

6403 MONOLEC® R & O COMPRESSOR / TURBINE OIL

TOWER AUTOMOTIVE, Kalamazoo, MI

Gardner-Denver-Electra-screw Air Compressor • SIC 3465 Automotive Stamping

**SAVINGS \$3,728.33
ANNUALLY IN ELECTRICAL ENERGY COSTS**

CUSTOMER TESTIMONIAL

CUSTOMER PROFILE

Tower Automotive is a metal stamping plant that produces metal parts for the automotive industry. They have been in business for over 50 years.

APPLICATION

A Gardner-Denver Electra-screw 100 hp. air compressor is used to deliver plant air. The unit runs 6,912 hours a year. The air compressor is located inside of the plant and pulls inside air, which is contaminated with airborne metal particles.

AREA OF INTEREST

With the commercial grade automatic transmission fluid, the maintenance personnel were concerned with the operating temperature and life of the oil in this application. The oil was leaking around the filter and they were using a can to catch the oil.

LE SOLUTION

The local LE Representative

recommended LE's 6403 MONOLEC R & O Compressor / Turbine Oil to control deposits and give protection against wear, corrosion and rust. He also presented ZAP, LE's Energy Saving Program as a way to reduce electrical energy costs. Based on expected savings in lower electrical energy costs, lubricant consumption and extended drain intervals, Tower Automotive agreed to convert to LE's 6403.

CUSTOMER COST SAVINGS

Prior to converting to LE's 6403 MONOLEC R & O Compressor / Turbine Oil, amperage readings were taken on the Gardner-Denver air compressor. After converting to LE's 6403, an amperage drop of 11.3 amps was recorded. The following formula is used to calculate the cost of a unit's electrical consumption. This is the same formula used by the local utility company.

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.Volts x Amps Saved x 1.73* = kW Savings
kW Savings x Hours of Operation Per Year = kWh Saved Annually
kWh x Electrical Rate = Annual Savings for the Unit
***Conversion factor for a 3-Phase Power Source**

.460 x 11.3 x 1.73 = 8.99
8.99 x 6912 = 62,138.88
62,138.88 x \$0.06 = \$3,728.33

**LE's 6403 MONOLEC® R & O COMPRESSOR / TURBINE OIL SAVES \$3,728.33
ANNUALLY IN ELECTRICAL ENERGY COSTS.**

After 2,000 hours LE's 6403 MONOLEC R & O Compressor / Turbine has reduced amperes, lowered temperatures, extended drain intervals and has eliminated leaks in the air compressor. LE Representative Barbara Graham also encouraged the maintenance department to proceed with plans to pull in outside air for the air compressor. This has further reduced amperage. The overall improvements in this one air compressor's operation have led to Tower Automotive converting another four compressors. When calculating energy savings on all Tower Automotive air compressors using LE's 6403, it totals an amazing \$11,039.84 annually!

We wish to thank Chuck Bowers, Maintenance Plant 3, Darren Smith, Maintenance Supervisor Plant 1, John Berish, Plant Manager, Eston Roberts, Maintenance Engineer and the LE Representative Barbara Graham for the information provided to prepare this report.



Barbara Graham