

# **Centralized Lubrication** for the Food and **Beverage industry**



• Packaging Machines • Filling Lines • Production Lines

**Lubrication Systems for all Applications** 

# **The Lincoln All-round Service**

Safety and Optimum Productivity

Our job is only done when our customer is satisfied and remains so.

Lincoln provides a special performance and service offer geared to all needs of the food and beverage industry. We see ourselves as your competent partner for the engineering, the carrying out, the assembly, the commissioning and, finally, the maintenance of your individualized turnkey centralized lubrication system. Our customers can rely on maximum safety and service when operating their systems. For our extensive service, our highly qualified personnel are at your disposal.

### Lincoln's All-round Service Modules

- Engineering and consulting
- Telephone support
- System house capability
- Installation
- Financing
- Commissioning
- Repairs
- Maintenance programs
- Training

### Your Advantages

- Warranty for the complete system
- Possible warranty extension
- Installation according to legal regulations
- Safe operation of the lubrication system
- Efficient and smooth running system
- Increased economies of scale









Even the most advanced technical components only provide optimum performance if assembly and repair are carried out by qualified and specialized personnel. For this reason, Lincoln service provides improved safety, increased up-time and optimum productivity for lubrication systems.

Contact Lincoln for your lubrication requirements Top in know-how, technology and service.

With five technical support centers on three continents, and a network of hundreds of system houses and distributors supported by regional sales and service offices, our customers can always count on our worldwide resources.

# Quicklub QLS 401



For Grease up to NLGI Class 2

The QLS 401 is a complete lubrication system that includes all necessary monitoring and control functions. All components including an internal over-pressure valve are part of the complete package. The comprehensive list of standard features is a remarkable characteristic of the QLS 401. The integrated, all-in-one system concept reduces installation time and costs.

## **Multifunctional**

The QLS 401 is versatile. An integrated circuit board optimally controls the pause time and the pump cycles to ensure a regular supply of lubricant. All settings are performed with ease via the keypad. Settings and messages are shown on the built-in LED display.

The QLS 401 is also available in a "key lock" version that locks the programming function.

A newly enhanced stirring paddle in the reservoir prevents grease separation - even with long service intervals.

The QLS 401 is designed for all industrial and mobile applications. Up to 18 lubrication points can reliably be supplied directly from the pump and monitored at an affordable price.





#### Sturdy The QLS

The QLS 401 is shock and vibration proof and operates reliably, even when exposed to severe operating conditions such as temperatures ranging from -25°C to +70°C or high pressure wash-downs (IP6K9K, NEMA 4 protection).

## Compact

The QLS 401 is a high-pressure grease pump with a controller and monitoring, a function display and a divider block. All system components and all the functions that are needed to lubricate at a professional level are included.

### System varieties

- QLS 301 grease pump with follower plate
- QLS 421 for truck trailers

Ask your Lincoln representative for further details



#### **System Features**

- 1- or 2-litres reservoir capacity
- Small compact, ready-to-install package
- Space requirements 230 mm x 230 mm x 215 mm (1-litre reservoir)
- Integrated controller with monitoring or optional without controller
- Integrated display and keypad
- Easy refilling please inquire for further information
- Built-in over-pressure valve with return
- Available in 12 or 24 VDC as well as 120 VAC, 60 Hz and 230 VAC, 50/60 Hz
- Attached divider block or (optional) with external divider block
- Internal outlet lubricant return
   possibility
- Large spectrum of usable lubricants: for multipurpose grease up to NLGI # 2
- Optional low-level control

# **Quicklub Progressive System**

Ideal for Individual Machines or Groups of Machines

### **Economical and Reliable**

Quicklub Systems have been designed to meet the toughest requirements of the food and beverage industry. Their operation is based on the reliable progressive principle in which the lubricant is dispensed by a piston pump via progressive plunger metering devices to the lubrication point. The lubrication occurs in metered, timed intervals at a maximum pressure of 350 bar. Thus the lubrication of bearings with high back-pressures is also guaranteed. The pump can serve up to three independent circuits, each with its own pump element, consisting of numerous lubrication points with lubricant.

The system is easy to monitor and ensures that the right quantity of grease is supplied to the lubrication points

### **Quicklub System Benefits**

- No corrosion of the light-weight pump housing which is made of heavy-duty, fiber-reinforced resin.
- The pump motor is protected against damage and moisture (IP6K9K).
- 2, 4, 8 and 15-liter reservoir (Optional with filling from the top and a lockable lid). A special 2 liter flat version is perfect for very low installation areas because it's only 244 mm high!
- Different pump elements with fixed or variable output
- The high-precision progressive metering device in block-form allows pressure differences of 100 bar and eliminates leaks

- Progressive metering device also available in stainless steel
- Multiple outlets of the progressive metering device can easily be internally combined without the need of external connectors
- Over-pressure valve also equipped with an indicator and reservoir return
- PLC controllable or fullyautomatic via integrated circuit board





Filling of Quicklub Pumps: Fast and Easy

#### SSV-D - The new Progressive Metering Device

SSV-D metering devices are adjustable per outlet pair thus enabling an accurate matching to lubricant requirements. The metering occurs within the metering block via metering screws that are available in 10 different sizes. The output of the progressive metering device can be easily changed, even after installation.



Filler with a Quicklub Progressive System

# Quicklub

# Chain Lubrication for Oil or Grease



### **Brush Lubrication**

The Lincoln brush lubrication in conjunction with the Quicklub 203 pump provides an economical entry-level chain lubrication system. The Quicklub range does however offer numerous add-on possibilities. As a result, it fulfils all expectations for an easy, maintenance-friendly and high quality lubrication system.

# Contact Lubrication via Guide Blocks

The main applications for this genuine simple new lubrication system are transport/conveyor chains found in all industries.

This system simultaneously cleans, guides and continuously lubricates the chain - and it has an extraordinary long life thanks to highly wear-resistant plastics that are very robust and insensitive to contamination and knocks.

The system is patent pending and underlies protection of registered design No. 20210758.2.





# MOS 201

# Mechanically Driven Oil Lubrication Pump – For the Oil Lubrication of Slow Moving Chains

The MOS 201 - a mechanically driven oil lubrication system consists of multiple mechanically driven oil pumps -MOP 201. The pumps are connected directly to the chain.

The system is suitable for continuous operation. A typical industrial application is for packaging machines such as palletizers. The MOS 201 lubrication system makes it possible to lubricate several, independently run chains. It is especially suitable for applications that require lubrication of more than 5 chains. Each chain and lubrication point uses one lubrication pump. The centralized oil supply to parallel pumps is provided by a ring feed connection.

#### Validated Environmental Information

The mechanically driven MOP 201 pump is an advancement of the MOS 101 that was developed for agricultural equipment. It is especially suitable for stationary industrial applications with more than 5 chains – e.g. palletizers. The connection takes place via an existing oil ring circuit. The separate pump element is connected directly by a Bowden cable with the drive, so that the defined individual lubrication of a chain is possible.





Lincoln Environmental Declaration: www.lincolnindustrial.de/Company

# Reputable Centralized Lubrication Systems - Turnkey Solutions

## The Answer for Production Lines

Lincoln lubrication systems are designed to keep your production line running, and to match your needs. Our systems help reduce your maintenance work. Depending on the application, systems such as two-line, single-line or sectional systems are all part of the Lincoln range.



Container supply system

#### **Experience Productivity:**

- Lincoln complete system guarantee
- Decades of experience in serving our customers
- Ensures process safety
- Quick Payback
- Self-manufactured pumps and metering units
- Choice of reservoir, drum or container type pumps
- PLC controllers with Field Bus system that minimizes wiring and maximizes efficiency

## The Classic Helios Two-line System

Two-line systems are used to supply lubricant to lubrication points of entire filling and packaging lines. One centrally located pump is capable of reliably supplying over 2000 points with lubricant. A higher flexibility in the metering of lubricant is achieved in combination with Quicklub progressive metering devices. Also the cost effectiveness speaks for a combined system. Helios two-line systems may be extended at any time.



Features

- Perfect for widely dispersed lubrication points
- Visual or electrical monitoring of each outlet pair
- If one bearing should block-up, all other outlet pairs continue to supply lubricant
- Simple and individual metering of the lubricant - each outlet pair can be adjusted separately
- Metering devices also available in stainless steel
- Intelligent control which automatically adjusts the minimum required system pressure - thereby increasing life-span of components





# **Reputable Centralized Lubrication Systems – Turnkey Solutions**

# **EZHS Lubrication System**

Lincoln has developed a revolutionary lubrication system specially designed for the lubrication of entire filling lines or production lines in the food and beverage industry. The EZHS grease lubrication system is ideal for production lines that have numerous lubrication points that are spread out over great distances or that require different lubrication intervals dependent on the zone or section of the production line. The system is based on the combination of a single-line/ two-line concept. The EZV metering device is rated at 400 bar pressure and can be electronically monitored, and it requires only one mainline connection. As a result, the EZHS provides the same safety features and advantages of a conventional two-line system at a more economical price as material and installation costs are saved. In combination with the outlet connection possibility to two secondary metering devices, and the large supply quantity (adjustable up to a maximum of 5 cm<sup>3</sup> per stroke), a larger number of lubrication points can be served.





#### A New Installation Concept Provides Improved Hygienic Aspects in Bottling Plants

Hygienic requirements are on the increase for filling operations and hence also for machine and system manufacturers. Besides stricter regulations and standards, another reason for this may be attributed to the development of new and innovative drinks that are more complex.

The demand for Mix and Wellness drinks, as well as Low-carbonated mineral water is escalating. The spore-free filling of these drinks poses diverse requirements on the filling process. As a result, nowadays the conceptual prerequisites of a filling line pertaining to a hygienic design tend to involve more the complete system, thereby also including the conveyance of containers and packaging

A problem with maintaining the cleanliness of the filling area has formerly been the piping and components of the lubrication system which are traditionally tightly and closely mounted together on the conveyors. The pipes could therefore not be properly cleaned from all sides, thus facilitating the build-up of particles and contamination in the voids.

Lincoln has developed an installation concept especially for the food and beverage industry that enables metering devices and piping to be suspend-mounted. As a result, the components can be fully cleaned or rinsed from all sides, thus fully removing any particles and/or contamination.



A new standard has been set, especially for filling lines with sensitive products.

# **Centro-Matic**

**Flexible Single-Line System** 

Centro-Matic single-line systems are used when the quantity of lubricant per point largely differs. The flexible and direct operating Centro-Matic injector has a metal-to-metal fit and spring-loaded metering pistons that can supply lubricant at high pressures (up to 240 bar for grease and 68 bar for oil). Thus, oil and grease up to NLGI class 2 may be used.

Each independently operated injector serves only one lubrication point and may be accurately adjusted to deliver the precise amount of lubricant required. Provided the pump capacity is sufficient and the tube dimensions are appropriate, the system may be enlarged at any time.



Canning machine with injectors

#### Features

- Individual metering per lubrication point
- Visual monitoring
- Lubricant supply at high pressure · Simplicity - easy to understand
- and install
- Extra lubrication points may easily be added
- · Injectors also available in stainless steel or for high temperature applications

#### **Centro-Matic EVD-FL-Injectors**

Based on the proven Centro-Matic injectors, a new generation of oil injectors made from aluminum in a maintenance-friendly flanged version was developed.



# Advantages of Automated Lubrication



- Increased profits and productivity
- Lower costs for repairs, spare parts and lubricant
- Improved operating times; less costly downtime
- Longer maintenance intervals Dramatic reduction in lubrication related bearing failures
- Significant contribution to safety and the environment



Lincoln GmbH Heinrich-Hertz-Str. 2-8 69190 Walldorf · Germany phone + 49.6227.33.0 fax + 49.6227.33.259

lincoln@lincolnindustrial.de www.lincolnindustrial.de © Copyright 2008 Printed in Germany Form W-133-En-0408

