



Duolec® Vari-Purpose Gear Lubricant (1605)

Lindamar Industries, Inc. – Paso Robles, Calif.

Kollman Gearboxes

- **Reduced operating temperatures**
- **Extended oil drain intervals**

Customer Profile

Lindamar Industries has used LE lubricants since November of 1994. They manufacture plastic film and bags, and also recycle plastic.

Application

Lindamar Industries operates 24 hours a day, seven days a week. They have four extruders that are the major production drivers of their operation. All processes are scheduled around the output of the extruders.

Challenge

The Kollman gearboxes mounted on Film Master extruders were overheating. The heat was causing the extruders to shutdown and interfere with production. The gearboxes were also very noisy, making it uncomfortable for those on the production floor.

LE Solution

The local LE lubrication consultant presented ZAP, LE's Energy Savings Program and Duolec® Vari-Purpose Gear Lubricant (1605) to reduce amperage used, relieve the overheating in the gearboxes, and to lower gearbox noise.

Results

Prior to the ZAP conversion to Duolec 1605, temperature and amperage readings were taken on the units.

The following formula is used to find the cost of a unit's electrical consumption. This is the same formula used by the local utility company.

Volts x Amps Saved x 1.73* = kW Savings
kW Savings x Hours of Operation Per Year = kWh Savings
kWh Savings x Electrical Charge = Energy Savings Per Year
*Conversion Factor for a 3-Phase Power Source

.480 x 3 x 1.73 = 2.491
2.491 x 8424 = 20984.2
20984.2 x \$0.07 = \$1,468.89

Duolec 1605 saved \$1468.89 in the Kollman gearboxes.

After installing Duolec 1605 in the Kollman gearboxes, the temperatures dropped from 127°F to 97°F, (53°C to 36°C) and the noise was greatly reduced. Previously, the oil drain intervals were every 4 months, Duolec 1605 extended the oil drain intervals to two years. Lindamar feels they are saving money by extending drain intervals, by reducing disposal costs for used oil, and by increasing production time. They have also avoided the added expense of labor and parts costs to rebuild the gearboxes.

Other Products Used

- Almaplex® Industrial Lubricant (1275)
- Monolex® Penetrating Oil & Lubricant (2059)
- Monolec® Hydraulic Oil (6520)
- Multilec® Industrial Oil (6803)
- Syntemp® Synthetic Lubricant (9102)

Thank you to Kevin Hefner, maintenance supervisor, and to the local LE lubrication consultant, for providing the information used in this report.



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Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.

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