

New Spray Coating System Helps Nut Manufacturer Increase Production, Reduce Ingredient Use and Lower Labor Costs



Problem:

Trophy Nut Company, a family-owned nut processor and candy manufacturer, needed to improve the efficiency of its panning operations. Peanuts and mixed nuts were being coated with honey slurry in a tumbler using three spray nozzles that frequently clogged. The abrasive coating quickly seeped into the nozzle's packing seals causing damage. The damaged nozzles had to be rebuilt. Routine nozzle cleaning and maintenance often required one to two hours of labor per day, resulting in extensive downtime.

Solution:

Spraying Systems Co. improved Trophy Nut's production using an AutoJet® Model 1550 Modular Spray System and a special JAU automatic air atomizing nozzle. The Modular Spray System provides a convenient way to activate the spray and allows precise control of liquid and atomizing air pressures to accurately control the flow of honey coating. The nozzle design includes a collar to wipe the clean-out needle each time it cycles to prevent the sticky slurry from entering the internal portion of the nozzle. A single JAU nozzle has replaced the three previously used nozzles and applies the honey coating more precisely and with less waste.



Internal and external views of the tumbler used for coating mixed nuts with honey slurry.



New Spray Coating System Helps Nut Manufacturer Increase Production, Reduce Ingredient Use and Lower Labor Costs – Continued

Results:

The new spray equipment has dramatically improved the panning process for Trophy Nut Company. More than 300 hours of labor for nozzle cleaning and nozzle repair are saved over the course of a year. In addition, production time has increased and ingredient usage has significantly decreased. Taken together, these factors have combined to generate an estimated payback of less than five months.

A CLOSER LOOK AT THE SYSTEM

A special JAU automatic spray nozzle with a clean-out needle is used to apply the honey coating on the nuts. The clean-out needle helps prevent clogging and costly downtime.



AutoJet® Model 1550 Modular Spray System controls the liquid pressure and atomizing air pressure to ensure the proper amount of honey coating is applied.



Spraying Systems Co.®
Experts in Spray Technology

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