ELECTROSTATIC SPRAY COATING CUTS PITA BAKERY'S OIL USE IN HALF, SAVING US$2,700 MONTHLY

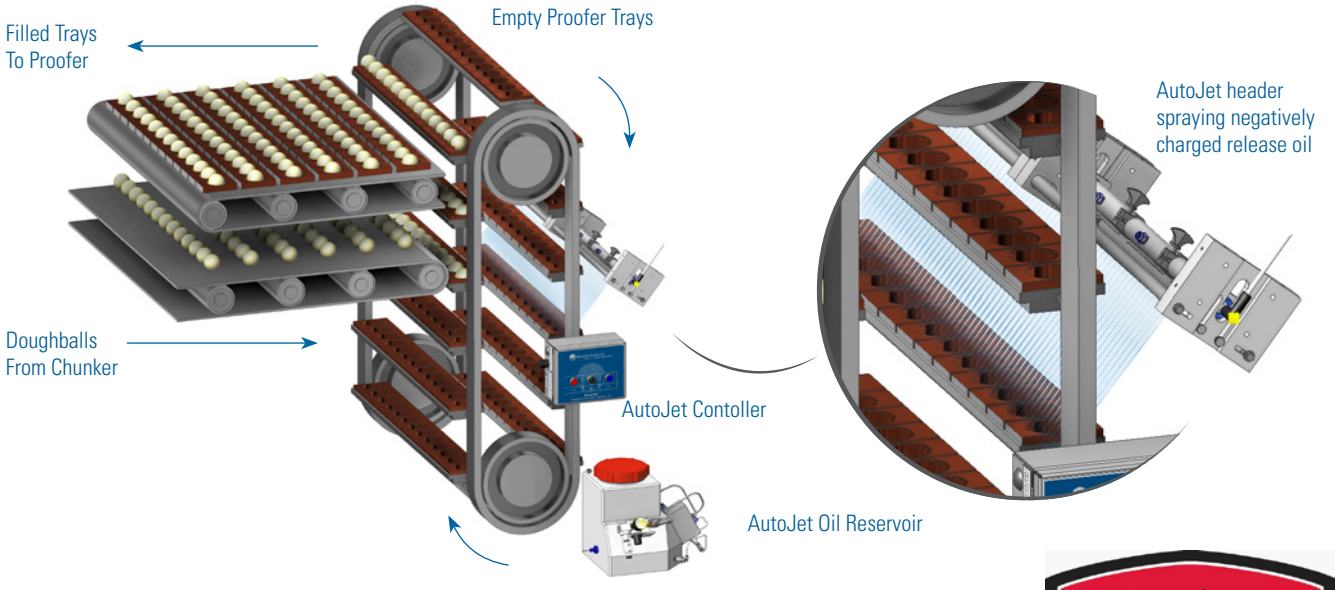
PROBLEM:

Father Sam's Bakery, a producer of pita bread, tortillas and flatbreads, was struggling with the application of a release agent on molds.

Trays of empty molds entered the top of a continuous vertical conveyor and passed through an oil-filled trough at the bottom, which saturated the net-like molds. Each mold was then loaded with a fresh ball of dough and the trays proceeded into the proofer. The system was messy and wasted a great deal of oil. The excess oil dripped on the conveyors and the floor, increasing downtime for cleanup.

SOLUTION:

Spraying Systems Co.'s solution consisted of replacing the dip oiling system with an AutoJet® Electrostatic Conveyor Spray System. Now, using the same vertical conveyor, an AutoJet header provides a continuous fine spray of negatively charged oil onto the empty proofer trays as they are conveyed downward. Electrostatic attraction pulls the oil onto the proofer trays, providing both very high transfer efficiency and excellent oil coverage.



Father Sam's

ELECTROSTATIC SPRAY COATING CUTS PITA BAKERY'S OIL USE IN HALF, SAVING US$2,700 MONTHLY – *Continued*

RESULTS:

Father Sam's changeover to an AutoJet® Electrostatic Spray System has eliminated overspray and dripping, which has cut oil consumption in half. The bakery had been using two 275 gal. (1041 liter) totes of oil each month, but that has been reduced to just one. Additionally, cleanup time has been reduced by about an hour a day.

Father Sam's approximate monthly savings is US$2,700, based on reduced oil use and cleanup time. The investment in the AutoJet Electrostatic Spray System was recouped in approximately five months. In addition, because oil is no longer dripping from the proofer trays, slippery floor conditions have been eliminated, resulting in a safer workplace.

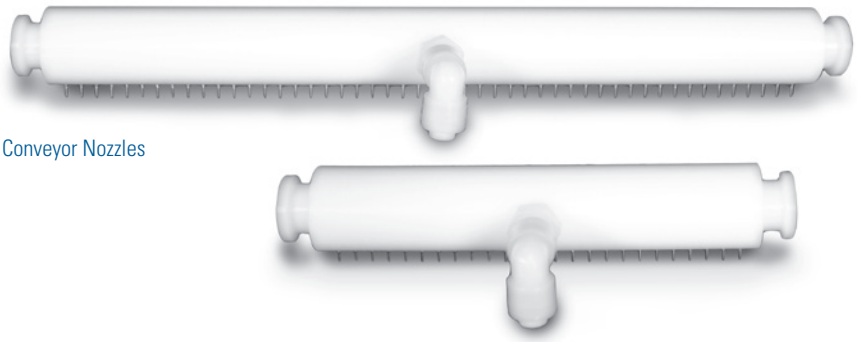
A CLOSER LOOK AT THE SYSTEM

How Does Electrostatic Spray Coating Work?
Electrostatic spray technology is based on the scientific principle that "opposites attract." In electrostatic spraying, a negatively charged liquid coating is attracted to a neutral, grounded target. This simple principle has powerful implications for advanced coating technology:

- The physical attraction of the liquid to the target pulls the coating to the metal surface, providing very high transfer efficiency (typically over 90%)
- Overspray is virtually eliminated, reducing cleanup and improving the work environment

Conveyor Nozzles In Use

Spray Controller



Conveyor Nozzles

System Components:

- 16-liter (4.2 gal.) oil reservoir with piston-style pump
- Spray controller accommodates up to 8 nozzles
- 6" or 12" (152 or 305 mm) conveyor nozzle with flow rates 0.1 to 20 cc/min

Spraying Systems Co.®
Experts in Spray Technology

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