Bakery Saves More than US$25,000 Annually with New Release Agent Spray System

Problem:
An artisan bakery needed to apply a light coating of release agent on 28” x 36” (711 mm x 914 mm) sheet pans before baking to prevent the bread from sticking to the pan. The release agent was previously sprayed on the sheets by hand—a messy and wasteful process. It was also a time-consuming task and required purchasing the release agent in expensive aerosol cans.

Solution:
Spraying Systems Co.’s turnkey solution used an AutoJet® Model 1550 Modular Spray System to control three air atomizing nozzles that applied the release agent. Rather than spraying pans individually by hand, the pans are now loaded on a conveyor where they pass under a spray station. A photoelectric sensor is used to detect the pans and trigger the spray. A precise volume of release agent is applied to each pan by JAUMCO spray nozzles without overspray. The flow rate of the nozzles can be easily adjusted to accommodate different pan sizes.
Bakery Saves More than US$25,000 Annually with New Release Agent Spray System – Continued

Results:

The AutoJet® Modular Spray System has eliminated manual spraying of the release agent and messy overspray. Pans can be coated five times faster than before, allowing workers to focus on other production tasks. Purchasing release agent in larger volumes is more economical for the bakery and has the additional benefit of eliminating the waste stream of aerosol cans. The bakery is saving more than US$2,100 per month. The payback period for the new spray equipment was less than four months.

A CLOSER LOOK AT THE SYSTEM

Three JAUMCO automatic air atomizing nozzles, triggered by a photoelectric sensor that detects the presence of bread pans, coat uniformly without overspray. The nozzles feature an internal air cylinder for controlled on/off operation up to 180 cycles per minute. The cycling of the nozzle interrupts only the liquid portion of the spray to prevent dripping.

JAUMCO nozzles also feature a clean-out needle extension and provide precise control of liquid flow with a convenient index metering adjustment. The percentage of total flow may be adjusted in 5% increments from zero to 100%, which is ideal for manifold situations where adjustments are required on individual nozzles.