Commercial Bakery Achieves Clean Labels with AutoJet® Food Safety Spray System

Problem:
A commercial bakery wishing to achieve a clean label needed to remove a chemical preservative from its products and use a natural yeast mold inhibitor instead. The bakery was unsure how to best apply the yeast to the top of baked goods and requested help from Spraying Systems Co.

Solution:
An AutoJet Food Safety System for Baked Goods proved to be the ideal solution for precision application of the yeast on a wide variety of baked goods. The system consists of an AutoJet 1550+ Modular Spray Panel and four PulsaJet® electrically-actuated spray nozzles. The nozzles, mounted above a conveyor, are triggered to spray when the baked goods are properly positioned in the spray station. Using Precision Spray Control (PSC), flow rate is automatically adjusted when operating conditions such as line speed changes. The system’s zone control capability enables individual nozzles to be turned on and off to accommodate different sized products. Each system is equipped with a 25-gallon (95-liter) stainless steel pressure tank with an agitator to keep the yeast properly mixed prior to application.
Commercial Bakery Achieves Clean Labels with AutoJet® Food Safety Spray System – Continued

Results:
The bakery is now successfully and efficiently applying yeast to its products with the AutoJet Food Safety System and has achieved its clean label goal. An added benefit of the yeast use has been improved shelf life of four days. The bakery has also realized reduced transportation, storage and container disposal costs associated with the elimination of the chemical preservative. The use of the natural yeast mold inhibitor has lowered operating costs and the bakery’s carbon footprint.

A CLOSER LOOK AT THE SYSTEM

Four PulsJet® electrically-actuated spray nozzles precisely spray yeast to the tops of baked goods.

AutoJet 1550+ Spray Control Panel provides complete automated control of nozzles to ensure precise and accurate placement of yeast with minimal waste. Automatic air and liquid control leads to proper flow and drop size and eliminates uneven application.

Precision Spray Control (PSC) involves turning nozzles on and off very quickly to control flow rate. This cycling is so fast that the flow often appears to be constant. With traditional nozzles, flow rate adjustments require a change in liquid pressure, which also changes the nozzle’s spray angle, coverage and drop size. With PSC, pressure remains constant enabling flow rate changes without changes in spray performance. PSC requires the use of electrically-actuated spray nozzles and an AutoJet spray controller.

For more information about Precision Spray Control, visit spray.com/psc