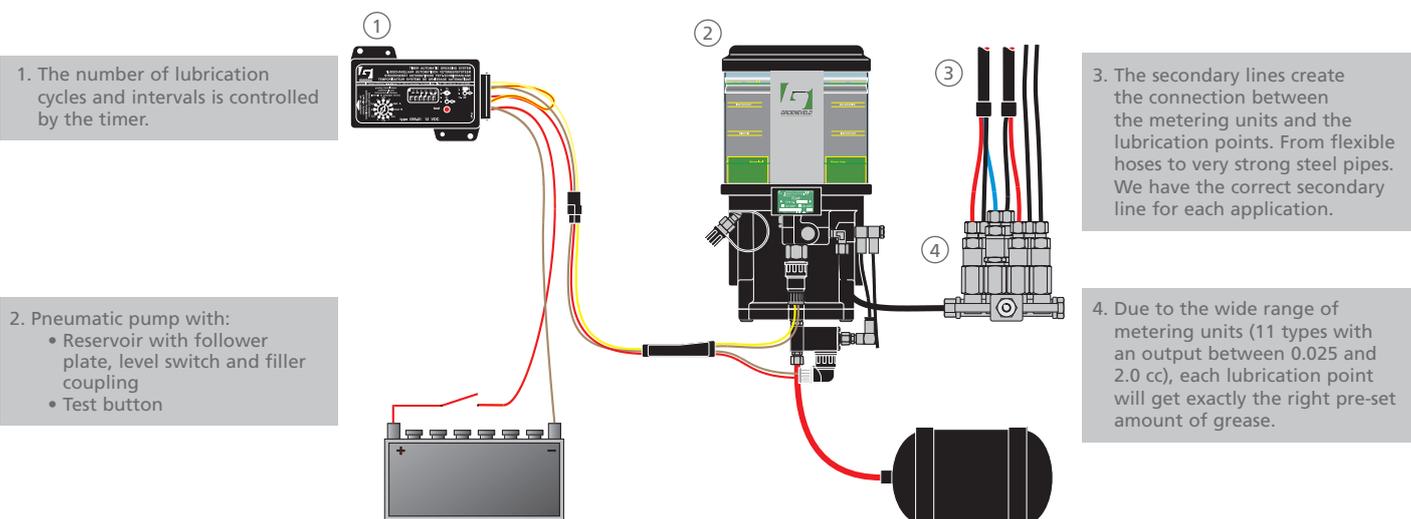
Metering units and distribution blocks

Groeneveld has a wide range of metering units available. These metering units can be mounted in any required combination on brass distribution blocks. The distribution blocks are available in versions with 1 up to 18 outputs.



SingleLine system overview

The SingleLine can be supplied with an electric or pneumatic pump and with an electric timer or a pneumatic brake counter. The system overview below shows a pneumatic pump with an electric timer. Groeneveld employees are looking forward advising you on the right system for your equipment.



Secondary lines

The lines create the connection between the metering units and the lubrication points. From flexible hoses to very strong steel pipes. We have the correct line for each application. The wide range enables Groeneveld to provide a bespoke solution.



Expert installation

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



Major time saving

Automatic lubrication of all bearings, steering knuckles and slewing bearings of the equipment will save you many hours of manual lubrication. Moreover, the equipment is lubricated while moving, a significant benefit compared to manual lubrication. Together with the extended life span of crucial components, this will ensure that the Groeneveld SingleLine has a quick return on investment. On top of that, lubrication on the road by the driver is a thing of the past. And maintenance personnel or drivers do not have to perform dangerous manouvers in order to lubricate difficult to reach points. All this makes the SingleLine automatic lubrication system a clever investment in vehicle availability, efficiency, productivity and safety.

Working principle

When the pump is activated, grease is pumped to the distribution blocks. The metering units on the distribution blocks provide the exact right amount of grease to the lubrication points via the secondary lines.

The right solution for any system

For applications with their own supply of compressed air, the pneumatic SingleLine will be the perfect solution. For all applications without their own supply of compressed air, the electric SingleLine shown here, will be the right solution.



Groeneveld and quality

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



Kits

For the most common applications, Groeneveld is able to provide ready-made kits. These kits contain all components that are needed for the installation. As a result, Groeneveld is able to provide the right solution for any vehicle, in an expert and fast way.

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.



Service is only a phone call away!



TriPlus

Progressive lubrication

TriPlus is a progressive lubrication system that is highly suitable for heavy haulage trailers, for instance, for which lubrication with NLGI-2 grease is prescribed. The system works with relatively low pressure, allowing for the preservation of the quality and structure of the grease. The system also enables very accurate metering at each lubrication point, independent 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 does not only save 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.

10 Good Reasons for choosing Groeneveld automatic lubrication

1. Safety

- An automatic lubrication system will prevent you from having to lubricate the equipment manually, putting a stop to all crawling and climbing in order to lubricate hard to reach lubrication points.

2. Efficient lubrication

- An automatic lubrication system will lubricate the components while they are operational, resulting in a lower downtime of the vehicle.
- Exactly the right amount of grease for each lubrication point.

3. Better lubrication

- Lubrication is the most effective when grease is applied in small amounts and with short intervals.

4. Lower repair and maintenance costs

- Automatic lubrication will extend the life span of bearings, steering knuckles and slewing bearings, as well as other components.

5. Increased uptime

- Less repair and maintenance will improve the uptime of the equipment.

6. Improved operations

- Reduced time loss as a result of manual lubrication, savings on work hours and an increased uptime.
- It will no longer be necessary to stop the vehicle for a lubrication cycle, as it is being lubricated while driving.

7. Higher residual value

- Thanks to the optimum lubrication of moving components, the condition of the rolling stock will be much better at the time of sale.

8. Environmentally friendly

- Improved life span of the components, less grease consumption and no need to put additives in the grease.
- Prevents irritating noises as a result of poorly lubricated components.
- Allows the use of biodegradable grease.

9. The unique product quality of Groeneveld

- Thanks to decades of experience in designing, producing, installing and maintaining leading automatic lubrication systems, Groeneveld is able to supply the correct automatic lubrication system for any application.

10. Groeneveld's professional service and support

- The professional assembly and service by Groeneveld will guarantee many years of use of the automatic lubrication system without any problems.
- The reliable support from the experienced Groeneveld organisation and its independent distributors and service dealers.