



combine



grapes



corn



tomatoes



roundbalers



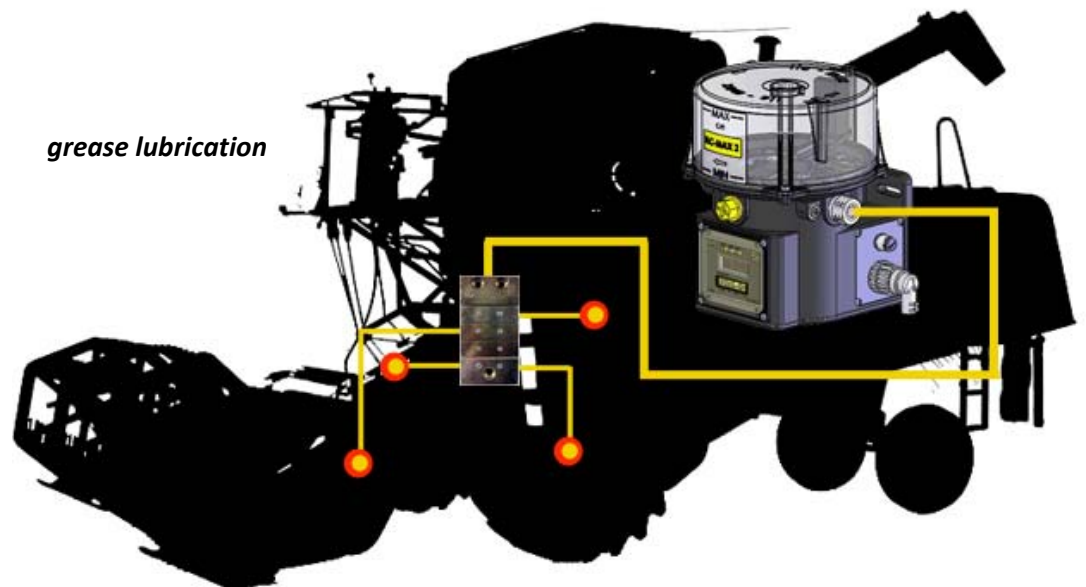
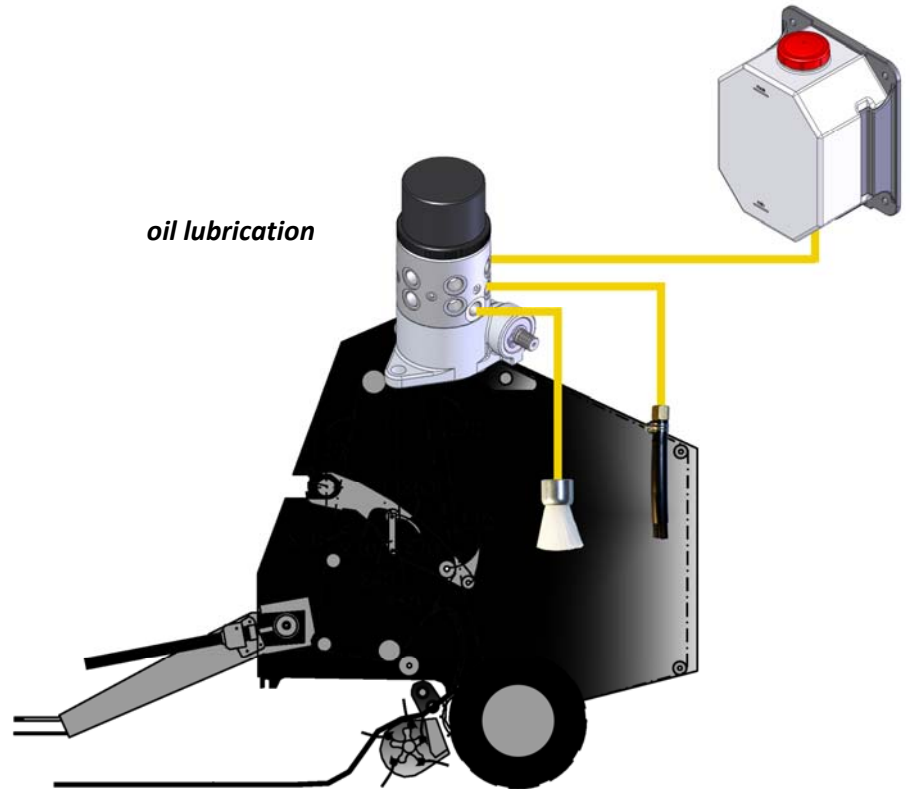
squarebalers



potatoes

CENTRALIZED LUBRICATION SYSTEMS
FOR FARM MACHINERY

lower downtimes
lower wear



USING CENTRALIZED LUBRICATION SYSTEM YOU CAN SAVE A LOT OF TROUBLE AND COSTS

A centralized lubrication system provides bearings with a continuous supply of lubricant at certain intervals, and it does so when the machinery is in operation and all the bearings are moving.

ADVANTAGES:

- machinery availability improved
- bearing life increased four times
- maintenance and repair costs drastically cut
- machinery and personnel expensive downtimes cut
- it saves lubricant up to 40%
- it protects environment



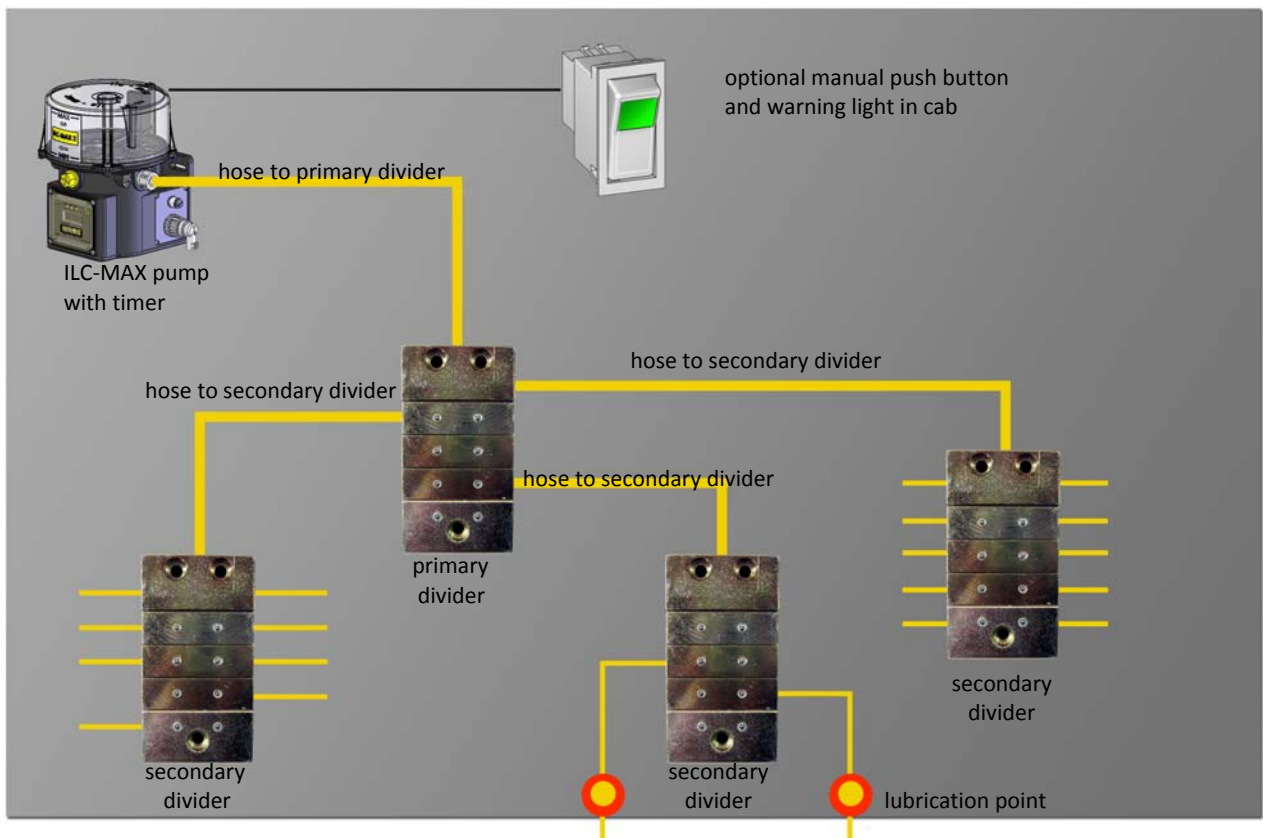
ILC-MAX 2 installed on a harvester combine



HOW THE LUBRICATION SYSTEM WORKS

System description

A typical system includes an automatic electric pump, progressive dividers, main hose and secondary hoses and timer with custom settings. ILC pump combines a reservoir, pump and control system into one unit. Available control options include the ability to notify the operator of a system failure using a special light in the cab. The lubricant flow created by the pump is divided in the progressive distributor and evenly distributed to each bearing according to their needs.



System operation

1. The pump is actuated automatically by an internal adjustable timer.
2. Lubricant flow starts and it is delivered to the primary divider through the main hose.
3. The primary progressive divider distributes lubricant in metering amounts to the secondary dividers.
4. The secondary dividers proportion the grease and deliver exact metering amounts to the bearings according to their specific needs through secondary hoses.



ILC PUMP FEATURES

The ILC pump

Designed for the harsh environment of the construction and mining industries, ILC pumps are loaded with features:

- Available in 12 V DC and 24 V DC, 24 V AC, 115 V AC and 230 V AC.
- Capable of dispensing no. 2 NLGI grease (oil systems available).
- Optional low-level alarms and system operation alarms with warning lights in the cab.
- Reservoir (2, 4, 5 or 8 litres) can be refilled through a grease fitting, typically every 100 to 350 hours of operation.
- All pumps have high-pressure capability to help ensure grease is delivered to each component.
- A blocked lubrication point can be detected at the pump or in the cab with the optional alarm and warning light.
- Pump controls run-time with built-in timer.



ILC PROGRESSIVE DIVIDERS FEATURES

ILC progressive dividers

The heart of the ILC system is the progressive divider. These dividers utilize unique internal pistons to precisely divide the grease flow to help ensure each bearing receives the proper amount of lubricant.

- Operating pressures of up to 280 bar. The divider delivers grease to every point, even under heavy loads.
- Standard dividers can be ported to deliver more grease to specific lubrication points.
- If the pump is ever damaged, the system can be cycled from the grease fitting on the pump or primary divider.
- Dividers are available with cycle indicator pins to provide visual indication of operation.
- With advanced monitoring, a proximity switch sends a signal to the pump when the system has completed a lubrication cycle to each bearing.



**MANUAL LUBRICATION AGAINST
AUTOMATIC CENTRALIZED LUBRICATION**

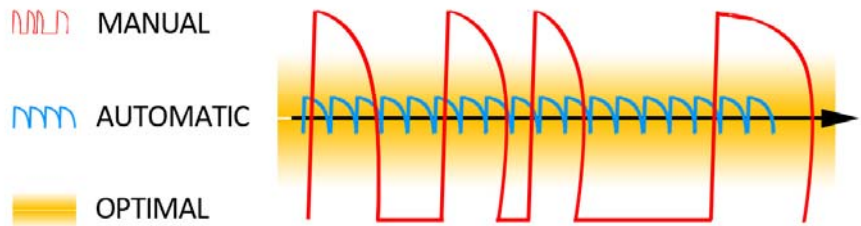
little, exactly metered
amounts of lubrication
are supplied at exact
intervals while machine
is running

friction points are in
motion, so optimum
distribution of
lubricant is guaranteed
throughout bearings

low lubricant consumption

bearing life 4 times longer

OVERLUBRICATION: dirty machines and environment



UNDERLUBRICATION: wear and high repair costs



*DPX progressive divider mounted
on a corn harvester*



*Lube point
on a square baler*



*Lubrication of the front axle
on a tomatoes harvester*

CHAIN LUBRICATION FOR FARM MACHINERY

Chains are among the most important power transmission elements in farm machinery, and they must be carefully lubricated. The traditional, manual method of lubrication carries a risk of inadequate lubrication. This results in premature wear and impairs the chain's operation. The costs associated with a chain failing due to insufficient lubrication are both inconvenient and usually very substantial. It does not have to be this way, though. You are always on the safe side with automated chain lubrication systems, which reliably provide driving chains with optimum lubrication.

Applications

- Spreaders
- Loading wagons
- Round-baler
- Self-loading forage wagons
- Silage wagons
- Tipper trailers
- ...and many more!

Chains and chain wheels like it smooth

Automated systems periodically relubricate the driving chains while the farm machine is operating. Just how this works is shown using a mechanically driven ILC chain lubrication system as an example. Our system utilizes the farm machine's chain wheel rotation to build up the pump pressure required for lubrication. Screw-in restrictors are used to regulate the flow rate.

The metered oil is fed directly to the chain through pipes which have brushes at their end. The lubricating brushes ensure that the lubricant is applied equally across the entire width of the roller, which provides an optimum supply of creeping lubricant to chain link plates and pins and chain rollers.

Advantages of automated ILC chain lubrication systems

- An economical system that pays for itself
- Efficient resource handling
- No unnecessary environmental pollution
- Exact adherence to lubrication intervals
- Exact metering of lubricant
- Extension of chain service life
- Increase in operational reliability
- Increase in wear resistance
- Reduction in risk of failure

