

Food Packer Saves Over US\$130,000 a Year with Automated Spray System

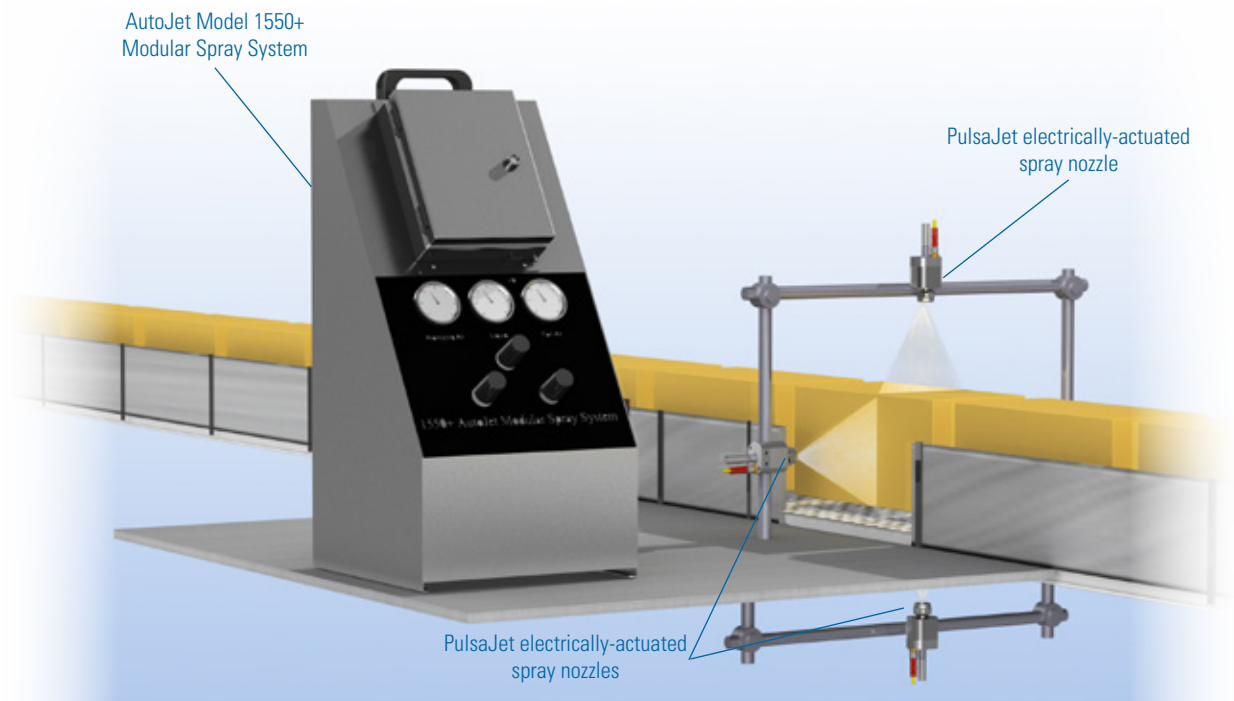


Problem:

A cheese packaging company was using hydraulic spray nozzles to flood blocks of cheese on a conveyor with mold inhibitor. The coverage on the cheese was inconsistent and created quality problems. In addition, the nozzles sprayed continuously and coated the cheese and the areas between blocks. A significant amount of mold inhibitor was wasted and the overspray created maintenance and safety issues.

Solution:

An AutoJet® automated spray system now applies the mold inhibitor on the cheese blocks. The system, equipped with four PulsaJet® electrically-actuated spray nozzles controlled by an AutoJet 1550+ Modular Spray System, dispenses the correct volume of mold inhibitor on each block of cheese with minimal waste. Using Precision Spray Control (PSC), the system makes automatic flow rate adjustments based on line speed to prevent over- and under-application of the mold inhibitor. The system also uses a photoelectric sensor to signal the nozzles to spray only when cheese is present.





Food Packer Saves Over US\$130,000 a Year with Automated Spray System – Continued

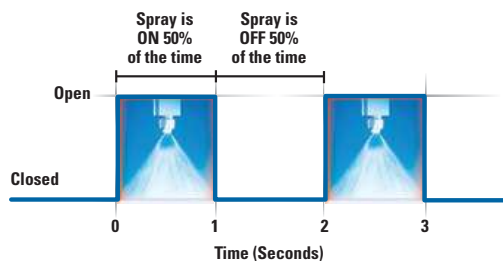
Results:

The use of the AutoJet® automated spray system ensures the cheese blocks are uniformly coated with the precise volume of mold inhibitor required. The mold inhibitor is applied only when cheese is detected in the spray station. The elimination of overspray has resulted in a 60% reduction in mold inhibitor use, a 75% reduction in maintenance time and a safer work environment. The system cost was offset in less than two months and the company is saving more than US\$130,000 per year.

A CLOSER LOOK AT THE SYSTEM



Pulsajet® electrically-actuated spray nozzles provide high-transfer efficiency to minimize waste and messy overspray. Cycle speeds up to 25,000 cycles per minute are possible to keep pace with fast line speeds. Pulsajet nozzles can be used with a variety of spray tips to ensure the performance matches the application requirements.



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



AutoJet Model 1550+ Modular Spray System features liquid control for proper flow and droplet size and ensures accurate placement of mold inhibitor to minimize waste.



Spraying Systems Co.®
Experts in Spray Technology

North Avenue and Schmale Road, P.O. Box 7900, Wheaton, IL 60187-7901 USA

Tel: 1.800.95.SPRAY Int'l. Tel: 1.630.665.5000

Fax: 1.888.95.SPRAY Int'l. Fax: 1.630.260.0842

www.spray.com



Case Study No. 236 ©Spraying Systems Co. 2017