

BAKERY REDUCES SCRAP BY 40% WITH AUTOMATED SPRAY SYSTEM



PROBLEM:

Manually coating gingerbread cookies with butter flavoring prior to baking was creating issues for a large commercial bakery. Workers were applying the flavoring using handheld spray guns. The process was time-consuming, and the results were inconsistent. The bakery was experiencing a high scrap rate due to the application of too much or too little flavoring.

SOLUTION:

An AutoJet® 1550+ Modular Spray System and an electrically-actuated PulsaJet® spray nozzle provided the bakery with the precision coating required. As cookies pass through the spray station, the proper volume of coating is applied. The system uses Precision Spray Control (PSC) to cycle the food-grade PulsaJet nozzle on and off very quickly to control flow rate without affecting spray performance. Flow rate adjustments are automatic and made when operating conditions, such as line speed, change. The compact AutoJet 1550+ Modular Spray System is mounted on a mobile cart for easy use on other conveyor lines.



BAKERY REDUCES SCRAP BY 40% WITH AUTOMATED SPRAY SYSTEM – Continued

RESULTS:

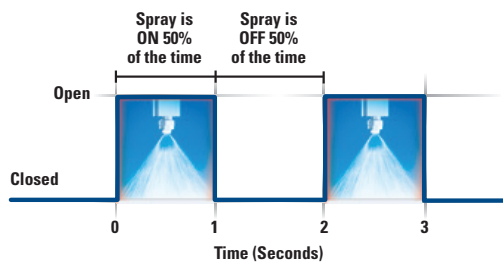
The bakery has reduced its scrap rate by 40% since the installation of the AutoJet® 1550+ Modular Spray System. In addition, workers have been deployed to

other tasks and flavoring waste has been eliminated. The bakery recouped the cost of the new system in just under 10 months.

A CLOSER LOOK AT THE SYSTEM



Pulsajet® electrically-actuated spray nozzle delivers the butter flavoring to the gingerbread products with accuracy and precision, eliminating over- and under-application problems.



AutoJet spray controllers provide precise control of flow rate and spray timing, eliminating overspray and wasted butter flavoring.



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



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

Intl. Tel: 1.630.665.5000

Fax: 1.888.95.SPRAY

Intl. Fax: 1.630.260.0842

www.spray.com



Case Study No. 290 ©Spraying Systems Co. 2019