Food-Grade Lubricant Improves Reliability of Pneumatic Equipment

Challenge

Background
At a meat processing facility, meat is extruded into a casing and sealed by “clips”. The process of Stuffing the casing and mechanically sealing it with “clips” is done pneumatically.

The facility was using white mineral oil to lubricate the cylinders and solenoid valves of the pneumatic system. After just six weeks of using USP white oil, the sticky residue would cover the solenoid surface resulting in malfunctioning.

The customer was interested in decreasing the cycle time of the pneumatic system.

Solution

Product
The local representative recommended Chesterton 650 AML. This product is designed for lubrication of pneumatic mechanism. It has excellent detergency and cleans the surface while it lubricates. Its excellent thermal stability reduces the residue and varnish formation. Chesterton 650 AML is NSF H1 certified and hence can be safely used in the food industry.

Chesterton 650 AML was simply added into the in-line oiler.

Results

- The 650 AML has been in operation for 12+ weeks without any issues. This has significantly exceeded the six weeks performance of USP white oil.
- Actuation has been trouble-free. No sticking of the pneumatic cylinder or solenoid was observed.
- There is virtually no odor.
- Floor workers expressed the system is less noisy.

The in-line lubrication system was cleaned of the old white oil, and water was drained from filters. 650 AML was filled in the top oil bowl of the pneumatic lubrication system.

Casing clipping in record time with no delays.

Sausage casing “clipping” machine.