Monolec® Hydraulic Oil (6120)

Ring Container Technologies – Belle Fourche, South Dakota

Liberty Blow Mold Machines

- Increased oil drain intervals by more than six times over the previous product
- Dramatically reduced leakage and oil consumption
- Saved more than $10,732 in four years

Customer Profile
Ring Container is a U.S.-based company with manufacturing plants in 18 states, plus one in the U.K. and one in Canada. This plant has three production lines and produces poly containers using blow mold machinery. It has been in business and has been an LE customer since 2005.

Application
Ring Container uses three Liberty RSI 3500 blow mold machines to manufacture 1.5- and 4-gallon poly containers used by adjacent bentonite plants to package granular bentonite marketed as kitty litter.

Challenge
Using a commercial grade hydraulic oil, Ring Container experienced:
- Short oil drain intervals, ranging from six months to one year
- Considerable oil leakage and consumption
- Frequent component failures

Solution
Mike Carter, LE lubrication consultant, recommended Monolec® Hydraulic Oil (6120). Monolec Hydraulic Oil meets all needs of modern hydraulic equipment: anti-wear qualities, rust and oxidation inhibitors, water resistance and anti-foaming qualities. It has high temperature stability, long oil life and uniform power flow.

Results
Monolec Hydraulic Oil has been in use since December 2005. Using LEAP – LE’s oil analysis program – the company has monitored the condition of its oil at four-month intervals. Analysis has shown consistently good characteristics in viscosity, additive package and total acid number after four years in service. The wear metals have been well below normal for machines of this type. Leakage and oil consumption have decreased dramatically and make-up oil requirements are minimal. Monolec Hydraulic Oil has been in service four to eight times longer than the previous hydraulic oil.

Ring Container has saved $10,732 since converting to Monolec Hydraulic Oil (6120). These costs savings, calculated below, are based on a conservative six times lubricant life for three units.

<table>
<thead>
<tr>
<th>Description</th>
<th>Commercial Hydraulic Oil</th>
<th>Monolec Hydraulic Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil cost for 6 oil changes</td>
<td>$17,212</td>
<td>$8,400</td>
</tr>
<tr>
<td>Labor for oil changes</td>
<td>$1,920</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$19,132</td>
<td>$8,400</td>
</tr>
</tbody>
</table>
Other LE Products Used

- Duolec® Vari-Purpose Gear Lubricant (1605)
- Monolec® Wire Rope Lubricant (2001)
- Monolex® Penetrating Oil & Lubricant (2059)
- Almagard® Vari-Purpose Lubricant (3752)
- Quinplex® Food Machinery Lubricant (4025)
- Monolec® Synthetic Industrial Oil (9046)
- Monolec® Synthetic Industrial Lubricant (9220)
- Des-Case® hygroscopic breathers

Thank you to Ring Container’s Gene Secrest, maintenance manager, and to Mike Carter, LE lubrication consultant (pictured), for providing the information used in this report.

Monolec®, Duolec®, Monolec®, Almagard® and Quinplex® are registered trademarks of Lubrication Engineers, Inc. Des-Case® is a registered trademark of Des-Case Corporation.

Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.