



## AUTOJET® MODEL 1550+ MODULAR SPRAY SYSTEM

AUTOMATIC SPRAY CONTROL  
MADE SIMPLE



**Spraying Systems Co.®**

Experts in Spray Technology



# AUTOJET® MODEL 1550+ MODULAR SPRAY SYSTEM OPTIMIZES THE PERFORMANCE OF YOUR AUTOMATIC SPRAY NOZZLES



## BENEFITS

- Automatic on/off control of nozzles offers greater precision than manual operation or other devices such as solenoid valves. Accurate placement of the sprayed liquid is ensured and waste is minimized
- Automatic air and liquid control means proper flow and drop size and the elimination of quality problems due to uneven application of the spray solution
- Achieve Precision Spray Control (PSC) when used with PulsaJet® or AA250AUH nozzles. PSC allows the use of larger nozzle orifices to reduce clogging and liquid use
- Self-contained unit can be set-up in minutes
- Operates both electrically- and pneumatically-actuated spray nozzles
- Ideal for coating, lubricating and marking applications
- Compact unit can be easily integrated into current operations

**AutoJet**  
TECHNOLOGIES  
From *Spraying Systems Co.*

## ABOUT PRECISION SPRAY CONTROL

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.

### Benefits include:

- A wide range of flow rates from a single nozzle at a constant pressure
- Flow rate can be changed almost instantaneously
- Flow rate can be automatically adjusted to line speed to ensure proper application
- Low flow rates can be maintained with larger spray orifices to reduce clogging

## NOZZLES SPRAYING 50% OF THE TIME





## PERFORMANCE OVERVIEW

### Pumping Capability

- Inks, stains, water-based solvents, lubricants, oils, paints, non-abrasive slurries
- Fluid viscosity 3000 cP or less at 68°F (20°C)
- Fluid temperatures of 32° to 140°F (0° to 60°C)

### Flow and Pressure Rating

- 2 gpm at 40 psi (7.5 lpm at 2.8 bar)
- Maximum air and liquid pressure: 100 psi (7 bar)

### Three selectable timing modes

- Fixed spray time
- Variable spray time
- Repeat

### Control Options

- On/off control for pneumatically- and electrically-actuated spray nozzles
- Liquid pressure control for both hydraulic and air atomizing spray nozzles
- Air pressure control for air atomizing nozzles
- Fan air pressure control provides spray pattern control for variable spray air atomizing nozzles

### Zone Control Options

Turn off electrically-actuated nozzles as needed to accommodate different products or sheet widths with an optional Zone Control Panel. Each zone can consist of multiple nozzles and multiple zones can be configured. Options include manual, digital and digital with timer versions

## SPECIFICATIONS:

Control panel: UL Type 1 with door closed (stainless steel)

Power required: 110 VAC, 60 Hz, 15 A, 1 Ø (capable to 260 VAC, 50 Hz, 15 A, 1 Ø)

Air inlet shut-off/lockout and filter assembly

Optional air operated double diaphragm pump

Liquid outlet strainer 100 mesh

Liquid pressure regulator and gauge

Control valve for recirculation to tank (pump and pumpless versions)

Standard triggering options: trigger cable, photoelectric sensor, thru-beam, hand pendant

Controls up to eight automatic spray nozzles (varies by type)

For automatic line speed adjustments using PSC flow control, a conditioned, 4-20mA signal is required

Dimensions: approximately 29" (0.75 m) tall, 14" (0.36 m) wide and weighs less than 58 lbs. (26.3 kg)

### Fluid delivery options:

- Pump version: includes integrated air operated diaphragm pump
- Pumpless version: regulates pressurized liquid supply
- Pressure pot version: regulates air pressure to a pressure vessel

### Wetted materials:

#### STANDARD

- Pumpless version: stainless steel, Viton®, PVC, nylon and nickel-plated brass
- For pump version: stainless steel, Viton, PVC, nylon, nickel-plated brass, polypropylene and PTFE

#### FOOD CONTACT

- Pumpless version: stainless steel, Viton, acetal, polyethylene
- Pump version: stainless steel, Viton, acetal, polyethylene, PTFE





## GENERATING RESULTS WITH THE AUTOJET® MODEL 1550+ MODULAR SPRAY SYSTEM

**SNACK MAKER REDUCES OPERATING COSTS BY US\$36,000/YR. AND IMPROVES QUALITY**

**Application:**

The system applies a light coating of sunflower oil to potato crisps before baking to maintain product appearance and taste. The system's pump moves the oil from a supply tote to automatic air atomizing nozzles equipped with clean-out needles to prevent clogging. Flow rate is easily adjusted to ensure uniform coating.

**Results since installation:**

Consistent oil coverage has lowered reject rates; oil use has been reduced and system maintenance has decreased by two hours per day.

**REVENUE GAIN: US\$3,000 PER MONTH**  
**SYSTEM PAYBACK: LESS THAN THREE MONTHS**

**NEW SPRAY SYSTEM SAVES BAKERY US\$70,000 ANNUALLY**

**Application:**

The system sprays a water and corn syrup solution on a sheet of dough on a moving conveyor. The solution helps flavorings stick and prevents tears in the dough. PSC flow control enables very low flow rates using hydraulic PulsaJet® nozzles. The constant spray pressure ensures consistent spray angle for uniform coverage of the dough. The system also maintains the proper application rate even when line speed changes.

**Results since installation:**

Corn syrup consumption has decreased by 60%, production has increased and the mist elimination system is no longer needed due to the use of hydraulic nozzles.

**REVENUE GAIN: US\$70,000 PER YEAR**  
**SYSTEM PAYBACK: LESS THAN TWO MONTHS**



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[spray.com/results](https://spray.com/results)

## HARDWOOD FLOORING MANUFACTURER SAVES MORE THAN US\$36,000 ANNUALLY

### Application:

The system sprays pigment into the groove of floor boards on a conveyor line. The pigment hides cosmetic imperfections and is supplied to an automatic air atomizing nozzle by a pressure tank. The system triggers the nozzle to spray only when the conveyor is moving and an object sensor detects a floor board. The use of a clean-out needle helps prevent the nozzle from clogging, ensuring uniform coverage of the boards.

### Results since installation:

Scrap has been reduced by 50%; operators are no longer required to monitor the system and overall production efficiency has increased.

REVENUE GAIN: US\$3,000 PER MONTH  
SYSTEM PAYBACK: LESS THAN TWO MONTHS

## NEW SPRAY SYSTEM HELPS ADD US\$18,000 ANNUALLY TO BOTTOM LINE

### Application:

The system applies a thin coating of silicone emulsion into plastic cups after molding to prevent them from sticking together during packaging and to help control dust in the plant. The emulsion is delivered to automatic air atomizing nozzles by a pressure tank. The nozzles, mounted in a header immediately after the molding machine, coat the cups as they pass through the spray station.

### Results since installation:

Emulsion use has decreased by 15% and nozzle maintenance time has been dramatically reduced.

REVENUE GAIN: US\$18,000 PER YEAR  
SYSTEM PAYBACK: LESS THAN 12 MONTHS



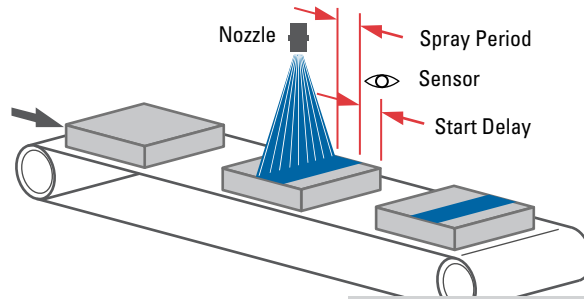
# AUTOJET® MODEL 1550+ MODULAR SPRAY SYSTEM TIMING MODES

## FIXED SPRAY TIME

The system will spray once after it is triggered based on entered start delay and spray period, then stops spraying until next trigger signal.

### Application Examples:

- Marking
- Partial coverage
- Single instance spray
- e.g.: die lube applications



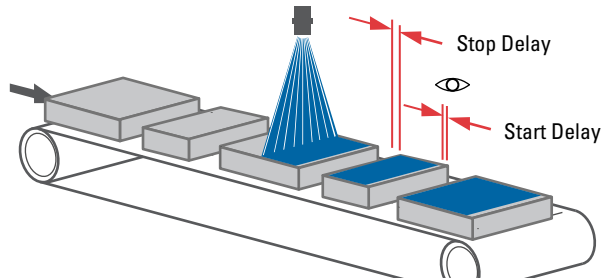
For this mode you enter:  
Start Delay  
Spray Period

## VARIABLE SPRAY TIME

This timing mode creates spray periods of variable lengths. The system will spray following the trigger. Spray period is based on the sensor seeing the object then utilizing the entered start delay and stop delay. The length of the spray depends on the length of the trigger input.

### Application Examples:

- Full coverage
- Variable size items
- Variable line speeds
- e.g.: precision spray applications



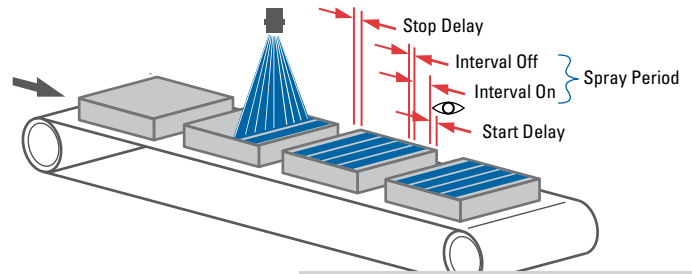
For this mode you enter:  
Start Delay  
Stop Delay

## REPEAT

This timing mode creates a continuous repetition of spray applications for a variable time or spray period based on object size. The system will spray following the trigger, spray period is based on the sensor seeing the object then utilizing the entered timing settings, spray delay, interval on, interval off, repeats these until trigger off signal then incorporates stop delay.

### Application Examples:

- Stripping
- Humidification
- Non-full coverage
- e.g.: conveyor applications



For this mode you enter:  
Start Delay  
Spray Period – Interval On Interval Off  
Stop Delay

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