

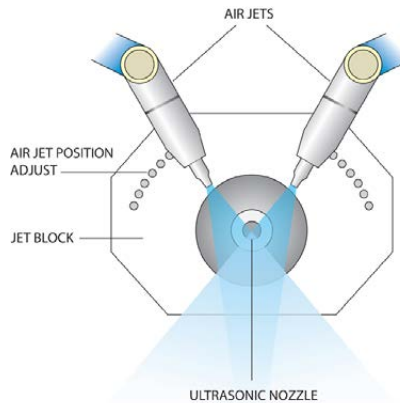
WIDETRACK

Wide Area Coating System

Single & Multi Head Spraying Systems



System Components



The soft, ultrasonically produced spray is shaped and directed toward the substrate by precisely timed alternating jets of air. Spray pattern width is adjusted by changing the position and angle of the jets for precise coverage of desired areas with very little overspray.

The WideTrack ultrasonic spraying system produces a wide, fan-shaped spray pattern that is up to 12" (305 mm) or 24" (610 mm) wide (dual) and features a user friendly LCD backlit display. Sono-Tek's non-clogging ultrasonic nozzles create highly uniform, repeatable spray patterns using low velocity air shaping technology.

System features include:

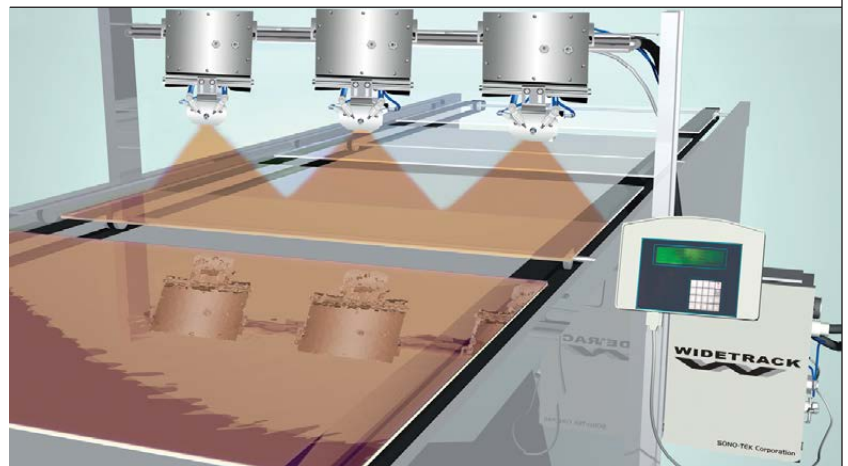
Rotary air valve controls precise timing of the air jets for uniform deposition.

The nozzle driver electronics supplies energy at the proper frequency and power to excite the ultrasonic nozzle.

One of Sono-Tek's precision pumping systems (gear pump, MicroFlow, or Syringe Pump TI) is fully integrated, delivering liquid at a precisely controlled rate to the ultrasonic nozzle.

The electronics enclosure houses the following:

- Nozzle driver subsystem
- Liquid delivery system
- Sensor electronics and power supply assemblies
- Jets control assembly
- Rotary air dispersion valve



High Volume Systems are Available for Spraying Wide Widths

The WideTrack spray system offers significant advantages over conventional pressure nozzles in a range of applications. The titanium construction makes it compatible with almost any liquid, reducing waste and improving spray performance.

For over 30 years Sono-Tek has produced precision spraying solutions for companies around the world, replacing conventional coating methods with clean, efficient, reliable ultrasonic spraying solutions.

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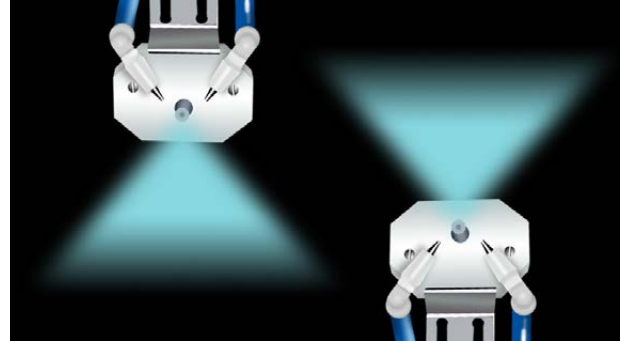


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R&D tabletop and standalone spray enclosures available.

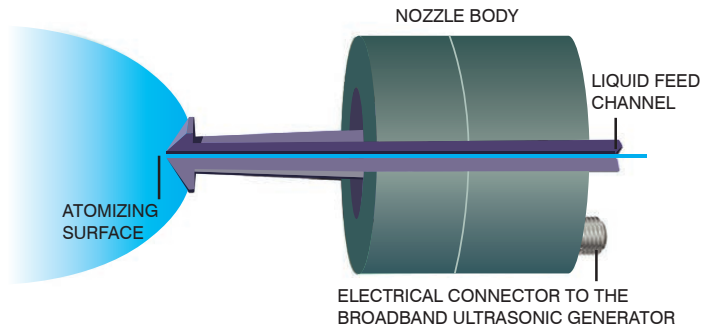
WideTrack systems can be mounted in spray up or spray down configurations.



Liquid Atomization

Ultrasonic nozzles operate by converting a high-frequency electrical signal into mechanical expansion and contraction of two piezoelectric transducers. This causes vibrations to be sent down the nozzle's titanium horn. Liquid emerging onto the atomizing surface is broken into a fine spray by the ultrasonic energy concentrated there. Atomized liquid is generated as a soft, low velocity spray with minimal overspray.

Cross section of an ultrasonic nozzle



WIDETRACK WIDE AREA COATING SYSTEM SPECIFICATIONS

General Specifications

Coating System	Stationary ultrasonic nozzle with air-operated spray dispersion assembly
Construction	Stainless steel, titanium, Teflon®, polypropylene, Delrin®, Ryton® (wetted materials)
Controller	8-bit micro-processor
Analog Channels	Up to 8 with 12-bit resolution
Display	Backlit LCD (4x40)
Width Range	2-24" (50-600mm) Custom widths available
Flow Rate Range	Gear Pump: 10 - 200 ml/min MicroFlow Pump: 0.01 - 25ml/min Syringe Pump TI: 0.01 - 50 ml/min
Deposition Uniformity	±10%
Deposition Repeatability	± 2%

Service Requirements

Line Power	110/120 VAC, 50/60 Hz or 220/240 VAC, 50/60 Hz
	Single phase, 750 VA max
Compressed Air	Clean, dry and oil-free
Supply Pressure	70 - 150 psi
Capacity	3 cfm / 24"
Exhaust	Application dependent

System Enhancements and Options

Enhancements

Programmable operation with RS232 communications and 250 recipe storage
Standalone enclosure
Chain/tab conveyor

Options

Titanium spray assembly
Stainless steel reservoir with filter and level sensor
Three position light tower
Calibration kit

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leadership through innovation since 1975

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