

Bakery Slashes Oil Use and Saves US\$28,000 Annually with New Spray System

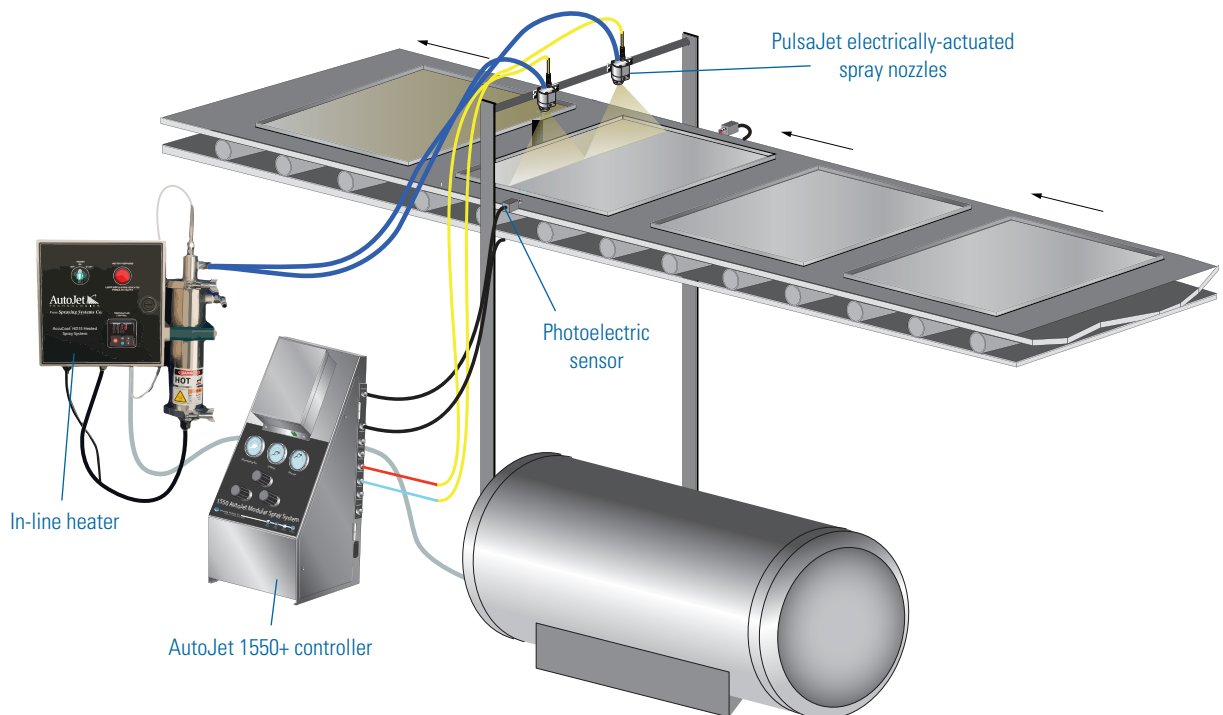


Problem:

A commercial bakery applies release oil to pans prior to pouring cake batter to ensure clean separation after baking. The spinning disc system in use was unable to maintain the proper oil temperature when additional oil was added to the system. The changes in oil temperature impacted the system flow rate and resulted in uneven coverage of the pans. In addition, oil use was high. Over-application of the oil created a messy and unsafe work environment that required excessive manual labor for clean-up.

Solution:

An AccuCoat® In-line Heated Spray System has solved the problem. The system uses a recirculation pump to move the heated oil through the system and back to the tank. When new oil is added to the tank, it is blended in the tank with the existing heated oil to ensure uniform viscosity. As the oil moves from the tank to the PulsaJet® electrically-actuated spray nozzles, an in-line heater provides heat on demand to warm the oil to the proper temperature. The AutoJet® spray controller ensures coatings are applied consistently, even when operating conditions like line speed change.





Bakery Slashes Oil Use and Saves US\$28,000 Annually with New Spray System – Continued

Results:

The AccuCoat® In Line Heated Spray System provides effective temperature control of the oil and precision application with minimal waste. Oil use has decreased by 25%. Maintenance time has been reduced by two hours per day due to the elimination of overspray. Worker safety has improved as well now that oil is no longer present on the floor around the conveyor line. The bakery is saving US\$28,000 annually and recouped the cost of the system in less than seven months.

A CLOSER LOOK AT THE SYSTEM

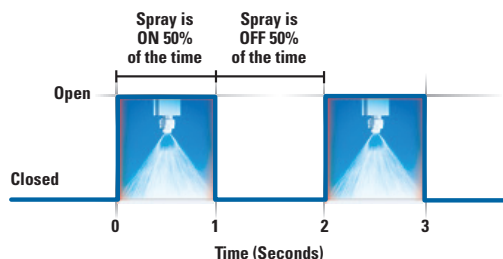


Two PulsarJet® electrically-actuated spray nozzles achieve very low flow rates and can often replace air atomizing nozzles and eliminate the need for compressed air.

AutoJet 1550+ Controller provides complete automated spray control of nozzles to ensure precise and accurate placement of release oil with minimal waste. Automatic air and liquid control leads to proper flow and drop size and eliminates uneven application.



In-line Heater provides heat on demand to warm the release oil up to 130°F (54°C) just prior to spraying to improve coating uniformity and minimize the risk of clogging.



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



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