

# Lincoln automatic lubrication systems

The industry's most complete resource for knowledge-engineered lubrication solutions



# Minimizing friction and wear

The true potential of proper lubrication can be realized in most markets, including ...



*Railroad*



*Wind industry*



*General industry*



*Oil and gas*



*Heavy industry*



*Construction and mining*



*Agriculture*

# We offer more than 100 years of innovation

The SKF lubrication systems portfolio primarily is comprised of two distinguished brands – SKF and Lincoln. Recognized individually for superior quality products, we provide increased capacity for reliable solutions throughout the lubrication industry.

Since the acquisition of Lincoln, our two brands have combined extensive research and development efforts to ensure continued innovation in the global market. As our customer, you will benefit from leveraged technology and the SKF Life Cycle Management approach to reduce total cost of ownership and maximize productivity through every stage – from specification and design to operation and maintenance.

Together, Lincoln and SKF are positioned to become your preferred supplier for best-in-class products and services. Our shared sales channels offer extensive geographical coverage and reach, while our experienced product specialists continue to provide unique lubrication solutions based on the needs of our customers.

The Lincoln brand contributes to and benefits from SKF's deep knowledge of friction reduction and tribology supported by multiple technology platforms – bearings and units, lubrication systems, seals, mechatronics and services.

## Benefits of an automatic lubrication system

### Lower maintenance cost and longer service life

- Bearing, gear and chain life are increased by applying small measured amounts of lubricant frequently while the machine is operating, thereby improving machine life.
- Labor for manual, point-by-point lubrication is eliminated.
- Labor for repair is reduced due to fewer bearing failures.

### Increased production

- Eliminates lost production due to required machine shut-down time for manual lubrication.

### Improved safety

- Prevents accidents that can occur trying to manually lubricate hard-to-reach lubrication points.

### Lower energy cost

- Improved lubrication for bearings, gears and chains translates to lower friction and lower energy cost.

### Environmental improvements

- Lincoln systems measure the exact amount of lubricant required. Waste, product contamination and spillage issues are substantially reduced.



# Quicklub

## System overview

Quicklub progressive lubrication systems dispense small, measured amounts of lubrication at frequent intervals while the production machine is running. These reliable systems are designed to provide a relatively simple and inexpensive method of automating the lubrication process.

## Quicklub divider block

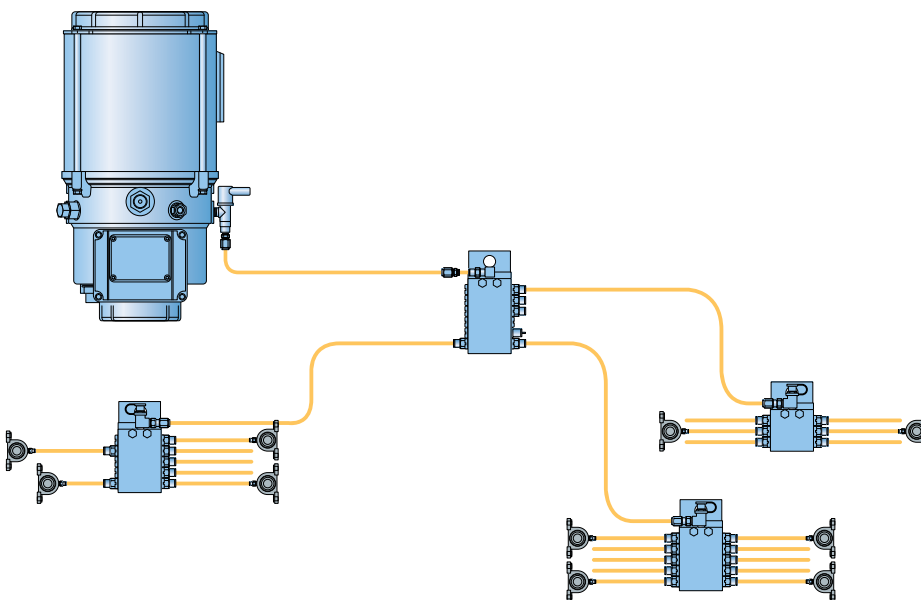
The heart of the Quicklub system is the patented SSV divider valve. More than a drilled manifold block, SSV valves incorporate a series of metering pistons which accurately dispense lubricant from each outlet (from six to 22), overcoming back pressure of up to 4 000 psi (275,8 bar). The high-pressure capability helps to ensure lubricant is delivered to each bearing.

The metering valve can be cross ported to increase supply to a variety of bearing sizes. Visual monitoring is provided with an indicator pin, which confirms a valve has completed a full lubrication cycle.

Valves are made of solid steel, one-piece construction which means there are no seals, O-rings or springs to wear out and allow leakage.

## Quicklub pump features

- **No air required**  
Available in 12 and 24 V DC and 120 and 240 V AC models
- **Wide range of reservoir sizes**  
From 34 oz. to 4 gallons (1 to 15 liter)
- **Integrated alarm options**  
For low reservoir and blocked lubrication line detection
- **Flexible control options**  
Integrated controls or PLC-compatible models
- **Data logging**  
Pump models are available that store system operation history
- **Manual override fitting**  
Even if the pump requires service, the machine can be lubricated manually





# Modular Lube

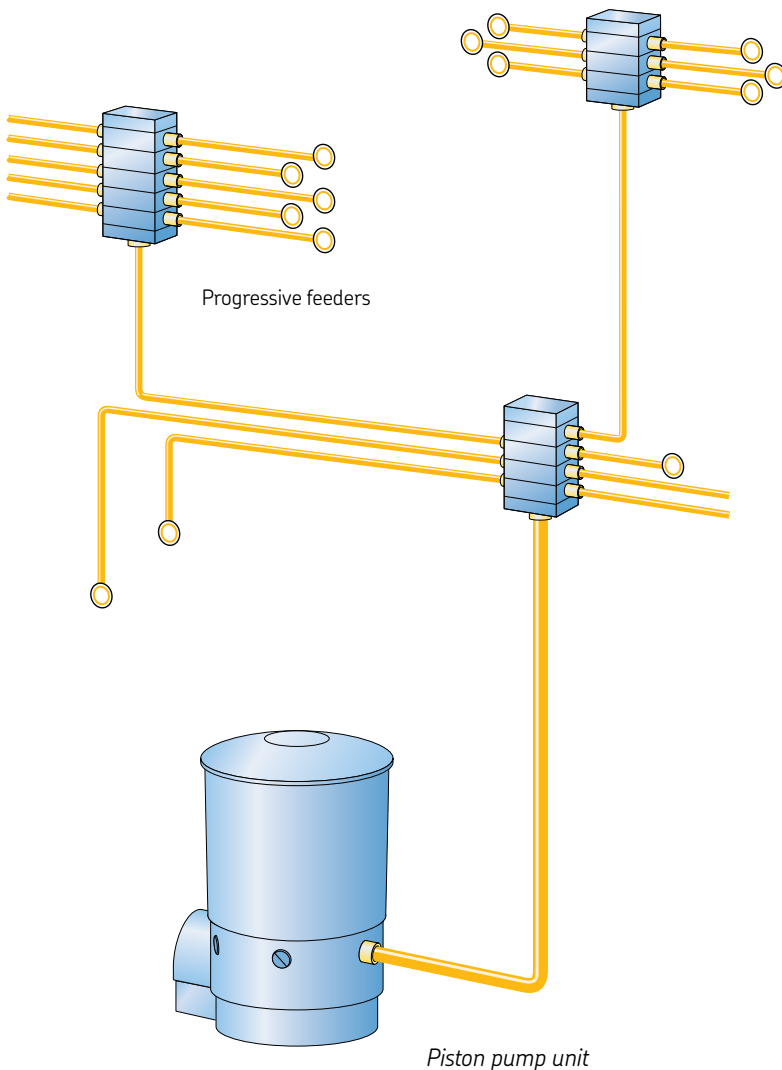
## System overview

Similar to the Quicklub system, a Modular Lube system utilizes a pump to move grease or oil to the lubrication point via metering valves. Consisting of a pump, controller or timer and a progressive metering valve, users choose a Modular Lube system when higher volumes of lubricant are required at each lubrication point.

Modular Lube valves are custom-sized for each series of lubrication points and can be serviced without disturbing the primary installation. Individual valves can be configured with a single or twin designation. The single outlet is capable of delivering twice as much lubricant as a valve configured as a twin.

## ModLube features

- Requires less piping and tubing, reducing costs
- Precision machined piston-to-bore tolerance fit reduces internal by-pass
- Modular concept allows faster changing of metering valve sizes





# Centro-Matic

## System overview

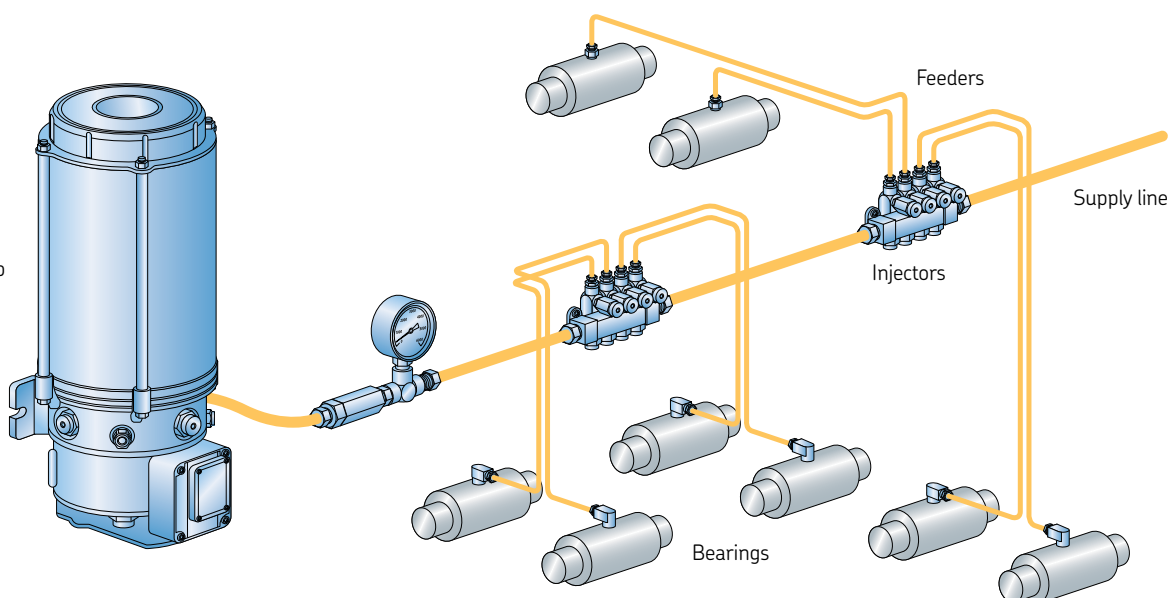
An air, hydraulic or electric pump automatically develops lubricant pressure through a single supply line to the injectors. Each injector services one lubrication point and may be accurately adjusted to deliver the precise amount of grease or oil required for each bearing. Both oil and grease injectors are available in various output ranges, in stainless steel and in high-heat models.



## Centro-Matic system features

- **Extremely flexible**  
Easy to add or reduce lubrication points
- **Adjustability**  
Injector outputs are adjustable – down to 0.001 in.<sup>3</sup> (0,016 cm<sup>3</sup>)
- **System monitoring**  
Alarm systems are available to monitor pressure, low reservoir level and the flow of lubricant at the bearing (System Sentry)
- **Capable of pumping long distances at high pressures**  
More than 300 ft. (91,4 m) with grease, pressures up to 6 000 psi (414 bar) depending on the injector and pump models
- **Large number of lubrication points**  
More than 500 lubrication points (depending on bearing size)

P653S electric Centro-Matic pump



# Two-line systems

## System overview

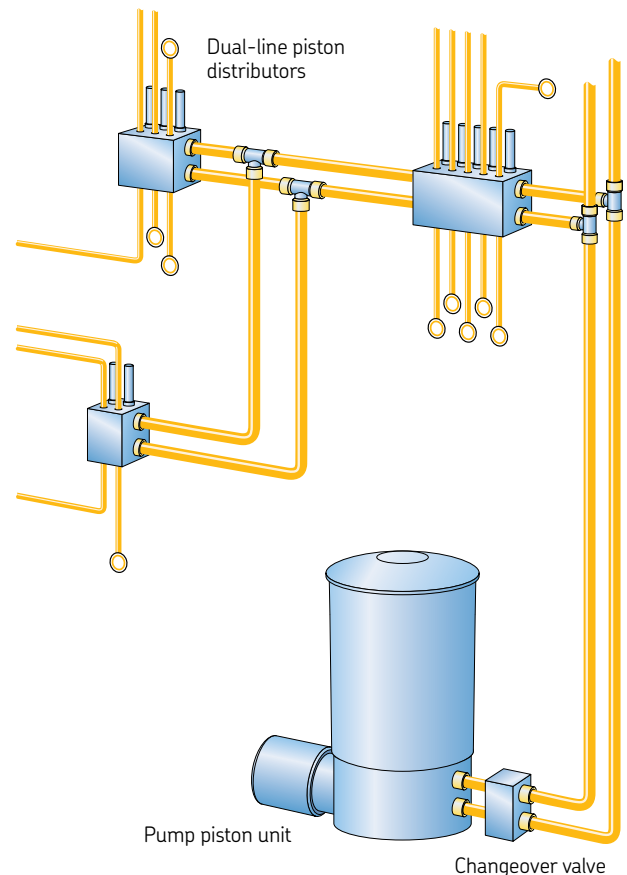
The advantage of a two-line system is that it supplies an exact metered quantity of lubricant from one pump station over large distances to many points (up to 2,000).

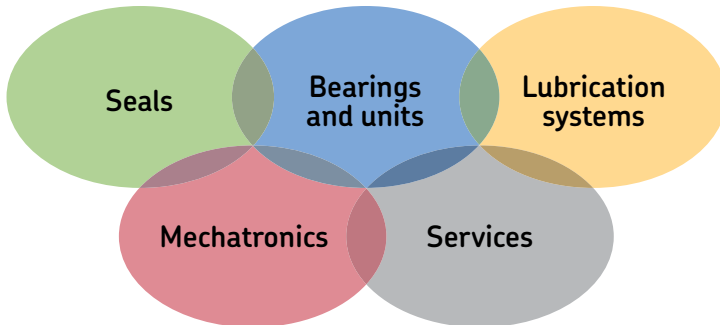
The metering devices are operated by two main lines, whereby the lubricant is the control medium of the system.

The two-line system can be combined with secondary progressive metering devices, thereby increasing the total number of lubrication points that are served by a two-line metering device.

## Two-line system features

- Ideal for rigorous conditions (i.e., cold temperatures)
- System can be extended at any time
- Perfect for widely dispersed lubrications points
- Visual or electrical monitoring of each outlet pair
- System continues lubricating even if one lubrication point becomes blocked
- Simple and individual metering of the lubricant – each outlet pair can be adjusted separately
- Intelligent control automatically adjusts the system to use the minimum required system pressure – thereby increasing the service life of components





### The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management services. A global presence provides SKF customers uniform quality standards and worldwide product availability.

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