



Spraying Systems Co.®
Experts in Spray Technology



Spray
Nozzles



Spray
Control



Spray
Analysis



Spray
Fabrication



AutoJet® Antimicrobial Spray Systems

Precise Application of Antimicrobials Helps
Ensure Meat and Poultry Safety



Ensure Food Safety, Increase Productivity and Reduce Chemical Use

Meat and poultry processors all have a common goal — to ensure the highest level of food safety possible while minimizing production costs. AutoJet® Antimicrobial Spray Systems help processors of ready-to-eat meats achieve these goals by eliminating slower, more expensive post-pasteurization techniques.

AutoJet Antimicrobial Spray Systems apply a predetermined volume of antimicrobial agent into the purge contained in vacuum packages before sealing. Vacuum-sealing of the packages distributes the antimicrobial evenly around the product. An AutoJet Spray Controller and a SprayCheck® sensor monitor liquid pressure and flow from PulaJet® nozzles to ensure the proper volume of antimicrobial is delivered to each product.

The efficacy of this SLIC™ (Sprayed Lethality in Container) process has been established by the USDA/ARS and the system has a proven track record in effectively controlling pathogens including E. coli, Salmonella and Listeria monocytogenes while reducing operating costs for processors.

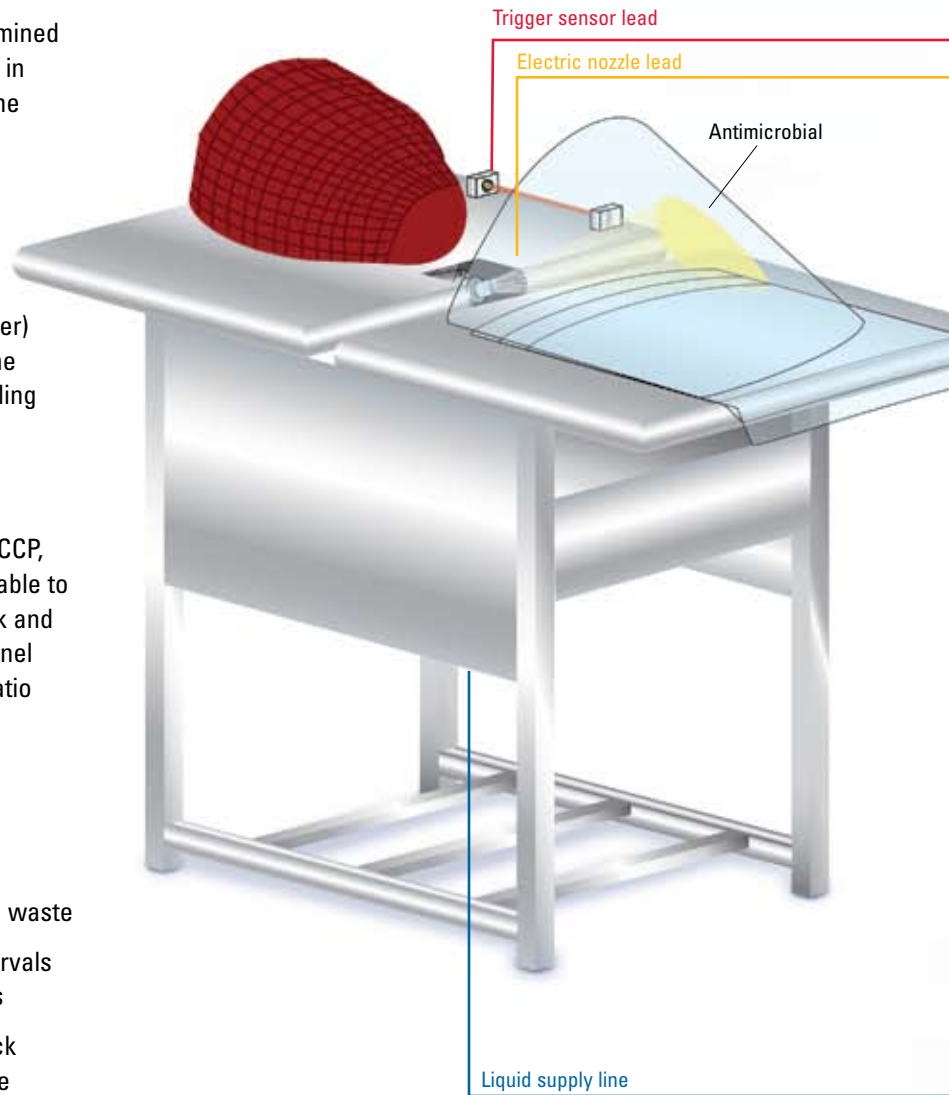
The automated system can be integrated into plant HACCP, GMPs and SSOPs. An optional auto-refill panel is available to continuously monitor the fluid level in the pressure tank and trigger a refill cycle when necessary. The auto-refill panel also dilutes concentrated antimicrobial to the proper ratio for application.

Benefits

- Closed-loop control ensures precise application of antimicrobial for consistent performance and minimal waste
- Flexible operation – various shot sizes and timing intervals can be pre-programmed for automatic batch changes
- Simplified validation process with optional SprayCheck sensor that confirms and documents each spray cycle
- Pressure tank offers simple assembly/disassembly for clean-up and is mounted on legs to provide easy cleaning underneath
- Easily adaptable to various products and packaging environments – multiple mounting options and adjustable armature for precise nozzle positioning
- Unattended operation and reduced labor – alarms notify workers if intervention is required
- Optional auto-refill panel monitors fluid level in pressure tanks and triggers refill when necessary

SLIC is a trademark of A&B Ingredients

Spraying antimicrobial in ham bags



Applications

- Bagged whole muscle product
- Hot dogs, links and formed products
- Case ready trays
- Packaged poultry products



Control Module

Allen Bradley MicroLogix™ 1100 PLC provides closed-loop control to maintain consistent pressure to the spray nozzle

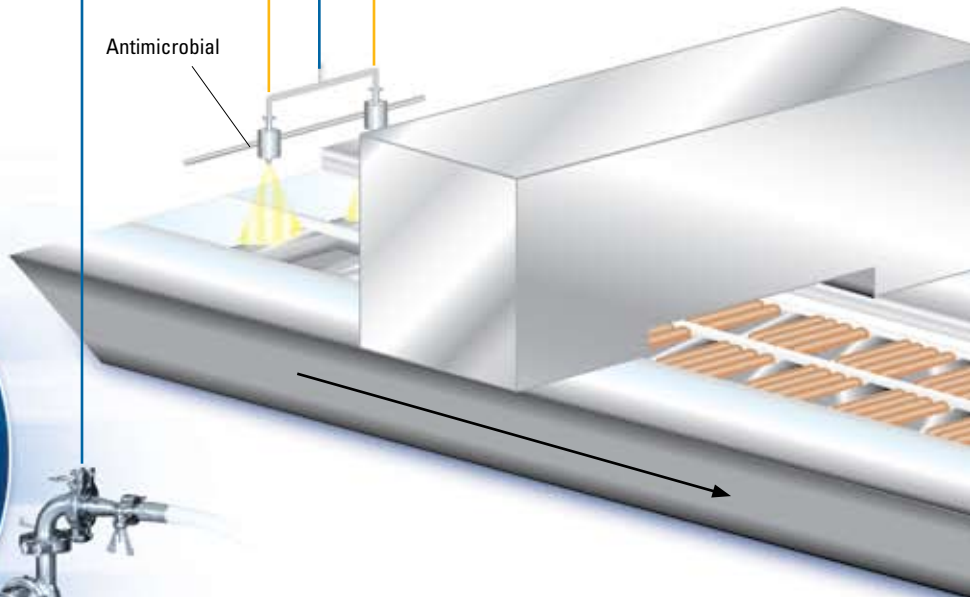
AutoJet
SPRAY CONTROL
From *Spraying Systems Co.*



Delivery Module

Custom PulsaJet® automatic electric spray nozzle with FDA-approved Ti-Ni finish and SprayCheck® sensor

Spraying antimicrobial on hot dog vacuum packaging machine



Supply Module

Polished stainless steel 25-gallon (95-liter) pressure pot with tri-clover sanitary fittings allows easy assembly and disassembly for clean-up



Electric nozzle lead

Pressure transmitter line

Liquid pressure regulating line

Level sensor line

Liquid supply line

Antimicrobial



Specifications

Control Module

- 6 in. (15.24 cm) touch screen provides easy user interface to Allen Bradley PLC controller
- Adjustable spray timing for volumes ranging from 2 to 45 cc
- Wall-mount, NEMA 4X rated panel
- Optional 2-channel capability provides independent control for two spray stations
- Stainless steel product detection sensor for triggering spray

Supply Module

- Polished stainless steel 25-gallon (95-liter) pressure pot with tri-clover sanitary fittings
- Liquid level sensor notifies operator when refill needed
- Optional automatic refill panel triggers pressure tank refill when sensor falls below threshold without disturbing pressure level
- Pressure relief valve provides safety release
- Pressure transmitter allows operator to view the operating pressure

Delivery Module

- Custom high-speed PulsaJet® automatic electric spray nozzle with FDA-approved Ti-Ni finish provides accurate, rapid, repeatable dose sizes
- Optional SprayCheck® sensor verifies spray application
- Multiple mounting options are available for roll stock and bagging machines from Cryovac®, Multivac®, RapidPak®, VC999®, and others
- Fully adjustable armature allows precise vertical and horizontal positioning

Alarm

- Stack light on top of control panel provides multi-colored lights for general alarms and tank low level

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Multivac is a registered trademark of Multivac Sepp Haggenmüller GmbH & Co. KG

RapidPak is a registered trademark of Alkar-RapidPak, Inc.

VC999 is a registered trademark of VC999 Packaging Systems, Inc.



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North Avenue and Schmale Road, P.O. Box 7900, Wheaton, IL 60187-7901 USA

Tel: 1.800.95.SPRAY Intl. Tel: 1.630.665.5000

Fax: 1.888.95.SPRAY Intl. Fax: 1.630.260.0842

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