





# CENTRALIZED LUBRICATION SYSTEMS FOR FOOD AND BEVERAGE INDUSTRY

for an higher productivity

Solutions for:

Conveying machinery Glass filling machinery Labelling machinery Washing machinery Bread divider machinery

...and many more!











## CENTRALIZED LUBRICATION SYSTEMS

#### **ECONOMICAL & RELIABLE**

Insufficient lubrication brings machines and lines to a screeching halt. Proper lubrication saves valuable time and makes maintenance routines simple. ILC systems have been designed to meet the toughest requirements of the food & beverage industry. Their operation is based on the reliable progressive principle in which the lubricant is dispensed by a piston pump via progressive dividers to the lubrication point. The lubrication occurs in metered, timed intervals at a maximum pressure of 250 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.

#### **ILC 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.
- 2, 4, 5 and 8 litre reservoirs.
- 3 different pump elements with fixed or variable output.
- Over-pressure valve also equipped with an indicator.
- PLC controllable or fully-automatic via integrated circuit board.
- Installation can be performed with threaded or ILC fittings.
- The high-precision progressive metering device in block-form allows pressure differences of 100 bar and eliminates leaks.
- Multiple outlets of the progressive metering device can easily be internally combined without the need of external connectors.
- Progressive metering device also available in stainless steel







## CENTRALIZED LUBRICATION SYSTEMS

#### ILC-MAX

The ILC-MAX is a complete system. It comes pre-assembled with everything a system needs: all kit components and a built-in overpressure valve. No system assembly is necessary as is usually required with common lubrication systems. Lubrication points can be supplied with NLGI 2 grease or oil directly from the pump at an affordable price. The long list of standard features is a remarkable characteristic of the ILC pump.

#### Ideal for:

- Machines with few lubrication points
- Chain lubrication
- Isolated lubrication points

#### It's compact

The ILC-MAX is not only a pump. It contains a control and monitoring unit and a divider block as well. ILC-MAX has all the components and all the functions needed to lubricate at a professional level. The compact design makes it easy to find an installation location even in the most unthinkable places.



The ILC-MAX may be small, but its performance is powerful. It can

handle temperatures ranging from -25°C to +70°C, variable mounting positions and high pressure washdowns (IP6K9K, NEMA 4 protection).

#### It's Multi-tasking

The ILC-MAX features multi-tasking. An integrated circuit board optimally controls pause and operating times, monitors the function to ensure lubricant is fed, and allows additional lubrication cycles to be initiated. Settings are always at your fingertips – all settings are performed with ease via keypad. Settings and messages are shown on the built-in display window.



#### Standard Features:

- Complete, compact system ready to use "out of the box"
- Variable mounting position
- Integrated circuit board with system function monitoring
- Integrated display and keypad
- Standard low-level control
- Built-in over-pressure valve
- Internal lubricant return possibility
- Available with or without attached divider block (up to 18 outlets)
- Optional external fault contact







## PMU PUMP FOR BREAD DIVIDERS MACHINES

- Oil pump PMU has a maximum of 12 outputs and is driven by a shaft positioning in the below body pump. Every piston drives two outlets in pair, placed one over the other.
- The pump shaft works as cam and is linked over the cam disk which drives pistons while suction and delivery phases.
- Delivery and suction are synchronized by mean the shaft rotation, through lateral and longitudinal holes.











## CENTRALIZED LUBRICATION SYSTEMS

# The Path to Cost Reduction Automated vs. manual lubrication

Insufficient lubrication brings machines and lines to a screeching halt. Proper lubrication saves valuable time and makes maintenance routines simple.

A lack of lubrication can bring your machines and production lines to a screeching halt. The increased cost of lubricants and maintenance duties, coupled with a higher machine value, drives the need for automatic, centralized lubrication systems. Harsh conditions such as water, soap and mechanical loads cumulatively result in a high wear

rate of bearings and friction points.

Lubrication is therefore absolutely necessary in order to provide the right protection. Lincoln lubrication systems are a reliable means of regular lubrication. While the machine is in operation, the lubricant is automatically delivered in time-controlled and metered quantities to all connected points in the system. Lubrication "in motion" ensures that the lubricant is optimally and evenly distributed within the bearing, thus reducing friction and premature wear. This is the ultimate form of lubrication applied in a systematic manner. Increased safety is another important factor. Dangerously located or hard to reach lubrication points no longer need to be accessed by hand. What's more, is a reduction in maintenance costs by the elimination of time consuming, tedious tasks and a reduction in lubricant consumption.

#### Large Savings = Fast Payback

The installation of a centralized lubrication system drastically reduces repair and maintenance costs. In addition lubricant consumption is cut and the life span of wear components is increased. This automatically reduces downtime and operation costs.

- 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 contributions to safety and the enviroment



## OVERLUBRICATION: dirty machines and environment

UNDERLUBRICATION: wear and high repair costs