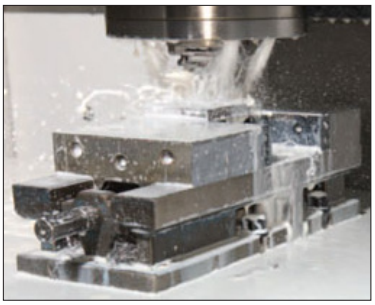
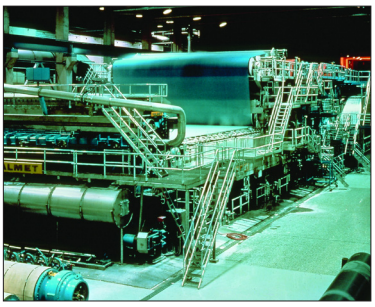




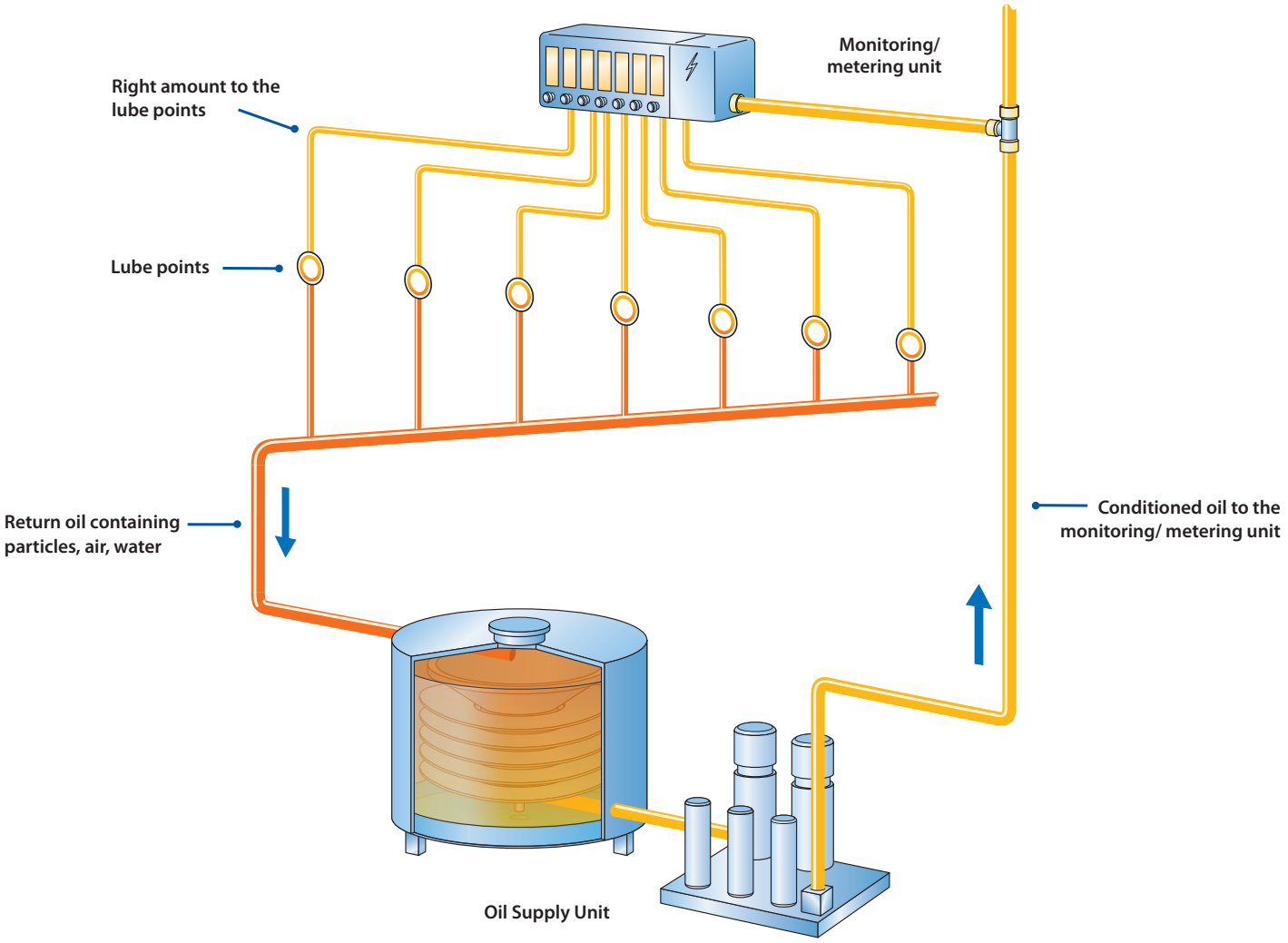
COMPONENTS LTD

CIRCULATING OIL LUBE SYSTEMS

- √ Lubricate Friction Points
- √ Control Temperature of Friction Points
- √ Remove Particles from Lubricant
- √ Proactive Maintenance through System Monitoring

CIRCULATING OIL LUBRICATION SOLUTIONS

Contamination is a fact of life in many mill systems. Conditioning oil with a Circulating Oil Lubrication System will contribute greatly to optimizing the lubrication and maintenance of your critical equipment. In contrast to total loss lubrication systems (where lubricant is not collected after it is applied to the lube point), in a CircOil Lube System, after the oil passes through the lubrication point, it is collected and reused. In addition to lubricating, circulating-oil systems perform a range of other functions, including: maintaining the lubrication points at a proper temperature, filtering out wear particles from friction points, preventing corrosion, and removing water condensation.



SYSTEM OPERATION

FLO's SKF CircOil systems include a wide range of tailor-made and turnkey solutions for flow rates from 0.1 to 300 l/min. Oil stored in the Oil Supply Unit is continuously pumped out and separated by hydraulic resistors (orifice tubes, adjustable metering valve distributors, throttles, etc.), flow limiters or progressive feeders, or multi-circuit pumps (multi-circuit gear pumps or multi-circuit piston pumps with one pump each per lube point). The right amount of oil is distributed to the lubrication points. The actual feed rates can be controlled visually or electronically. Monitoring systems with individual warning levels are available for a more predictive maintenance approach. Once it's passed through the lubrication points, oil containing particles, air and water is fed back through a return line into the Oil Supply Unit where it is reconditioned and reused.

Benefits

- Efficient cooling and lubrication
- Removal of particles
- Removal of air, condensation and process water
- Integrated condition monitoring
- Demand-based distribution of lubricant which can be monitored

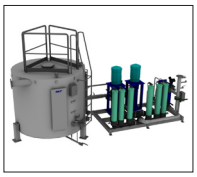
CIRCULATION OIL SYSTEMS FOR EVERY APPLICATION

SKF Oil Conditioning Unit

SKF Oil Conditioning Units are low-volume off-loop or kidney loop systems. Installed directly onto existing machinery, a unit provides continuous oil filtration to remove contamination and includes a cooler to maintain the operating temperature of lubricating oil. It helps to: protect machinery from unexpected failures; protect oil, extending its useful service life; and extend machine service life by reducing wear and improving lubrication. The design is fully integrated with a minimal number of connections and apart from periodic filter changes, there is no need for regular maintenance. These units are used effectively in many applications such as large bearing housings, compressors, turbine systems, vacuum pumps and gearboxes. They can be useful on machinery where the existing filtration is not satisfactory or does not exist.

SKF Compact Circulating Oil Lubrication System

SKF Compact Circulating Oil Lubrication Systems are complete, self-contained systems designed for smaller applications such as stamping presses, punch presses and crushers. Each unit is locally assembled and tested for flow, pressure, sound levels and proper operation. Standard units usually include: electric motor and pump, oil filters, level indictors, flow meters, pressure gauge and steel oil reservoir.



SKF Flowline Circulating Oil Lubrication System

The SKF Flowline system was developed to provide superior air and water separation performance for industries with high-volume oil circulation applications for cooling and cleaning the lubrication points, such as Pulp & Paper. The system works at high temperatures and eliminates contaminants such as abraded particles, oxidized particles, water, and air bubbles. Traditional systems use large reservoirs, have typically less than half of the oil in effective circulation, and have inefficient air and water separation. The Flowline oil reservoir's revolutionary construction provides a better oil utilization ratio (over 90%), superior removal of air bubbles and water, has a volume only 1/3 to 1/2 of traditional reservoirs, saves energy by using a variable frequency AC-drive, and dramatically reduces oil consumption.

Lincoln FCS Fluid Circulation System

FLO's Lincoln Fluid Circulation System for open gears and support rollers has been developed to be able to use highly viscous lubricants specifically designed to suit the operating conditions of large girth gear drives. It can be used for lubricating single, double or multiple pinion drives. Lubricant is continuously applied to the gears, collected, filtered and returned to a reservoir to be re-used. The lubricant is taken in either via an immersion bath or via a separate reservoir, pumped through lubricating pipes and excessively applied onto the load-carrying tooth flanks, as the machine operates, to clean and cool the driving pinions. The separate reservoir system version also allows heating of the lubricant for outdoor applications during winter seasons. A complex filtering component ensures that the lubricant is free from contamination.

OIL DISTRIBUTION AND MONITORING

Screw-In Restrictor

- Restricts continuous flow to a specific value
- Volume per lube point: 0.2 to 230 ccm/min
- Unlimited number of lube points
- No monitoring of lube points, main line pressure monitoring possible

Metering Valve Distributor

- Restricts continuous flow to a adjustable value
- Volume per lube point: 0 to 2,000 ccm/min
- Unlimited number of lube points
- Visual monitoring of lube points, main line pressure monitoring possible

Flow Monitor with / without Adjustable Valve

- Restricts flow between adjustable min/max value
- Volume per lube point: 50 ccm/min to 14 l/min
- Max number of lube points: 20
- Monitoring: Oil flow of each lube point

Flow Limiters

- Divides large flow into parallel individual flows
- Volume per lube point: 0.1 to 130 l/min
- Unlimited number of lube points
- Precise measurement of actual flow

Progressive Feeders

- For use in oil or grease lubrication systems
- Unlimited number of lube points in combination with flow limiters
- Monitors Feeder cycles by piston detector

SKF Safeflow Variable Oil Flowmeter

- Adjustable for specific amount per lube point
- Volume per lube point: 0.04 to 56 l/min
- Unlimited number of lube points
- Monitoring: Common alarm per bank of flow meters or individual alarm per lube point

SKF Flowline Monitor Turbine Flowmeter

- Adjustable for specific amount per lube point
- Volume per lube point: 0.05 to 50 l/min
- Unlimited number of lube points
- Monitoring: Precise measurement of temp., pressure and flow, group alarm, individual point alarm, Modbus, Profibus, Ethernet

THE FLO DIFFERENCE

FLO has been the leading distributor for Lincoln in Ontario since 1977 and has received the Lincoln "Distinguished Distributor Award" which is awarded annually for outstanding sales performance to one or two distributors in North America, in 1999, 2002, 2005, 2007 and 2010. We are committed to "Meeting Customers' Needs Better" with qualified, well trained people who focus at making us the best at responding quickly, at installing professionally and at providing quality customized lubrication solutions for all our customers - done right the first time. Our clients understand that they're not dealing with "just another lube equipment supplier". They consistently choose FLO because they know they can trust and rely on FLO to take care of them, quickly and professionally. It is with this level of expertise and commitment that FLO will design, install and maintain a Circulating Oil Lubrication System for you.

FLO Components Solutions include:

- Systems Design
- Auto Lube Systems
- Fluid Dispensing Systems
- General Lube Equipment
- Specialty Lubricants

- Trouble-shooting
- Lubrication Audits
- Complete On-Site Personnel Training
- Scheduled On-Site Maintenance Programs
- Factory Authorized Warranty & Service Facility

THE FLO EFFECT

Experience - We have helped industry leaders improve productivity and reduce operating costs with "peace of mind" Solutions for over 35 years.

Flexibility - We meet the requirements of your most demanding applications with the largest range of products and services in your local area.

Fast Response - Guaranteed within 24 hours.

Expertise - All our technicians have a skilled trade ticket, are participating in an apprenticeship program or have applicable industry experience. We service products from Lincoln, SKF, Mityvac, CoreLube Equipment and Graco, as well as most other major lubrication equipment manufacturers' brands.

Convenience - Our industry exclusive Mobile Workshops and our ability to create your solution "on site" frees up your resources to focus on your core business.

Trust - 90% of our business comes from customers who have relied on us for over 10 years.

INTERTEK ISO 9001:2008

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For Total Lube Solutions,

GO WITH THE FLO!

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