

Challenge

Background

A potato manufacturing plant using roller chain-driven dryers operates at 65°C (150°F). The dryer chain was lubricated with a USP white oil for H1 status.

Chains are frequently inspected and were found to wear too quickly. Chain failure must be prevented to avoid large product loss.



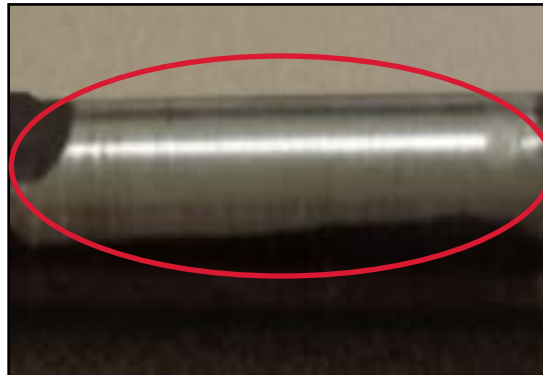
Fries coming off the dryer.

Solution

Product

Chesterton 690 FG Lubricant Food Grade Chain Oil was recommended. **690 FG** is an H1 formulated lubricant using a USP white oil base **plus** performance additives.

Even though the client is under contract with a large lubricant supplier, they decided to switch over to **Chesterton 690 FG** based upon performance data comparison and initial equipment trials.



Wear area (circled) of chain pin after six weeks with a competitor's food grade oil.

Results

Increase Reliability

Chain pin wear has been reduced by approximately 75%.

Plant currently buys **690 FG** in bulk and in aerosol, one drum every 20 days. **690 FG** is applied via oiler and an automatic dispenser.



Notice the formation of a "Wear Shield" on the chain pin to protect against wear.

Wear area (circled) of chain pin after six weeks with **Chesterton 690 FG Lubricant**.