Shrink Wrapper Chain Lubrication Improves Productivity

Food and Beverage Industry
650 Advanced Machinery Lubricant (AML)
IL/MRO Case Study

Challenge

Background

A bottling plant wasn't using lubrication on the chains of a high-temperature shrink wrapper because the excessive heat, which goes up to 175°C (347°F), was causing low temperature oil to carbonize on the chains and the cost of high-temperature oil was too expensive.

As a result, the chains were squeaky and would get jammed in the shrink tunnel. This resulted in the customer having to reject many lots that were exposed to high heat for extended time, compromising plant productivity.

Shrink wrapper in bottling plant.

Solution

Product

The Chesterton specialist diagnosed the problem and recommended Chesterton 650 Advanced Machinery Lubricant (AML), a higher temperature chain oil that operates up to 211°C (412°F) and reduces friction to improve power consumption.

650 AML is a biodegradable, NSF H1 certified, high performing lubricating oil, which is made from plant and synthetic based esters. It has extremely high load bearing capabilities and detergency to keep chains clean.



Chesterton 650 AML is sprayed on the chains in the high-temperature tunnel inside the shrink wrapper.

Results

Improved Productivity

After applying **650 AML**, the squeak stopped completely. The chain runs smoothly without getting stuck in the tunnel. This has significantly reduced the number of rejected batches and increased productivity by at least 10%.

The customer replicated the success from this shrink wrapper unit to two more wrappers in the plant.



Well lubricated and squeak-free tunnel chains.