

**4058 QUINPLEX® H1 PENETRATING OIL & LUBRICANT  
4046 QUINPLEX® SYNTHETIC FOOD GRADE OIL**

**MAPLE LEAF PORK, Manitoba, Canada**  
**Quick Chill Chain • SIC 2011 Meat Packing Plants**

**SAVES 4 HOURS OF DOWNTIME A WEEK!**

**CUSTOMER TESTIMONIAL**

**CUSTOMER PROFILE**

Maple Leaf Foods Inc. is a leading, global food processing company. Based in Toronto, Canada, Maple Leaf employs approximately 15,000 people at operations across Canada, in the United States, Europe and Asia and reported sales of \$4.8 billion in 2001. Maple Leaf is a publicly traded company, common shares trade on the Toronto Stock Exchange under the symbol "MFI".

The company has many plants across Canada including Canada's largest pork facility, located in Brandon, Manitoba, Canada. Maple Leaf has been processing hogs at the Brandon facility since August 31, 1999. The Brandon plant is a world-class, technologically advanced facility. It is the company's flagship pork processing operation and is one of the largest in North America, processing approximately 45,000 hogs per week. This location has been an LE customer since 2001.

**APPLICATION**

The Quick Chill Chain is a 1 km long (3280 feet) chain that carries the pigs through the quick chill freezer at -45°C.

**AREA OF CONCERN**

Once a week, on the weekend, the freezer is warmed up and washed down and then the freezer is started up again. On Monday morning at start-up, the chain would repeatedly jam due to water frozen in their links causing 4 hours of downtime at the start of every week.

**LE SOLUTION**

LE Representative Chris Barnes recommended a three-step process to remove the ice and lubricate the chain. A chain spray system with 6 nozzles was installed to spray a combination of air and liquid into the pin area of the chain. First food grade alcohol is applied to dissolve the ice, then 4058 QUINPLEX H1 Penetrating Oil & Lubricant is applied to displace the water, finally 4046 QUINPLEX Synthetic Food Grade Oil is applied to lubricate the chain effectively even at -45°C.

4058 QUINPLEX H1 Penetrating Oil & Lubricant contains a food grade polar organic solvent to assist in water displacement, it also dissolves most rust and loosens corroded and frozen parts and protects metal surfaces from rust and corrosion.

**LUBRICATION  
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LI70506  
03-03-13






4046 QUINPLEX Synthetic Food Grade Oil has a pour point of -57° C (-70° F) and has excellent load carrying and anti-wear properties. It is ideal for use in bearings, bushings, chains, hydraulics and air compressors operating in both normal ambient temperatures and extreme cold conditions such as blast freezers and cold rooms.

Both 4058 Quinplex and 4046 Quinplex are USDA authorized and rated H1 for food and beverage equipment, they are also CFIA approved (n1) by the Canadian Food Inspection Agency for incidental food contact.

### **CUSTOMER COST SAVINGS**

The three-step process succeeded in dissolving the ice and lubricating the chain. The chain problems have been eliminated saving 4 hours of downtime per week. The savings in downtime is quite significant for a plant of this size.

### **ADDITIONAL PRODUCTS USED**

-  605 ALMASOL® Vari-Purpose Gear Lubricant is used in gearboxes
-  4025 QUINPLEX® Food Machinery Lubricant is used in bearings throughout the plant
-  4059 H1 QUINPLEX® Penetrating Oil & Lubricant is used as a penetrating oil
-  4140 QUINPLEX® White Gear Lubricant is used on the Cryovac chains
-  9920 SYNOLEC® Gear Lubricant is used in gearboxes in the freezer

We would like to thank Maintenance Supervisors John Karasz, Myron Krawchuck, and Fred Veenbaas, Maintenance Manager Dick Thomson, Motion Industries Representative Larry Grime, and LE Canada National Sales Manager Chris Barnes for the information provided to prepare this report.