

A.T.S. ELECTRO-LUBE INTERNATIONAL INC.



**Automatic Electronic
Lubricant Dispenser**

The ELECTRO-LUBER™ DISPENSER

WORKING PRINCIPLE

When one of the selector switches is closed, an electro-chemical reactor cell is activated, and an electro-chemical reaction takes place by which electrical energy is converted into nitrogen gas. The gas is trapped in a hermetically sealed bellows type gas chamber. As the gas is produced, an internal pressure builds up, which is applied against a piston. The piston then forces the lubricant out of the cylinder and into the lube point. The strength of the electrical current determines the amount of gas produced, which in turn, controls the rate of lubricant flow and the length of time the Electro-Luber™ will operate.

RED RING STANDARD ELECTRO-LUBERS.™
Maximum operating temperature: +55°C (+131°F)
over a period of time.

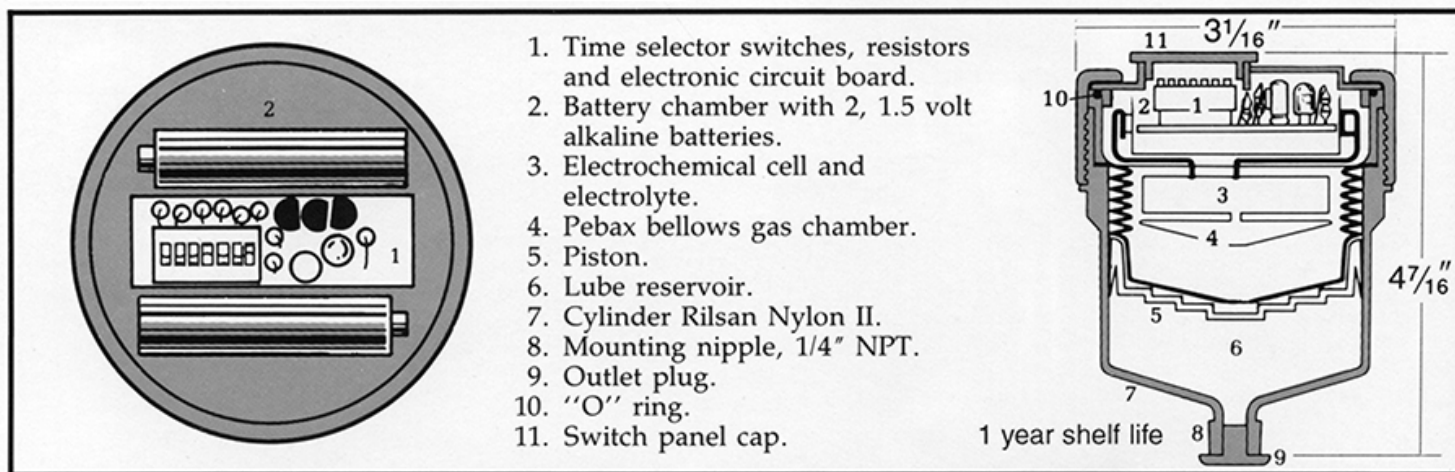
BLUE RING LOW TEMPERATURE ELECTRO-LUBERS.™
Operating temperatures: -40°C (-40°F) to +40°C (+104°F).

Minimum operating temperatures:
With EP1 lubricant: -30°C (-22°F)
With EP2 lubricant: -15°C (+3°F).

The plastic housing can withstand temperatures to -70°C (-94°F) before crystallizing.

PLEASE NOTE: 24M has been cancelled and is used only as a booster.

FUNCTIONAL DIAGRAM



INSTALLATION INSTRUCTIONS

1. Before installing the Electro-Luber™ dispenser on a bearing, use a standard hand lube gun and pump a few shots of the same type of grease into the bearing to ensure all old grease is removed and the passage is free of restrictions.
2. At change out time NO PURGING is necessary.
3. Install the Electro-Luber™ dispenser, if possible, directly on the bearing. For a bearing having a 1/8" NPT thread, use a 1/4" to 1/8" adaptor.
4. DO NOT use the Electro-Luber™ dispenser above +55°C (+130°F).
5. DO NOT use the Electro-Luber™ dispenser on a system that requires more than 50 p.s.i.g. or 3.5 atm.
6. DO NOT use the Electro-Luber™ dispenser to feed more than one bearing.
7. DO NOT use the Electro-Luber™ dispenser on hoses, pipes, or tubing smaller than 1/4" I.D.

ELEVATED TEMPERATURES

DO NOT use Lotemp lubricant with the outlet down. The lubricant will run out without control.

REMOTE INSTALLATION

For remote installation, use up to 3 feet or 1 metre tubing or pipe 1/4" I.D. for lubricant.

For oil, use up to 15 feet or 5 metres of tubing or pipe.

NOTE

Fill all lines with oil or grease before installing the dispenser.

LOW TEMPERATURES

DO NOT use high temperature lubricant. It will harden and the dispenser cannot push it out.

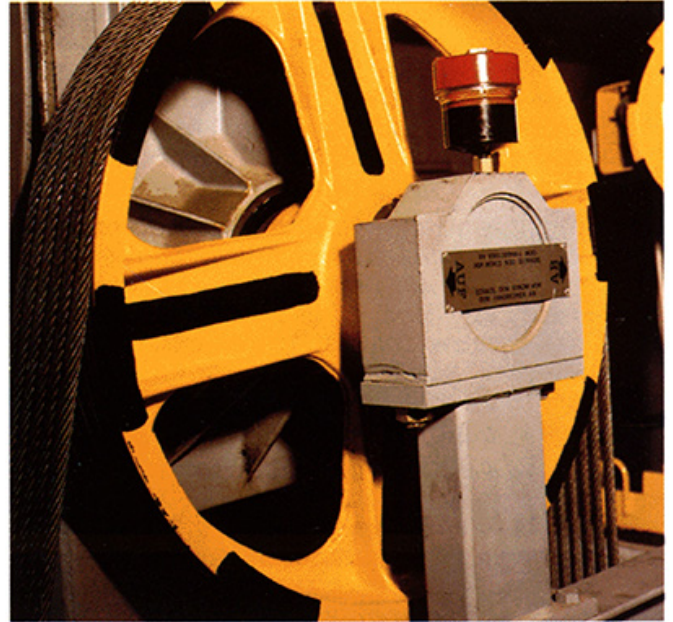
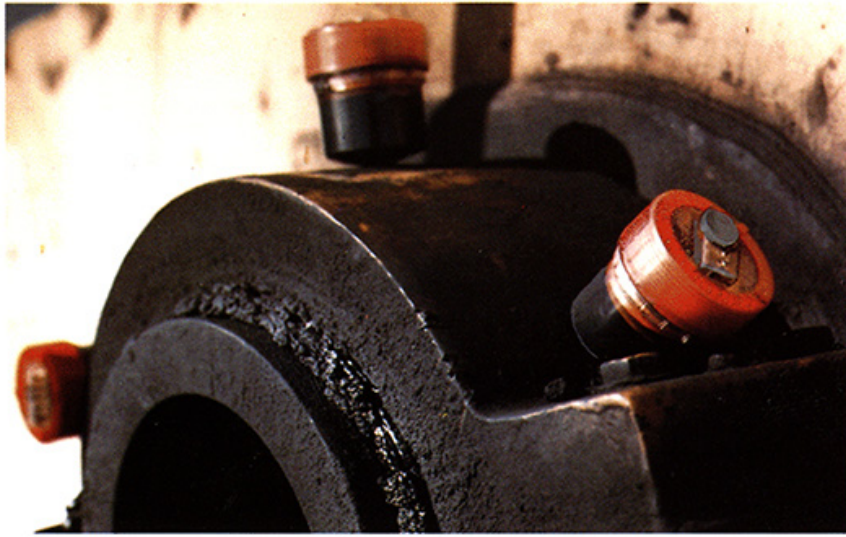
ELEVATED ALTITUDES

The Electro-Luber™ dispenser should perform normally up to 300 m (1000 ft.) above sea level. The dispensing rate will increase above 300 m. For example, at 2000 m (6000 ft.) the discharge rate can be as much as 50% higher than normal. For application in high elevations, ask for special instructions.

PLEASE INSTALL WATERPROOF CAP UNDER ALL CONDITIONS.

NOTE: Not responsible for consequential damage beyond replacement of ELECTRO-LUBER™, or refund of amount paid.

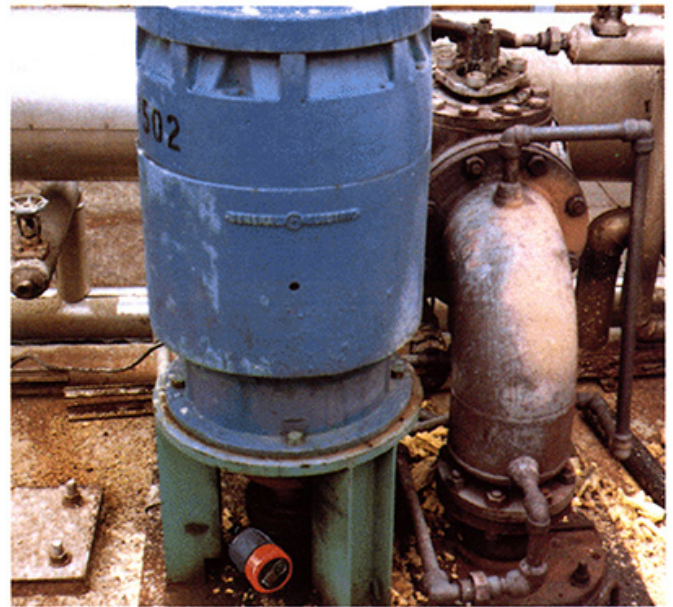
THE ELECTRO-LUBE AT WORK AROUND THE WORLD...



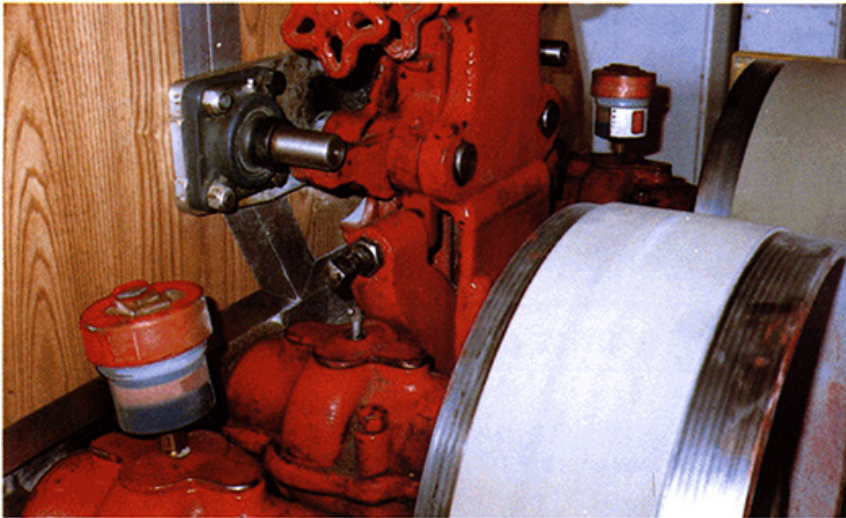
ELEVATOR CABLE PULLEY — GERMANY



COAL STACKER — CANADA



PUMPING STATION — U.S.A.



FLOUR MILL — U.S.A.



SCREW CONVEYOR — CANADA

THE ADVANTAGES OF CONTINUOUS ELECTRO-LUBE LUBRICATION

The continuous lubrication of bearings removes foreign material from the bearing, aids in dissipating the heat generated by the bearing, retards oxidation, and ensures a constant supply of fresh lubricant. The advantages of continuous lubrication as produced by the Electro-Lube dispensers are as follows:

1. Continuously feeding a small amount of lubricant into the bearing pushes out wear material such as chrome flakes, keeps out dirt, water and foreign material and generally keeps the bearing cleaner. The constant flow of the Electro-Lube keeps the seals lubricated so they are more effective in preventing bearing contamination.

2. As a bearing cools down, it creates a slight vacuum or negative pressure. In the intermittently lubricated bearing, the vacuum may draw in foreign material. In the continuously lubricated bearing, the vacuum draws in more lubrication. In dusty environments, such as are found in gravelpit operations, iron ore mining, coal mining, grain handling and in operations where silica is suspended in the air, the continuous dispensing system will tend to keep harmful material out of the bearing and prolong bearing life.

3. If the bearing operates in a moist or acidic environment such as is present in lumber mills or pulp and paper mills, the continuous injection of lubricant will reduce oxidation and bearing breakdown. The bearing cavity will tend to be filled with lubricants and flush out moisture and harmful chemicals, which may otherwise accumulate if the bearing is unused for some time.

4. In some bearings, the lubricant near the race is used over and over again until it is used up and breaks down while the remainder of the lubricant in the cavity has not been used. Sometimes 95% of the lubricant remains unused. In these cases the bearing may have an adequate supply of lubricant but the bearing is inadequately lubricated. The Electro-Lube continually moves the lubricant into the bearing so that the old lubricant is constantly being replaced by fresh lubricant.

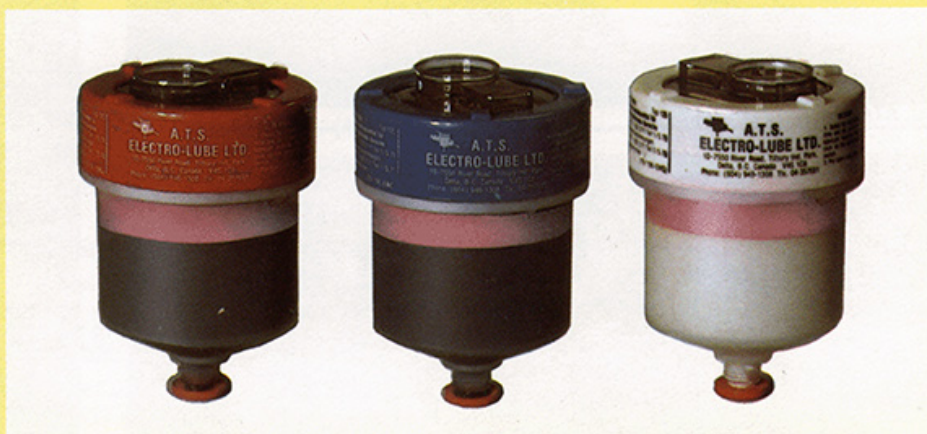
5. By being in constant contact with the moving parts, a constant supply of lubrication can dissipate some of the heat generated on the contact surfaces and reduce the friction and wear between the rubbing surfaces.

Helmut Fandrich, Consultant

THE ELECTRO-LUBE AUTOMATIC ELECTRONIC LUBE DISPENSER

Invented, designed, and manufactured in Canada, the Electro-Lube dispenser is available with a wide selection of lubricants for every purpose.

Each unit is colour coded — red cap for normal and high temperature use, and blue cap for low temperature use. White cap for food industry.



SOLVE YOUR LUBRICATION PROBLEMS WITH THE AUTOMATIC ELECTRONIC LUBE DISPENSER

PATENTS
U.S.A. — 4023648
U.S.A. — 4671386
CANADA — 101490
BRITAIN — 1496841
JAPAN — 1011803
GERMANY — DE 2520241 C3

ENERGY, MINES AND RESOURCES CANADA
For use in Hazardous Locations
GASEOUS MINES CATEGORY
Certificate No 600

PTB Nr Ex- 85/2091
Electrische Betriebsmittel für explosionsgefährdete Bereiche
EN 50 014-1977 / VDE 0171 Teil 1/5.78
Allgemeine Bestimmungen
EN 50 020-1977 / VDE 0171 Teil 7/5.78
Eigensicherheit "I"
EEx ib IIB T4 (79/196/EWG)

EX 1 CERCHAR
Matériel ou Système Electrique Pour Mines Grisouteuses
EN 50 014 . 1977 (NF C 23-514)
EN 50 020 . 1977 (NF C 23-520)
EEx ia I

BVS Nr 87.1065 EX 1
Europäische Gemeinschaften 82/130 EWG
Allgemeine Bestimmungen
EN 50014-1977/VDE 0170/0171 Teil 1/5.78
Eigensicherheit "I"
EN 50020-1977/VDE 0170/0171 Teil 7/5.78
EEx ib I

EX CERCHAR
Matériel Electrique Utilisable en Atmosphere Explosible
EN 50.014 . 1977 (NF C 23-514)
EN 50.020 . 1977 (NF C 23-520)
EEx ia IIC T5

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