AUTOMATIC GREASING FOR HYDRAULIC HAMMERS

BreakAlube,
When the going

gets tough

As a result of field experience Groeneveld has identified a need for a reliable hydraulic hammer greasing system.

BreakAlube is designed specifically to handle the toughest of conditions and offers excellent operational reliability and long life.



BreakAlube is based on Groeneveld's proven TriPlus progressive grease pump. Vital pump parts, including pump element and drive axle bearings, are entirely new developments. BreakAlube can build up working pressures up to no less than 275 bar and can be used with greases up to NLGI Class 2 including additives such as graphite and copper.

How BreakAlube works

After the hydraulic hammer has been operating for 60 seconds, BreakAlube will start a greasing cycle, in which the preset amount of grease is discharged at the hydraulic hammer greasing point. With the maximum dose, greasing will take 60 seconds.

The grease quantity, 0.2 cc minimum to 4.0 cc maximum per greasing cycle, can be set in the Digital Control Unit. The quantity will be both highly accurate and constant, regardless of the grease temperature or viscosity. This is achieved by measuring the number of pump element strokes.





A warning light in the cab will alert the operator when grease is low, the reservoir empty, or when a system error occurs. BreakAlube also allows automatic hammer deactivation as soon as proper greasing is no longer warranted (activation upon request).

Safety

To prevent damages to the hydraulic hammer or BreakAlube, the system features important standard built-in safety provisions.

- BreakAlube will only grease when the hydraulic hammer is in operation.
 Greasing an inoperative hammer may cause damage in certain situations when the hammer is activated.
- BreakAlube cannot build up sufficient pressure in the discharge line when the grease reservoir is empty or when an external line is damaged. In that case, a pressure switch will automatically switch off the pump.
- If the pressure in the grease pump runs too high, e.g. because the hydraulic hammer is not connected, a built-in safety valve will ensure that the grease is pumped back into the reservoir; eventually, the pump will also switch off automatically.
- Whenever an error or failure occurs, a warning light will alert the operator.
- Optionally, switches off the hammer should proper greasing not be guaranteed.

TECHNICAL SPECIFICATIONS

Grease types: up to NLGI Class 2

Grease output per cycle: 0.2 - 4.0 cc

Maximum working pressure: 275 bar

Operating voltage: 24 Vdc

Current draw: 2 A

Grease reservoir: 3 litres

Digital Control Unit

BreakAlube features a Digital Control Unit that ensures technically correct and safe completion of the greasing cycle. The Digital Control Unit functions are comprehensive:

- The timer function will start the greasing cycle after every 60 seconds of operation of the hydraulic hammer.
- Checks the discharged quantities of grease and monitors the working pressure in the system.
- Monitors the integrated overpressure valve.
- Alerts the operator to system errors and low grease (blinking light). When the grease reservoir is completely empty, the light will be on continuously.
- Optionally, switches off the hammer should proper greasing not be guaranteed.

Diagnosis

The Digital Control Unit features a memory to store parameter settings and operational data. The greasing settings can be changed with a GINA handheld computer.

This device also allows you to read out the memory for diagnostic purposes. Pressing the BreakAlube test button for several seconds also allows the operator to check the cause of any current error during work. The cause of the error is shown by the flashing warning light in the cab.

Standard features

- Heavy-duty tempered pump element for long life
- · Heavy-duty eccentric drive axle bearings
- Under-pressure and over-pressure detection with warning signal
- Grease reservoir with spring-operated follower plate
- Low grease and empty reservoir warning
- Automatic hydraulic hammer switch-off, to be activated upon request

