Customer Testimonial

Quinplex® White Oil (4030)

Poultry Processing Plant – Central Georgia

Chain

- More than doubled chain life
- Reduced lubricant usage by 90%
- Decreased lubricant interval by 2/3

Customer Profile
This Poultry Plant is one of the largest processors of chicken in the world and is a first stage poultry processing plant.

Application
The plant uses six large chains throughout the plant to process live chickens.

Challenge
The chains average 1,000 feet in length. Using a commercial brand chain lubricant, the chains would only last a maximum of 14 months before having to be replaced. Replacement of the chains were expensive and time consuming. The average cost of replacement for one processing line chain is in the neighborhood of $20,000.

LE Solution
The maintenance manager consulted with LE to find a solution. Since the plant had already had great success with other Lubrication Engineers, Inc. products, they were more than willing to listen to what LE had to offer.

LE recommended Quinplex® White Oil (4030), which is a food grade SAE 30 white oil that is a USDA authorized and NSF Registered H1 lubricant. It is designed with Quinplex®, an extremely strong anti-wear and rust and oxidation resistant proprietary additive. Quinplex 4030 has the ability to do the following: resist water, form a barrier against rust and corrosion and stay in place (clingability). This was a major concern since the processing lines are sterilized every night with high-pressure water. This is a requirement of the USDA for all chicken processing plants. Previous lubricant was discolored after wash down and the chains had to be lubricated every three days.

Results
The plant agreed to try Quinplex 4030 on Picking Line #2. This is the longest chain in the plant. Within one week of applying Quinplex 4030, the maintenance staff noticed that the chains were extremely wet (had a lot of lubricant on the chain). Lubrication frequency went from three times a week to once a week on Saturdays. This helped immediately in savings, since the chains could be lubricated on off-peak times, thus freeing up a maintenance person to pursue other activities.

The other consideration was the amount of lubrication needed and the chain stretching due to wear. With the previous lubricant, a 10-micron spray nozzle was used. With Quinplex 4030, a 0.6 micron nozzle is used to provide an extremely fine mist. This has resulted in savings of over 90 percent of previous lubricant used.

The chain would stretch over six inches in a 14-month period and had to be replaced at a cost of $18,500. With the introduction of Quinplex 4030 the chain only stretched a little over two inches in twelve months and the chain life is expected to be at least double if not more.
The following chart shows the comparison between the two lubricants.

<table>
<thead>
<tr>
<th>Lubricant Used</th>
<th>Install Date</th>
<th>End Date</th>
<th>Stretch in Inches</th>
<th>Cost of Replacement</th>
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</thead>
<tbody>
<tr>
<td>XYZ</td>
<td>12-2002</td>
<td>2-2003</td>
<td>6 2/3</td>
<td>$18,500</td>
</tr>
<tr>
<td>Quinplex 4030</td>
<td>2-2003</td>
<td>2-2004</td>
<td>2 5/8</td>
<td>$0</td>
</tr>
</tbody>
</table>

Estimated cost savings for using Quinplex 4030 in a 2-year period for all six chains used in plant, minus the cost of the lubricant is a net savings of $96,000.

**Other Products Used**

- Duolec® Vari-Purpose Gear Lubricant (1606)
- Quinplex® Food Machinery Lubricant (4025)
- Monolec® Industrial Lubricant (4701)
- Monolec® Synthetic Industrial Oil (9460)

*Thank you to the maintenance staff members, and to Mark Jones, 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.