CUSTOMER PROFILE

Fairmont Foods of Minnesota is located in Fairmont, MN. They process high quality frozen packaged foods including Italian, Oriental and traditional food dishes. Rick Zoellmer is Maintenance Supervisor and Paul Grussing is Maintenance Purchasing Officer.

APPLICATION

Sullair 20-100H rotary screw air compressor.

AREA OF INTEREST

With a commercial Dexron II they had to change the oil too often, which caused downtime and increased labor costs.

LE SOLUTION

In July of 1993, Fairmont Foods’ Sullair 20-100H rotary screw air compressor was converted from the commercial Dexron II lubricant they had been using to LE’s 6802 MULTILEC® Industrial Oil. LE’s 6802 is formulated to provide excellent oxidation resistance to achieve long drain intervals. It also contains MONOLEC®, LE’s exclusive wear-reducing additive. To assure that the unit was clean, with minimal contamination from the previous product, the compressor was warm drained and flushed with 30 gallons of LE’s 6401 MONOLEC® R&O Compressor/Turbine Oil.

CUSTOMER COST SAVINGS

To document the performance in the Sullair air compressor, the amperage readings were recorded for several months while fully loaded, before and after conversion to LE’s 6802 MULTILEC® Industrial Oil. Average readings are used with the formula listed below to find the cost of the unit’s electrical consumption. This is the same formula used by the local utility company.
\[ \text{Volts} \times \text{Amperes} \times 1.73^* = \text{kW} \]
\[ \text{kW} \times \text{Hours of Operation Per Month} = \text{kWh/Month} \]
\[ \text{kWh/Month} \times \text{Electrical Charge} = \text{Electrical Cost Per Month} \]

*Conversion Factor for a 3-Phase Power Source

### 6802 MULTILEC Industrial Lubricant

- \(0.460 \times 103 \times 1.73 = 81.97\)
- \(81.97 \times 346.67 = 28,417\)
- \(28,417 \times \$0.07427 = \$2,110.53\)
- \(28,417 \times \$0.07427 = \$2,110.53\times 12 = \$25,326.36\)

### Commercial Grade Lubricant

- \(0.460 \times 130 \times 1.73 = 103.45\)
- \(103.45 \times 346.67 = 35,863\)
- \(35,863 \times \$0.07427 = \$2,663.55\)
- \(35,863 \times \$0.07427 = \$2,663.55 \times 12 = \$31,962.60\)

### ANNUAL SAVINGS $6,636.24
**USING LE’s 6802 MULTILEC® INDUSTRIAL OIL**

This represents a savings that will completely pay for the cost of the flush oil and fill with LE's 6802 MULTILEC® Industrial Oil in less than six weeks. After that, the savings contribute to profits.

In addition to saving $6,636 annually in electricity usage, the unit is producing air at 120 psi. With the previous commercial grade product, the plant air was only 115 psi. This indicates that the unit is running more efficiently and the output has increased.

Lubrication Engineers (Oil) Analysis Program, LEAP, has been used to safely extend the previous drain interval from 2,000 hours to 8,000 hours. Thus, effectively reducing their oil consumption and oil disposal 4 times.

Fairmont Foods continues to use LEAP to monitor the condition of this screw compressor, which is now over 16 years old, with over 100,000 hours on it.

### OTHER PRODUCTS USED

LE’s 6802 MULTILEC® Industrial Oil is also a fully approved hydraulic oil, and it meets specifications for Fairmont Foods fryer line’s central hydraulic system. After seeing the excellent results in their Sullair compressor, LE’s 6802 was put into the hydraulic system in August 1996. With approximately 20,600 hours on the 1st fill in January 2000, LEAP is being used to continue monitoring oil quality and equipment safety.

On March 7th, 2000, the Hydraulic Systems Sump was 5 feet under water due to the room flooding. Maintenance personal at Fairmont Foods knew of the tremendous separation ability of MULTILEC®. The water was just drained out of the hydraulic sump and the system was up and running in less than 6 hours. Oil analysis sent for LEAP on March 8th, showed the water content of this oil with about 22,000 hours at only 2/10ths of 1% (0.2%).

We wish to thank Rick Zoellmer, Maintenance Supervisor; Paul Grussing, Maintenance Purchasing Officer and the local LE Representative for the information provided to prepare this report.