# 6404 MONOLEC® R & O COMPRESSOR / TURBINE OIL

## HENRY MAYO NEWHALL MEMORIAL HOSPITAL, Valencia, CA

ALVP Model 105023 Reciprocating Air Compressors SIC 8062 General Medical & Surgical Hospitals

#### **CUSTOMER PROFILE**

Henry Mayo Newhall Memorial Hospital is a general medical and surgical hospital, which has been an LE customer since 1989.

#### **APPLICATION**

Along with wanting to maintain reliable equipment operation, the hospital personnel were also interested in saving money, and were receptive to the **ZAP** Energy Saving Program offered by the local LE Representative. A comparison test was proposed with the commercial grade lubricant and LE's 6404 MONOLEC R & O Compressor / Turbine Oil.



#### AREA OF CONCERN

Critical equipment for the Newhall Hospital is the ALVP model 105023 air compressors, which provide power plant control air. These air compressor cycle into an off mode for 2.5 minutes and in the on mode for 30 seconds. The electrical power rates vary a great deal, ranging from \$0.06 per kilowatt hour to \$0.11 per kilowatt hour, depending on the time of day and season of the year.

#### LE SOLUTION

LE's 6404 MONOLEC R & O Compressor / Turbine Oil was recommended to reduce wear and friction, thus reducing amperage used.

#### CUSTOMER COST SAVINGS

A comparison of the electrical power consumption before and after the conversion to LE's 6404 showed a 7.2% (.89 amp) decrease in electrical power demand under the same conditions. Also note that with the 30 second on cycle, the compressor would pressure up to 100 psi with LE's 6404 versus the 90 psi attained with the previous commercial grade lubricant. The oil temperature also decreased 10°F.





### Rates per Kilowatt Hour

Summer Day	Rate 12 noon to 6 pm =	\$0.11
Summer Morning	Rate 8 am to Noon =	\$0.09
Summer Evening	Rate 6 pm to 11 pm =	\$0.09
Summer Night	Rate 11 pm to 8 am =	\$0.06
Winter Day	Rate 8 am to 9 pm =	\$0.10
Winter Evening	Rate 9 pm to 8 am =	\$0.06

#### **Savings Calculations**

89 amps x 480 volts x 1.73\* x \$ per kWh x hours x number days = \$ Savings 1000 watts

<sup>\*</sup>Conversion factor for a 3-phase power source.

Summer Day	\$0.11 x 1 hr. x 120 days =	\$ 9.76
Summer Morning & Evening	\$0.09 x 1.5 hrs. x 120 days =	\$11.99
Summer Night	\$0.06 x 1.5 hrs. x 120 days =	\$ 7.99
Winter Day	\$0.10 x 2.17 hrs. x 245 days =	\$39.34
Winter Night	\$0.06 x 1.83 hrs. x 245 days =	\$19.90

ANNUAL ELECTRICAL SAVINGS =\$88.98
-3 quarts oil used in compressor =\$-9.26
TOTAL ANNUAL SAVINGS = \$79.72

We wish to thank Richard Londergan and Troy Druliner, Maintenance Personnel and LE Representative Andy Hutt for the information provided to prepare this report.



**Andy Hutt**