

**6805 MULTILEC® INDUSTRIAL OIL**  
**RONNINGEN-PETTER DIVISION, Portage, MI**  
**Kellogg-American Com-Air Hydrovane Compressors**  
**SIC 5084 Industrial Machinery & Equipment**

**CUSTOMER PROFILE**

Ronningen-Petter Division of Dover Resources, Inc. is a manufacturer of stainless steel and carbon steel filtration equipment. They have been in business over 30 years, and became an LE customer in May of 1995.

**Savings of \$1,799.62 annually  
in electrical energy consumption alone!**

**APPLICATION**

Plant air is supplied by two Comp-Air Hydrovane air compressors. They are 50 hp units that operate 16 hours a day, Monday through Friday and five hours on Saturday. The environment for these air compressors is controlled. They are located in their own building that never gets below 50°F. (10°C.) or above 80°F. (27°C.).

**AREA OF INTEREST**

Ronningen-Petter was interested in saving money on oil and filters for these two air compressors. They were previously using a synthetic air compressor oil, and it was recommended that they change this oil monthly.

**LE SOLUTION**

In April of 1995, the local LE Representative recommended LE's 6805 MULTILEC Industrial Oil for this application. LE's 6805 would help them to achieve a longer drain interval and realize a savings on electrical energy cost. LE's 6805 is formulated to combat acid hydrolysis in rotary vane compressors and has outstanding rust and oxidation resistance. It was also recommended that they monitor oil life by using LEAP<sup>SM</sup> (Lubrication Engineers [Oil] Analysis Program).

**CUSTOMER COST SAVINGS**

Amperage readings were taken on the units before converting to LE's 6805 MULTILEC Industrial Oil. After the conversion to LE's 6805, amperage readings were again taken. They revealed an overall 7.5 amp drop. Temperature readings were also taken, showing a reduction of 5° after converting to LE's 6805.

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:

$$\begin{aligned} & \text{Volts} \times \text{Ampere Reduction} \times 1.73^* = \text{kW Savings} \\ & \text{kW Savings} \times \text{Hours of Operation Per Month} = \text{Monthly kWh Savings} \\ & \text{Monthly kWh Savings} \times \text{Electrical Charge} = \text{Energy Savings Per Month} \\ & \text{*Conversion Factor for a 3-Phase Power Source} \end{aligned}$$

$$\begin{aligned} &.480 \times 7.5 \times 1.73^* = 6.228 \text{ kW} \\ &6.228 \times 344 = 2,142.43 \text{ kWh Savings/Month} \\ &2,142.43 \times \$0.07 = \$149.97 \text{ Energy Savings/Month} \end{aligned}$$

***This equates to savings of \$1,799.62 annually  
in electrical energy consumption alone!***

After three months the oil analysis showed the oil still suitable for use. The maintenance personnel at Ronnigen-Petter estimate that while using the previous lubricant, they were spending \$13,000 per year for oil, parts and labor.

Wayne Van Sweden in Maintenance says, ***"I am very impressed and pleased with the improvement that LE's 6805 MULTILEC has made in our compressors. Barbara was convinced she could help us, and that 6805 would do what she said it could do."***

We wish to thank the Maintenance Personnel at Ronningen-Petter and LE Representative Barbara Graham for the information provided to prepare this report.



**Barbara Graham**