



H1 Quinplex® Food Machinery Lubricant (4024)

Large Soup & Baby Food Manufacturer, Pennsylvania Angelus® 60L Can Seamers & Other Equipment

- **H1 Quinplex:**
 - » Remained in place, despite frequent washdowns
 - » Doubled seamer life from 5 to 10 years
- Other LE solutions throughout the plant extended lube intervals and prolonged equipment life

Customer Profile

This facility is one of the largest private label manufacturers of soups and baby foods in North America. This plant – which has been an LE customer since 1995 – makes soups and baby foods for several customers under many different brand names.

Application

The plant uses two Angelus 60L can seamers to seal the soup can lids after they are filled. Each seamer processes an average of 250,000 cans per day, for a total plant production of 500,000 soup cans per day.

Challenge

The commercial grade grease the plant was using washed out from the constant intrusion of water and soap in the machine components.

LE Solution

Larry Boyle, LE lubrication consultant, recommended **Quinplex® Food Machinery Lubricant (4024)**, an NSF H1 lubricant recommended for food processing equipment. This white, water-resistant grease resists high temperatures, clings to metal, inhibits rust and corrosion, and is mechanically stable. It provides true extreme pressure performance and contains Quinplex®, LE's exclusive impact- and water-resistant additive.

Results

The average projected life for Angelus 60L seamer components is five years, which is what the plant had experienced prior to switching to LE. Using Quinplex 4024, the 60L seamer major component life is now 10 years, double the previous life expectancy. The plant also uses Quinplex 4024 in the Angelus 60L spindle rolls and upper turret assembly. It has doubled the life of both of these machine components as well.

“LE helps me do my job better,” the maintenance supervisor said. “My equipment runs longer and downtime is minimized. LE products and services come through for me.”

Other Challenges & Solutions

- Elmar fillers in the soup filling and baby food filling areas – **Duolec® Vari-Purpose Gear Lubricant (1605)** is used in the gearboxes of these fillers. This gear oil's water separation capability is crucial to its performance and long life in this application. The OEM spec calls for a Belray ISO 220 oil to be drained every six months. The Duolec 1605 is changed per oil analysis results, approximately every two to three years.
- White Cap capper drives in the baby food filling area – Just like the gear oil used in the Elmar filler gearboxes, **Duolec® Vari-Purpose Gear Lubricant (1606)** achieves a two- to three-year drain interval, far beyond the OEM spec.



- Bearings at the conveyor line and above – **Quinplex® Food Machinery Lubricant (4025)**
- Bearings below the conveyor line where there is no potential contact with food – **Almaplex® Industrial Lubricant (1275)** withstands water washout better than commercial grade lubricants.
- APV Gaulin homogenizers – Significant water intrusion caused the OEM-recommended Mobil oil to break down and require changing every three months. After switching to LE-recommended **Monolec® R & O Compressor / Turbine Oil (6406)**, these units have run trouble-free for many years. Monolec 6406 keeps water on the sump bottom, where it is easily drained off when the unit stops operating. Oil samples are pulled semi-annually, and the oil is changed annually.
- Sumitomo kitchen drives – This equipment is washed down daily with high-pressure hoses, causing water and cleaners to contaminate the oil. Even with **H1 Quinplex® White Gear Lubricant (4090)** in the drives, water contamination and premature gearbox failure was troublesome with annual gearbox replacements required. These drives are very hard to replace, requiring an entire day for two men to replace just one drive, because they are located under the framework of the large cooking vats. This also means the soup cooker is taken out of production for that day. Larry recommended the installation of **Extreme Duty Breathers** to combat the contamination. After two years with these desiccant breathers, no drives have failed. Maintenance personnel appreciate that they no longer have to climb under the cookers and twist themselves into pretzels to remove the drives.
- FMC rotary sterilizers – Whenever these machines are torn down for maintenance, the bearings are found still coated with **Almaplex® Industrial Lubricant (1275)**.

Prior to the switch to this LE grease, all that was left at teardown of the OEM-specified Shell Alvania EP 2 grease was carbon deposits and hardened grease.

- Sew Eurodrive units – **H1 Quinplex® White Gear Lubricant (4090)**
- Hub City worm drives – **H1 Quinplex® White Gear Lubricant (4140)**
- FMC water cooled hydro sterilizer – This massive unit stands 114 feet high and involves all three factory floors. It sterilizes baby food in glass jars and canned soup by means of a chain conveyor system, processing roughly 960,000 jars or cans per day.
 - » Cone drives – **Monolec Industrial Synthetic Lubricant (9460)** is used in the 18 drives that propel the cans through the sterilizer. Some of these drives have had Monolec 9460 in them for several years. Even the drives exposed to the harsher temperatures see oil life of three or four years. Oil samples are pulled semi-annually for testing, and the oil is filtered occasionally as deemed necessary by these tests.
 - » Cone Drive Bearings – **Almaplex® Ultra-Syn Lubricant (1299)** is used successfully to grease these bearings.
- Palletizing robots – **Monolec® Industrial Lubricant (4700)** is used successfully in the axis rotation of the robot bearings of the arms and base pivot points.

Other LE Products Used throughout the Plant

- H1 Quinplex® Food Machinery Lubricant (4023)
- Monolec® Penetrating Oil and Lubricant (2059)
- Pyroshield® Syn Open Gear Grease – aerosol (5100)
- Clear Grease Guns
- Oil Sight Glasses
- Oil Storage Containers
- Sampling Ports

Thank you to the customer's plant manager and soup module maintenance supervisor and to Larry Boyle, LE lubrication consultant (pictured), for providing the information used in this report.



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