

Exacta•Coat^{CC}

PROGRAMMABLE COATER



for Carbon Capture
Electrolyzer Coatings

Fully enclosed XYZ tabletop ultrasonic spraying system designed for coating carbon capturing devices such as Polymer Electrolyte Membrane Electrolyzers (PEM), Solid Oxide Electrolyzers, and other devices. Coatings include various electrolyte materials, including suspensions containing carbon inks, PTFE binder, ceramic slurries, platinum, Iridium, and other metal catalysts.

ULTRASONIC SPRAYING SYSTEM

ExactaCoat CC features:

- Compact benchtop design
- 400 mm x 400 mm x 100 mm (15.75" x 15.75" x 3.94") range of motion
- Pathmaster® Windows®-based programming software with image import
- Remote trackball teach pendant
- Coordinated motion in all three axes simultaneously

Sono-Tek ultrasonic nozzles feature:

- Up to 80% reduction in material consumption
- Reduced wasteful overspray and atmospheric contamination
- Non-clogging design results in minimal servicing and downtime
- Repeatable spray patterns that are easily shaped for precise coating applications
- Highly controllable spray produces reliable, consistent results with or without masking
- Corrosion-resistant titanium and stainless steel construction
- No moving parts to wear out

Optional Equipment:

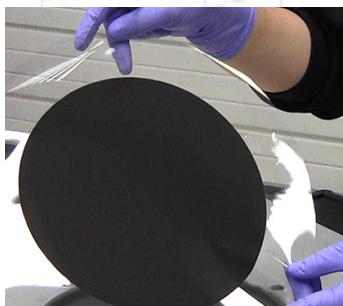
Heat Plate, Vacuum Plate, or Combined Heat/Vacuum Plate

Ultrasonic Dispersion Pump - for keeping suspensions evenly dispersed during coating process

MicroFlow Recirculation Pump - for precise dispense of suspensions at very low flow rates

Camera - Passive Vision

Laser Pointer

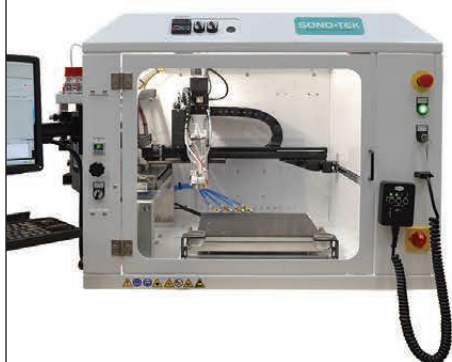


Ideal for R&D or low-volume production, the ExactaCoat CC is easily configured with Sono-Tek ultrasonic nozzles to customize spray patterns for your specific application. Spray patterns range from 0.08 - 2" wide (2 - 50 mm).

IMPACT



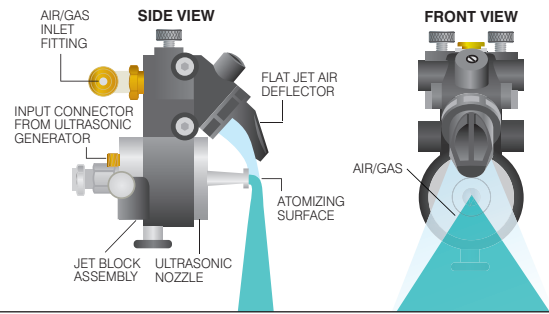
ACCUMIST™



SONO•TEK Corporation

Operating Principle

The Impact System combines Sono-Tek's unique ultrasonic atomizing nozzle with a controlled jet of air from the flat jet air deflector. The ultrasonically produced spray at the atomizing surface is immediately entrained in the air stream, creating a fan-shaped spray pattern (10 - 50mm). The velocity of the air stream is controllable, allowing low or high-impact of the atomized spray onto the product or substrate.

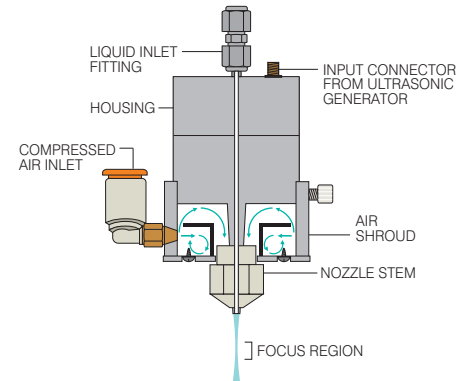


The AccuMist™ system combines Sono-Tek's unique Microspray ultrasonic atomizing nozzle with low pressure air to produce a soft, highly focused beam of small spray drops.

Compressed air, typically at 1 psi, is introduced into the diffusion chamber of the air shroud, which produces a uniformly distributed flow of air around the nozzle stem.

The ultrasonically produced spray at the tip of the stem is immediately entrained in the low pressure air stream.

The spray envelope is bow-shaped (2mm - 10mm). The width of the bow is controlled by adjusting the distance between the nozzle and the substrate.



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.



EXACTACOAT CC PROGRAMMABLE SYSTEM SPECIFICATIONS

Enclosure Specifications

Work Area* 400 x 400 x 100 mm (15.75 x 15.75 x 3.94 in)

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

Repeatability 0.025 mm (0.001 in)

Resolution 0.015 mm (0.0006 in)

Motor Brushless DC servo

Drive Mechanism Ball screw drive

Work Payload 11.4 kg (25 lbs.)

Inputs/Outputs 52

Software Pathmaster® Windows-based

Power 120V, 220V, +/- 10%, 50-60Hz

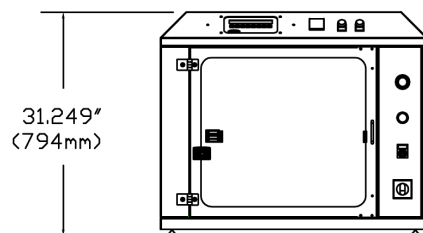
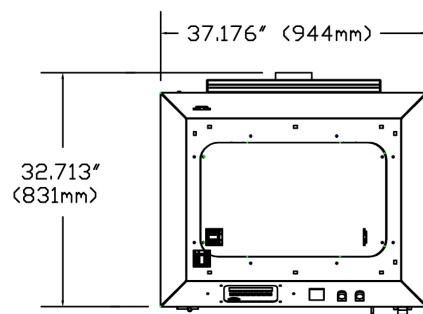
Air 80 PSI dry unlubricated air

Exhaust 90 cfm (2549 lpm) - *Customer Supplied*

Certification CE certified

Options	Laser Pointer
Heat plate temp	Up to 150°C
Vacuum plate	4 zones, user controlled
Camera (Passive Vision)	Adjustable viewing area

Dimensions 37.2" W x 31.2" H x 32.7" D



SONO•TEK Corporation
leadership through innovation

Corporate Headquarters:
2012 Rte. 9W, Milton, NY 12547 USA
Phone: (845)795-2020
Fax: (845)795-2720

E-mail: info@sono-tek.com **ISO CERTIFIED**
Web: www.sono-tek.com
Printed in USA
©2008 Sono-Tek Corporation. All rights reserved
EXACTACOATCC22R1