

Customer Testimonial



Multilec[®] Industrial (6802)

Gold Mine in South Central Montana

Ingersoll-Rand Model SSR-400

- *Amperage reduction of 38 amps*
- *Saved \$3,628.80 in electrical consumption per year*

Customer Profile

This Gold Mine in South Central Montana operates in complete environmental compliance on the border of Yellowstone National Park.

Application

The mine's compressed air is provided by two Ingersoll-Rand SSR-400 hp rotary screw compressors.

Challenge

Although the mine had switched to a premium synthetic oil, expecting better overall performance and oil life, electrical energy usage remained high for these units.

LE Solution

Jim Pezoldt, LE lubrication consultant, presented Lubrication Engineers' ZAP Energy Saving Program to the gold mine personnel. The gold mine, looking for the most cost effective way to run these units, agreed to convert one air compressor (Unit #1) to Multilec[®] Industrial Oil (6802) on August 25, 1995.

Results

Prior to the conversion, amperage readings were taken while the unit was still using the synthetic air compressor oil. The compressor was then flushed for four hours with Multilec 6802. After the unit was refilled with Multilec 6802, there was an amperage reduction of 38 amps.

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.

$$\begin{aligned} \text{Volts} \times \text{Amperes Saved} \times 1.73^* &= \text{kW Savings} \\ \text{kW Savings} \times \text{Hours of Operation Per Year} &= \text{kWh Savings} \\ \text{Annual kWh Savings} \times \text{Electrical Rate} &= \text{Annual Electrical Savings} \end{aligned}$$

*Conversion Factor for a 3-Phase Power Source

$$\begin{aligned} .460 \times 38 \times 1.73 &= 30.24 \\ 30.24 \times 3,000 &= 90,720 \\ 90,720 \times \$0.04 &= \$3,628.80 \end{aligned}$$

Multilec 6802 saves \$3,628.80 in annual electrical consumption cost.

After seeing the results on Unit #1, Unit #2 was scheduled for a conversion to Multilec 6802.

Other Products Used

- Monolex[®] Penetrating Oil & Lubricant (2059)
- Almasol[®] Dry Film Lubricant (9200)

Thank you to the gold mine personnel, and to Jim Pezoldt, LE lubrication consultant (pictured), 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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