



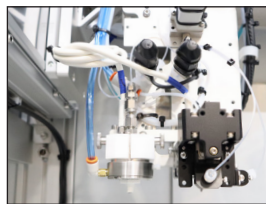
NovoCoat

Ideal for mid-to-high-volume production, NovoCoat is easily configured with Sono-Tek ultrasonic nozzles to customize spray patterns for your specific application. Patterns are easily shaped, ranging from 0.08 - 6" wide (2 - 153 mm). Several liquid delivery options are available with a wide range of flow rate capabilities, depending upon the system configuration.

Machine size selection is dependent upon application. Common spray area sizes are:

- 600 x 600mm
- 800 x 800mm
- 1000 x 1000mm

600 x 600mm shown



Dual nozzle configuration with AccuMist and MicroMist air shaping nozzles

NovoCoat is a standalone programmable three-axis robot ultrasonic full coating solution. Single or multiple Sono-Tek ultrasonic nozzles can be integrated. A variety of system options are available for integration. Windows®-based software makes it easy to program and store spray patterns for automated processes. NovoCoat is available in several gantry sizes to suit small to large substrates.

NovoCoat includes many integrated features:

- Robust standalone enclosure
- SMEMA conveyor capable
- Windows®-based programming software (PC included)
- Intuitive joystick for nozzle motion and teaching programs
- Coordinated motion in all three axes simultaneously
- Integrated nozzle power, pump control, and heat plate control (optional)
- Sealed linear slides to protect ball screw drives
- Optional heat and/or vacuum plate:
600mm system – 550mm x 550mm
800mm system – 750mm x 750mm
1000mm system – 950mm x 950mm

Sono-Tek ultrasonic nozzles feature:

- Up to 80% reduction in material consumption
- Reduced wasteful overspray and atmospheric contamination
- Non-clogging nozzle design results in minimal servicing and downtime
- Precise, repeatable spray patterns are easily shaped
- Controllable spray produces reliable, consistent results
- Corrosion-resistant titanium and stainless steel construction
- Ultra-low flow rate capabilities, intermittent or continuous
- No moving parts to wear out



NovoCoat Programmable Coating System Specifications

Tooling Plate Size (600mm system):

660 x 660mm (26 x 26 in)

Range of Motion: (3 size configurations)

600mm: 580 x 580 x 85mm*
(22.8" x 22.8" x 3.3")*

800mm: 780 x 780 x 85mm
(30.7 x 30.7 x 3.3")*

1000mm: 980 x 980 x 85mm
(38.6 x 38.6 x 3.3")*

*NOTE: Coating area may be reduced depending on nozzle configuration, options and accessories

Repeatability: 0.025 mm (0.001 in)

Resolution: 0.02 mm (0.0008 in)

Motor: Brushless DC servo

Drive Mechanism: Ball screw drive

Work Payload: 10 kg (22 lbs.)

Inputs/Outputs: Configurable and expandable input/output system to meet application needs

Software Control: Windows®-based

Power:

Without Heat Plate:

208-240VAC 50/60Hz 1-phase

3-wire (L, N, G or L1, L2, G)

13.3 Amps Max, 4 Amps Typical

With Heat Plate (600mm system):

208-240VAC 50/60Hz 3-phase

4-wire (L1, L2, L3, G)

30 Amps Max

Air: 0.60-0.70MPa (85-100psi)

100LPM Max (for single nozzle system)

Actual consumption will vary depending on number of nozzles and spray shaping technologies used

Exhaust: 4250LPM (150CFM)

minimum - customer supplied

Dimensions: Gantry: Application Dependent

Enclosure: Application Dependent

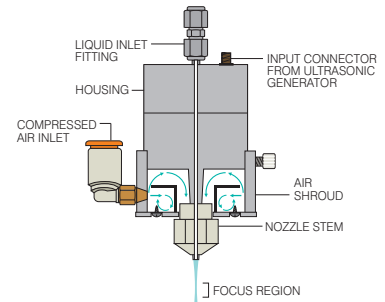
Customizable options are available. Contact Sono-Tek for details.



Sono-Tek ultrasonic nozzles can create a variety of precise spray patterns:

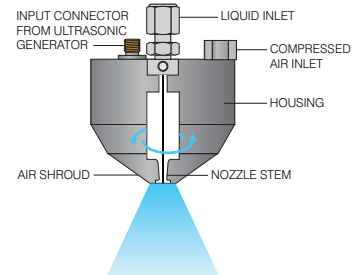
The **AccuMist™** nozzle creates a narrow, slightly bow-shaped spray pattern.

Pattern width adjustable from 1.778 - 6.35 mm (0.070 - 0.250").



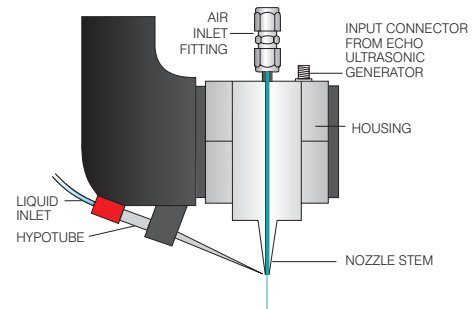
The **Vortex** nozzle produces a wide, conical spray pattern.

Pattern width adjustable from 50 - 102 mm (2 - 4") in diameter.



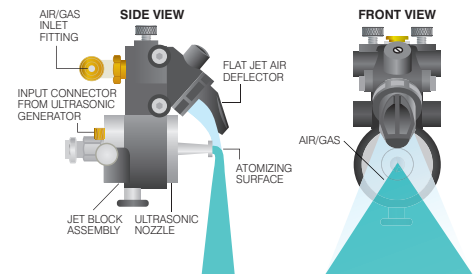
The **MicroMist™** nozzle creates a very narrow, cylindrical spray pattern.

Pattern width adjustable from 0.26 - 0.77 mm (0.010 - 0.030").



The **Impact** nozzle creates a wide, fan-shaped spray pattern.

Pattern width adjustable from 50 - 150 mm (2 - 6").



All four nozzles shown create precise, repeatable, controllable, low-volume atomized spray patterns and can be easily integrated with the NovoCoat programmable coating system.

The system is most commonly used with one or more Sono-Tek syringe pump(s) for precision, low-flow applications.

Sono-Tek Laboratory Services

Sono-Tek's in-house laboratory services offer the expertise of our engineering and technical staff in resolving process issues and tailoring our technology to meet the needs of our customers.

