Monolec® R & O Compressor / Turbine Oil (6402)

Country Pure Foods – Akron, Ohio

Sullair Rotary Screw Air Compressor

- Saves 16.4% in annual power consumption
- Saves $11,087 annually on electric energy costs

Customer Profile
Country Pure Foods is a juice packaging operation. They have been in business for 45 years, serving customers coast to coast. They have been an LE customer since 1993.

Application
A Sullair 200 hp rotary screw air compressor supplies air for Country Pure Foods’ operation.

Challenge
While using a specialty lubricant company air compressor oil, they were experiencing problems with clogging of the oil cooler. The compressor was running hot, and they were only getting 6,000 hours service out of the oil. The compressor operates in a moist environment, in the presence of frequent washdowns associated with a food processing operation.

LE Solution
The local LE lubrication consultant presented LE’s ZAP Energy Saving Program, coupled with Monolec® R & O Compressor / Turbine Oil (6402) to save on electrical energy costs and to extend the life of the compressor. Monolec 6402 contains special additives to control deposits and give protection against wear, corrosion and rust. It is nonfoaming and contains Monolec, LE’s exclusive wear-reducing additive.

Results
Country Pure Foods now has more than 16,191 hours on Monolec 6402, with no downtime. They have recorded both an amp drop and temperature drop after converting to Monolec 6402. The air compressor oil was changed after they felt they had achieved the extended drains they had anticipated.

<table>
<thead>
<tr>
<th>Sullair Rotary Screw 255-200 hp</th>
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<tbody>
<tr>
<td><strong>Reading Dates</strong></td>
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<tr>
<td><strong>Amperes</strong></td>
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<tr>
<td><strong>Sump Pressure</strong></td>
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<td><strong>Line Pressure</strong></td>
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<tr>
<td><strong>Discharge Temp. (°C)</strong></td>
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<tr>
<td><strong>Injection Temp. (°C)</strong></td>
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<td><strong>Oil Temp. (°C)</strong></td>
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<tr>
<td><em><em>Volts x Amperes x 1.73</em> = kW</em>*</td>
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<td><strong>kW x Hours of Operation Per Year - kWh</strong></td>
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<tr>
<td><strong>kWh x Electrical Charge = Electrical Savings Per Year</strong></td>
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*Conversion Factor for a 3-Phase Power Source

Cost Analysis Breakdown

Monolec 6402

\[
\text{.460 x 140 x 1.73* = 111.4 kW} \\
111.4 x 6750 = 751,950 \text{ kWh} \\
751,950 x $0.075 = $56,396.25
\]

Specialty Grade Lubricant

\[
\text{.460 x 167.5 x 1.73* = 133.3 kW} \\
133.3 x 6750 = 899,775 \text{ kWh} \\
899,775 x $0.075 = $67,483.13
\]

Monolec 6402 saves 16.4% in annual power consumption and $11,087 annually on electric energy costs.

Other Products Used
- Quinplex® H1 Penetrating Oil & Lubricant (4059)
- Quinplex® Food Machinery Lubricant (4025)
- Almagard® Vari-Purpose Lubricant (3751)
Thank you to Dan Rotnem, who made the initial buying decision to try Monolec 6402, and to Joe Kuntz, LE lubrication consultant (pictured), for providing the information used in this report.