

Challenge

Background

At a food processing facility, equipment that is used for filling prepackaged, serving containers of pastes, sauces, and creams would typically fail by sticking at start-up. The situation was especially bad, over a three day holiday weekend, when moisture would build up and cause hang-ups. Internal surfaces were pitted and contaminated with a sticky residue.

The customer was using USP white oil to lubricate the pneumatics because they required an NSF H1 lubricant. Since USP white oil does not have enough water elimination properties, water was not displaced from the metal surface of the pneumatic systems.



Pneumatic actuators on filling machine.

Solution

Product

The local Chesterton representative recommended Chesterton 650 Advanced Machinery Lubricant. This product is designed for lubrication of pneumatic mechanisms and has an excellent water elimination properties. It is NSF H1 certified and can be safely used in the food industry.

The in-line lubrication system was cleaned of the old white oil and water was drained from the filters. Chesterton 650 AML was filled in the top oil bowl of the pneumatic lubrication system. Cylinders were cycled for 2 – 5 minutes to allow fresh 650 AML into filling equipment.



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

Results

Benefits for using 650 AML:

- Made actuators and solenoid valves look and work like they were brand new valves.
- Over time, maintenance personnel did not find water accumulated in the cylinders.
- Cleaned the sticky residue and kept the surfaces clean throughout the operation.
- Solved the problem of valve sticking at the start-up and actuation failures.
- Superior to any other lubricant ever tried at the plant.
- Odorless nature of 650 AML compared to USP white oil improved the working environment.
- The facility decided to switch from USP white oil to 650 AML throughout the plant.



Filled container of delicious chocolate mousse.