



## Groeneveld Durability from within!

With almost 40 years experience, Groeneveld is developing products that help reduce our customers carbon footprint. Our products and solutions will contribute to the optimum efficiency of our customers, improving fuel consumption and reducing the waste of lubricants, all of which help contribute to a healthier environment. At Groeneveld we not only provide our customers with solutions for efficiency, but also set high standards for ourselves internally. Groeneveld aims to optimize all business processes such as energy-efficient applications, the use of fully recyclable materials, waste management, education and training of staff. Groeneveld Group 9001 certified - Groeneveld Italy 14001

## Your efficiency is our challenge!



### Greensight Active security system

Greensight is a modular, active security system that can be composed of ultrasonic sensors, a full-color monitor, an incab display, a smart alarm and various cameras. Greensight helps you prevent damage and personal injury. Greensight can be applied in many ways in trucks, busses, garbage trucks, trains, off-road materiel, wharf cranes, etc. Greensight is the ultimate solution in areas with a high risk of injury or damage.



### BreakAlube Preservation of wrecking hammers

BreakAlube are indispensable when working with wrecking hammers. BreakAlube is a progressive grease pump and it has been used successfully for these heavy-duty and specialized applications for many years. BreakAlube is resistant to extreme operating conditions, ensuring high operational safety and a long life. Important parts of the pump, such as the pump element and the bearings of the drive shaft, have been developed especially for heavy-duty working conditions. BreakAlube can build up a working pressure of up to 275 bar and it is suitable for greasing up to NLGI class 2, also with additives such as graphite and copper.



### Oilmaster Oil level management

Oilmaster reduces the need for manually checking the oil level and topping up between surface intervals. This innovative product guarantees carefree oil management with reduced maintenance costs, oil consumption, time loss and environmental impact, and constant oil quality. Oilmaster is used in the transport, off-road sectors and in stationary installations.



*The right  
Twin for any  
application!*

## Twin Heavy duty greasing system

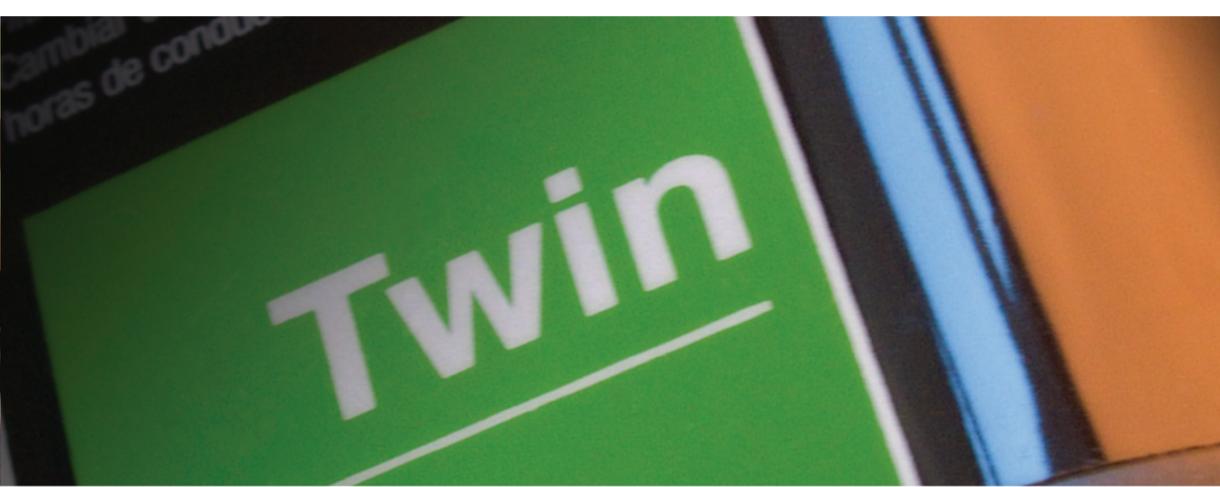
Groeneveld has developed the Twin double-pipe greasing system especially for heavy-duty operating conditions. Twin is suitable for high-quality NLGI-2 grease. The system automatically greases each lubricating point, it monitors the lubricating process and stores operational data in its own memory.

Investments in automatic greasing pay back themselves from the first moment through lower operating costs and greater availability of the equipment.

### Twin, top-class automatic lubrication

A Twin system consists of a plunger pump, a main pipe system to the distribution blocks with dose-measuring devices and a secondary pipe system to the lubricating points. The grease is pumped to the distribution blocks through a double main pipe system.





The dose-measuring devices supply exactly the correct amount of grease to each lubricating point. The pump automatically switches off only when the pressure in all dose-measuring devices is 100 bars. This ensures that always the correct amount of grease is supplied to each lubricating point, independent of the back pressure, temperature or viscosity of the grease, and at an ambient temperature down to minus 25°C.

#### Accurate operation

The dose-measuring devices supply exactly the correct amount of grease to the lubricating points. An electronic time switch or PLC determines the starting moment and the duration of the lubricating cycle. The interval time can be set using the default installed selector switch.

#### Electronics for extra security

The built-in control unit checks the pump for good functioning and the progress of the lubricating process. The default indicator on the display signals a too low grease level or faults. Besides, Twin has its own memory that can be read using a laptop or diagnostics device.

#### Lubricants

Optimum adaptation of the lubricating properties of the grease to the application is of great importance. This is exactly why GreenLube has been developed: a high-quality range of lubricants uniting the best properties of various grease types. GreenLube is available in drums of 18 to 200 kg. Visit our web site for more information about GreenLube.

#### Draw spring system

The Twin grease tank default has suction with draw spring. The use of suction offers great advantages:

- 1) It prevents oxidation of the grease.
- 2) It prevents mixing with condensed water.
- 3) All of the grease is used.
- 4) The tank wall remains clean, ensuring easy visual level checking.



- More than 15 years experience in the field
- It is the only greasing system that can pump 2-grease through dose-measuring devices. Because of this unique application, TWIN can make use of pressure sensors at the lubricating points and the 2-grease is evenly distributed over distance and need for lubrication, even in extremely cold weather conditions.
- The filling system prevents dirt and moist from coming into contact with the grease.
- The suction makes sure that all grease is used and that optically checking the grease tank remains possible.

#### Less wear

Grease reduces wear of moving parts and effectively combats moist, dirt and corrosion.

#### Lubrication during operation

With automatic lubrication a small amount of grease is regularly injected while the machine is fully operational. This results in the best possible distribution of the grease over the bearing surface, a constantly good sealing and considerable reduction of grease consumption.

#### Less lubricating costs

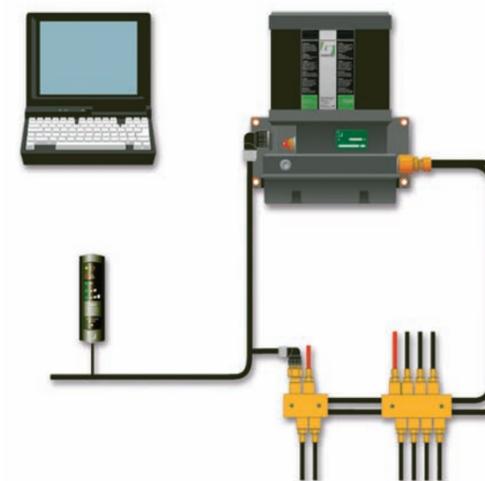
Lubrication during operation and accurate (temperature-independent) grease dosage will on average decrease the grease consumption by 50 percent. Additionally, the grease can be purchased in larger amounts (drums instead of cartridges) and is therefore cheaper.

#### Economic life

Less wear results in a longer life and a higher residual value of the vehicle or machine.

#### Less environmental impact

Lower grease consumption means less waste product in the environment. The closed construction and the tank with suction make the Twin particularly suitable for biologically degradable grease types.



### TECHNICAL SPECIFICATIONS

Pumps:	electric or pneumatic
Number of greasing points:	dependent on the pump, large systems are possible
Control:	digital control unit with its own memory. Connection with PLC possible.
Reservoir volume:	2 to 200 kg
Output:	12 to 350 cc/min
Grease pressure:	100 to 250 bar
Ambient temperature:	-25 °C to + 70 °C (NLGI EP 2-grease)

[www.groeneveld-group.com](http://www.groeneveld-group.com)

