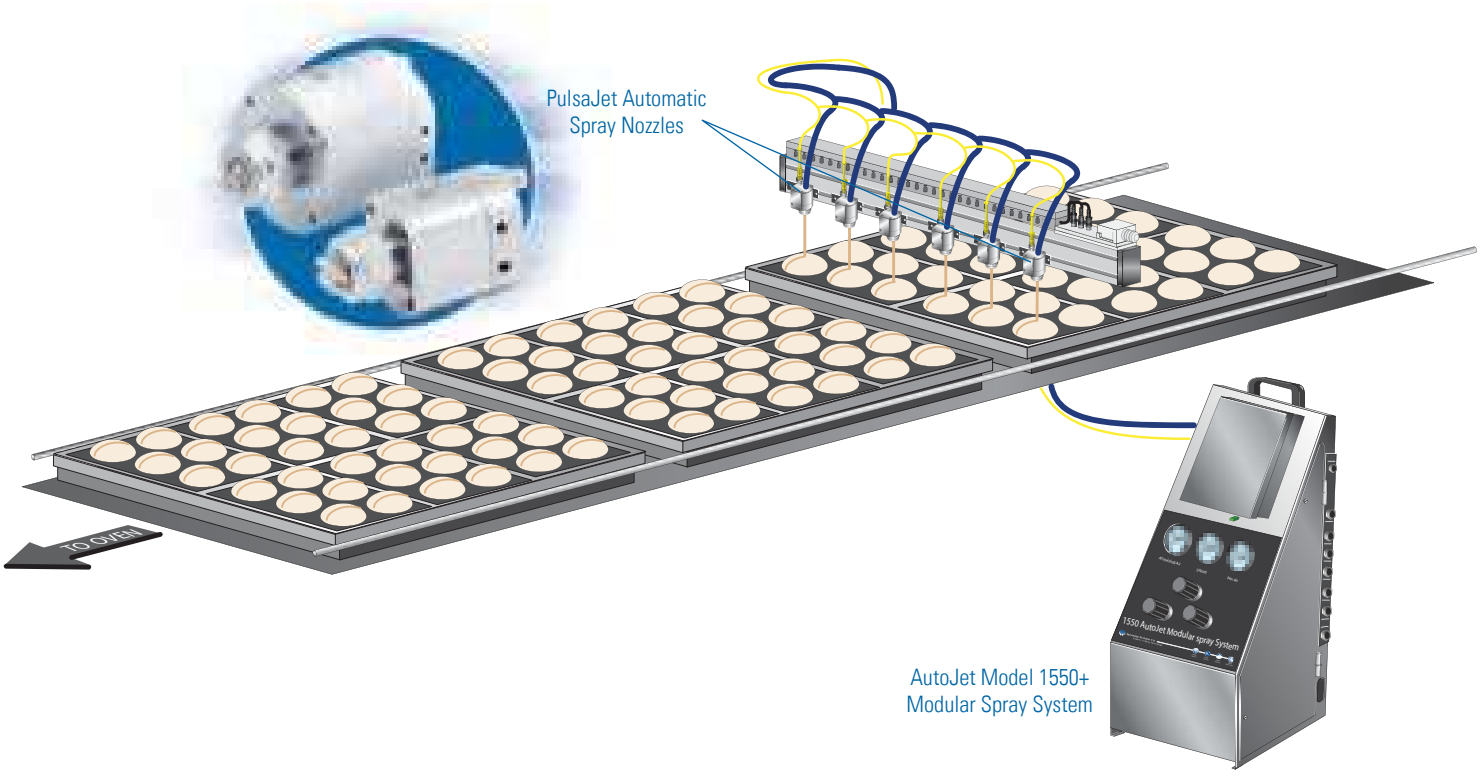
Bakery Reduces Scrap and Downtime with Automated Bread Scoring System

Problem:

A leading producer of baked goods in the southeastern United States needed to score rolls before baking to ensure shape and appearance consistency. A mechanical splitter was being used to score the rolls. However, the blades in the splitter often stuck to the unbaked dough and resulted in unacceptable scrap rates. In addition, the splitter required frequent maintenance which decreased production time and increased labor expense.

Solution:

Spraying Systems Co.'s solution uses an AutoJet® Model 1550+ Modular Spray System and PulsaJet® automatic spray nozzles. Six PulsaJet nozzles equipped with solid stream spray tips are mounted in a 72" (1828 mm) header over the conveyor line before the oven. The spray controller uses a photoelectric thru-beam sensor to trigger the automatic nozzles intermittently as each pan of rolls passes under the spray manifold. Spaced 3.5" (89 mm) apart at a spray height of 4" (102 mm), the needle-like sprays provide clean score marks without sticking to the dough.



Bakery Reduces Scrap and Downtime with Automated Bread Scoring System – Continued

Results:

Using the AutoJet® Modular Spray System and PulsaJet® nozzles has dramatically improved the bakery's scoring process. Scrap and downtime for maintenance have been reduced by approximately 20%. The cost of labor for system maintenance has decreased by more than 50%. Together, these factors have resulted in an estimated payback period of eight months for the new spray equipment. The bakery has purchased additional scoring systems for multiple plant locations.

A CLOSER LOOK AT THE SYSTEM

Six PulsaJet nozzles cover the width of the conveyor.

Modular Spray System provides easy control of nozzles and cycle times up to 10,000 cycles per minute. The spray control panel is NEMA 4 rated.

Spraying Systems Co.®
Experts in Spray Technology

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