

# INCREASING THROUGHPUT AND DECREASING WASTE IN COATING, LUBRICATING AND DISPENSING OPERATIONS JUST GOT EASIER THAN EVER



# INTRODUCING THE AUTOJET® 2008+ PRECISION SPRAY CONTROL SYSTEM WITH ZONING: EVERYTHING YOU NEED TO SPRAY IN A SINGLE SYSTEM

Our newest AutoJet Spray System makes it easier than ever to bring the benefits of Precision Spray Control (PSC) to your operations. It offers unmatched spray performance and operating flexibility and is easy to set up and simple to use. The system includes: a spray controller, a zone control panel, a spray manifold, electrically-actuated spray nozzles and a liquid delivery module. It's pre-engineered, pre-tested and readily available for quick delivery.



# AutoJet Liquid Delivery Module Pulsation Dampener VFD Pump

# **IDEAL FOR:**

- Dispensing
- Lubrication
- Marking
- Moisture Control
- Mold Release
- Precision Coatings







PulsaJet® Automatic Spray Nozzles



# PRECISION SPRAY CONTROL (PSC): THE SECRET TO SUPERIOR COATING, LUBRICATING AND DISPENSING

AutoJet® 2008+ Precision Spray Control Systems with Zoning consist of PulsaJet® automatic spray nozzles, a 98250 modular manifold and an AutoJet 2008+ spray control panel, zone control panel and liquid delivery module. The system uses PSC to ensure coatings, lubricants and other liquids are applied consistently, uniformly and with minimal waste even when operating conditions change.

PSC uses the AutoJet 2008+ spray controller to turn electrically-actuated PulsaJet nozzles on and off very quickly to control flow rate. The cycling is so fast that the flow often appears to be constant. Flow rate changes are based on line speed and occur almost instantaneously to ensure the proper application rate.

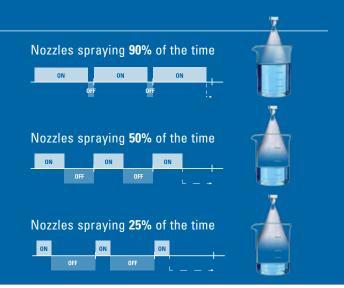
### **Additional Benefits of PSC:**

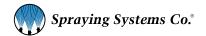
- Reduces product scrap caused by over- or under-application of coatings
- Reduces the use of costly coatings by applying the proper coating volume directly on the target
- Increases production fast cycling of nozzles keeps pace with high line speeds
- Eliminates maintenance time to clean excess coating from equipment and/or floor due to over-application
- Improves worker safety by minimizing misting
- Eliminates the need for compressed air in some operations. Electrically-actuated hydraulic PulsaJet nozzles can achieve very low flow rates – comparable to the flow rates of air atomizing nozzles
- Eliminates the need to change nozzles for different batches or products; a single PulsaJet nozzle can produce a wide range of flow rates

# HOW PRECISION SPRAY CONTROL (PSC) WORKS

Electrically-actuated spray nozzles are turned on and off very quickly to control flow rate. This cycling is so fast that the flow often appears to be constant.

With traditional nozzles, flow rate adjustments require a change in pressure. Changing pressure also changes the nozzle's spray angle/coverage and drop size. With PSC, pressure remains constant enabling flow rate changes without changes in spray performance.





# HOW THE AUTOJET® 2008+ PRECISION SPRAY CONTROL SYSTEM WITH ZONING WORKS

# AUTOJET 2008+ SPRAY CONTROL PANEL - THE HEART OF THE SYSTEM

- Specifically designed to maximize the performance of PulsaJet® electrically-actuated nozzles
- 48V power
- Faster cycle speeds and higher pressure operation
- · Reduces striping
- . User friendly HMI operation
- · External system remote control possible



# **ZONE CONTROL PANEL OPTIONS –**BOOST OPERATING FLEXIBILITY

- Turn off nozzles as needed to accommodate different products or sheet widths. Choose from three versions:
- Manual version allows up to eight spray zones to be created.
   One toggle switch controls each zone and each zone can consist of multiple nozzles. The number of nozzles per zone is determined by the driver capacity in the AutoJet 2008+ panel
- Digital version provides similar performance to the manual version but it is designed for operation with an external control system. The panel accepts the activation signal and distributes it to the appropriate nozzle zones
- Digital version with timer offers the greatest operating flexibility. Users can set the delay and spray times of the nozzles in each zone. This ensures nozzles spray only when the target is in the proper position



# PULSAJET ELECTRICALLY-ACTUATED NOZZLES – UNMATCHED PRECISION

- Accurate spray placement on target with minimal waste
- Wide range of flow rates available from a single tip
- Choice or standard UniJet<sup>®</sup> tips or premium UniJet
   PWMD and PWMM spray tips that provide improved spray uniformity for critical coating applications
- Flow rates from .0025 to 1.6 gpm (0.009 to 6.1 lpm) at 40 psi (2.75 bar)





## 98250 MODULAR MANIFOLD -

# ENSURES PROPER FLUID DELIVERY TO NOZZLES AND SIMPLIFIES INSTALLATION



- Streamlines plumbing of multiple PulsaJet® nozzles and eliminates kinks and bends in tubing that can hinder liquid flow to nozzles
- Lightweight, adjustable design makes nozzle and header installation easy; nozzles are easily accessible once installed to facilitate maintenance
- Customizable to your operations choice of manifold length, nozzle quantity and nozzle spacing; adjustable spray nozzle mounting brackets to adjust spray pattern overlap and nozzle spacing
- Suitable for use with water, oils, lubricants, inks, water-based solvents, non-abrasive slurries and more

# AUTOJET LIQUID DELIVERY MODULE – DEPENDABLE PUMP SYSTEM

- Versatile, multi-stage centrifugal pump for use with most non-flammable or non-volatile, solid-free materials and liquids with viscosities below 75 cP at 68°F (20°C)
  - Flow rate ranges of 0.5 to 6 gpm (1.9 to 22.7 lpm) 10 to 100 psi (0.69 to 6.9 bar)
- VFD pump controlled by AutoJet® 2008+ spray control panel for adjustment of motor frequency to maintain system pressure
- Built-in pulsation dampener improves system performance
- Optional recirculation features

# **OPTIONAL FLUID STORAGE TANK**

- For water-based spray applications
- 100 gallon (379 liter) capacity tank with fluid level switch for auto-refill
- Polyethylene, stainless steel, EPDM and Viton® wetted components
- Fluid outlet: 1-1/4" NPT (F)
- Recirculation inlet: 3/4" NPT (F)
- Optional hose kits available

Note: system components can be sold separately



### **SPECIFICATIONS**

AutoJet® 2008+ Spray Control Panel			
Ambient temperature	95°F (35°C)	104°F (40°C)	With vortex cooler installed 104°F (40°C)
Max. load current	5A	4A	6A
Max. no. of 10000AUH-03 PulsaJet spray nozzles	13	10	16

48V nozzle driver standard; 24V nozzle driver optional

PulsaJet nozzle cycle speed: up to 50% faster

PulsaJet nozzle operating pressure: up to 250% higher to spray higher viscosity coatings

Wide range of input and output signals

Designed for integration with customer's I/O

### **AutoJet Manual Zone Control Panel**

On/off control for eight zones

Manual switches – use any or all

304 stainless steel enclosure. NEMA 4X

Switches can be wired for multiple spray nozzles

# **AutoJet Digital Zone Control Panel**

On/off control for eight zones

Zones digitally selected by input signal; zones controlled by four AutoJet driver modules

304 stainless steel enclosure. NEMA 4X

# **AutoJet Digital Zone Control Panel with Timer**

On/off control for eight zones

Zones digitally selected by input signal; zones controlled by four AutoJet driver modules

304 stainless steel enclosure, NEMA 4X

HMI interface

Delay and spray timing functions are controlled within digital zone panel

Note: system components can be sold separately

The following trademarks are registered to other entities in the US and may be registered in other countries as well: Peek™, Viton®



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### 9001:2015 14001:2015 CERTIFIED

# PulsaJet® Electrically-Actuated Nozzles

Liquid inlet conn.: 1/8" NPT or BSPT

Min. flow rate at 40 psi (2.8 bar) and 10% duty cycle: .0017 gpm (0.006 lpm)

Max. flow rate at 100 psi (6.9 bar) and 100% duty cycle:

0.47 gpm (1.8 lpm)

Max. rated pressure: 250 psi (17 bar)

Max. liquid temperature: 200°F (93°C)

Power: 24VDC, 0.36 amp (-03 size)

Max. operating speed: 15,000 cpm

Materials: stainless steel, Viton or EPDM seals, PPS and PEEK

# 98250 Modular Manifold

Max. length: 18 ft. (5.5 m)

Min. no. of spray nozzles: 2

Max. no. of spray nozzles: 16

Max. liquid pressure: 100 psi (6.9 bar)

Max. flow rate: 8 gpm (30 lpm)

Max. liquid temperature: 120°F (49°C)

Materials: header anodized aluminum, PVC wire way,

polypropylene junction box

Wetted components: anodized aluminum, Viton, neoprene, nylon,

nickel-plated brass or stainless steel and nylon

Liquid conn. 1/2" NPT (F) – supplied with 1/2" OD tube

push-to-connect fittings

Approximate weight: 3 pounds (1.4 kg) per foot (305 mm) of length

# **AutoJet Liquid Delivery Module**

6 gpm at 100 psi (23 lpm at 6.9 bar)

Liquid inlet: 1" NPT (F)

Liquid outlet: 1" NPT (F)

Liquid recirculation: 3/4" NPT (F)

Width: 32.5" (825.5 mm)

Depth: 12.63" (320.8 mm)

Height: 28" (711.2 mm) max

Weight: < 115 pounds (52.2 kg)

Wetted components: 304 and 316 stainless steel, butyl, EPDM, others

Platform: stainless steel

Power: 230V, 8.8A, single phase

Options and accessories: control software configuration, recirculation configuration, fluid storage tank, fluid hose package