

## ... Precision Ultrasonic Coating Systems

SAMES KREMLIN

SONO•TEK

Sono-Tek has partnered with one of the world's leading electrostatic coating manufacturers in the world, Sames Kremlin, to develop an exciting new coating technology:

# Ultrastatic® Enhanced Spray Coating **ESC**

**Newly developed Ultrastatic ESC option available for special early release to research institutions**

The Ultrastatic® ESC system uses ultrasonic atomization in combination with electrostatics. The joining of these two long-established coating techniques has shown interesting results, often enhancing deposition and coating attributes.\*

Ultrastatic® ESC is currently being offered as a research and development tool for laboratories and universities exploring new methods of thin film deposition.

The Ultrastatic® ESC option is easily configured with Sono-Tek XYZ motion systems for full custom coating solutions offering many features and benefits:

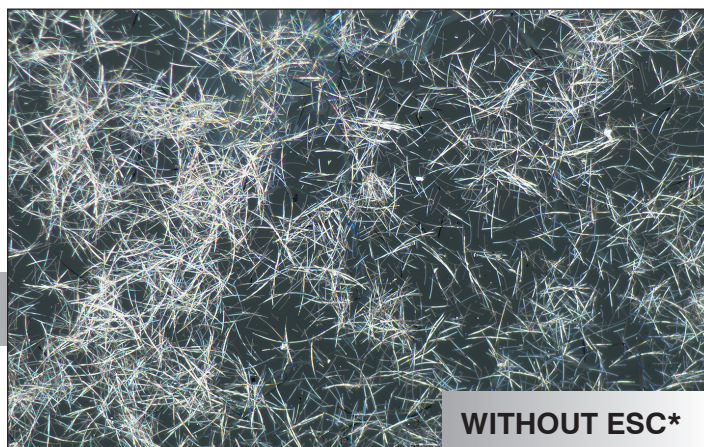
- Programmable coordinated XYZ motion
- Capable of very low flow rates
- Self-cleaning, non-clogging ultrasonic nozzle
- Break up of agglomerated particles due to ultrasonic nozzle vibrations



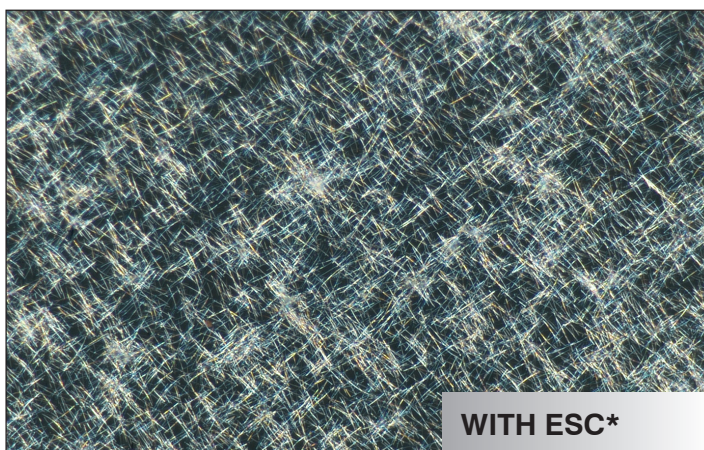
### INPUT SPECIFICATIONS

Voltage Range	100-240 VAC, 50/60 Hz
Max Current	0.25A

\*Results vary greatly and depend on substrate and liquid properties.



WITHOUT ESC\*



WITH ESC\*

The photos above illustrate silver nanowires sprayed without ESC (top) and with Ultrastatic® ESC (bottom) using the same deposition parameters.

Patented low velocity air shaping systems entrain the atomized spray into precisely defined patterns. The type of air shaping system used depends upon application requirements.

### AccuMist



### Vortex



Nozzle Type	AccuMist	Vortex
Spray Width (per nozzle)**	2-40 mm (0.08 - 1.5")	40-125 mm (1.5 - 4.9")
Max Flow Rate**	.1 - 15 ml/min	5 - 60 ml/min

\*\*Specific width and flow rate dependant on nozzle configuration

ISO CERTIFIED

**SONO•TEK Corporation**