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BETE® FLEXFLOW™ PRECISION SPRAY CONTROL SYSTEMS FOR AUTOMATIC SPRAY NOZZLES

BETE's FlexFlow Spray Systems ensure precision control and flexible automation for our Electric HydroPulse® and other automatic spray nozzles for use in Food Processing or any other industry looking to save resources and improve product quality. These plug-and-play controllers are an elegant solution for precision coating, moistening, and lubricating applications. Consider the FlexFlow for any industrial process where expensive compounds or ingredients need to be sprayed directly onto the process target. Each control panel can function as a standalone system. Our 2000 model features an Ethernet port to allow integration with your existing plant operations. Visit www.bete.com/flexflow-spray-systems for more information.

SPRAY THE EXACT AMOUNT YOU NEED, PRECISELY WHEN YOU NEED IT

With FlexFlow precision spray control systems, you can activate spray zones using automatic triggers such as photoelectric and proximity sensors, or make adjustments manually. Additional trigger delay settings provide flexible parameters to reduce material consumption and minimize cleaning maintenance by fine tuning the timing of the intermittent spray onto moving targets.

ACHIEVE UNIFORM COATING WITH PULSE WIDTH MODULATION

FlexFlow spray controllers achieve optimum spray precision by regulating the spray flow rate using Pulse Width Modulation (PWM). With traditional single-fluid spray nozzles, the only way to adjust the flow rate is by adjusting liquid supply pressure, which results in changes to spray performance characteristics such as drop size and spray pattern. By comparison, PWM flow control works by cycling spray nozzles on and off at high frequencies (up to 150 times per second). Adjusting the duty cycle, or ratio of ON versus OFF dwell time, enables FlexFlow to control the average flow rate without changing the supply pressure or spray performance characteristics. The high-frequency

operation ensures that spray coverage remains uniform, even when coating products on high-speed conveyors.

FLEXFLOW™ PRECISION SPRAY CONTROL FOOD PROCESSING BENEFITS

BETE's precision spray control systems provide even spray coverage with minimal waste. Discover optimal spray performance for applying flavors, coatings, mold inhibitors, antimicrobials, preservatives, release agents, and moisturizers with exceptional accuracy.

- Control a wide range of flow rates
- Guarantee an even and uniform application rate that connects with conveyor line for automated speed adjustments
- Reduce consumption of expensive coatings
- Reliable spray dosing provides an accurate calorie count
- Reduce overspray waste and improve product quality
- Exact target coatings secure a clean and safe environment
- Promote increased production
- Reduce maintenance and downtime

USE AS A PRECISION SPRAY SYSTEM FOR A WIDE VARIETY OF FOOD PROCESSING COATING OPERATIONS

- Application of antimicrobial agents for food safety
- Application of preservatives and mold inhibitors to help extend shelf life
- Application of egg wash
- Coat bottles to minimize scuff damage
- Apply water to balance moisture loss from the freezing process
- Apply coatings and release agents to pans, cookie sheets, and conveyors to prevent sticking
- Apply flavors, oil, and butter to enhance the appearance and improve the taste of products
- Apply viscous coatings like syrups and glazes