SCIENTIFIC MOTION

Spin Coating System

CT-300 Series

Model #CT-300WC (Front View)

Model #CT-300WC (Back View)

- Processes wafer sizes from 100mm through 300mm (automatic wafer size detection).
- Wafers are transported via a 3-axis robot using path-planning software, enabling access to orthogonal stations without a linear track.
- Servo-drive dispense arm with programmable z-direction and sweep (linear and hyperbolic).
- Servo-drive spin chuck with programmable ramp, speed, and time (1 to 8000 RPM).
- Dynamically dispenses up to four process fluids, e.g. flux, DI water, solvent, or photoresist.
- Web enabled, PC controlled system with a 12” touch-screen interface for operation and recipe management.
- Modular design allows up to 2 FOUP load ports or 2 cassette stations or combination of both.
- Up to 3 process modules can be incorporated with flexible configurations, e.g. spin coater, developer, bake station, and buffer.
- Can be directly integrated with adjacent equipment such as a reflow oven via a 25 wafer buffer module.
- Available communication protocols are SMEMA, SECS/GEM, Modbus, and Ethernet (remote diagnostics).

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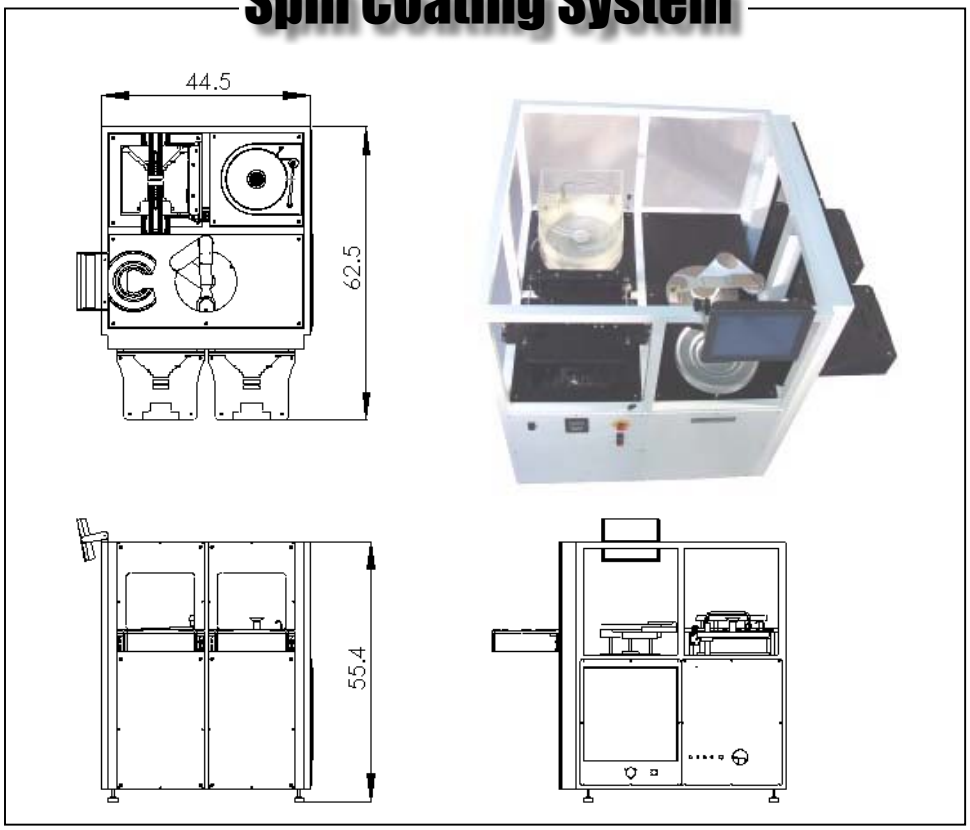
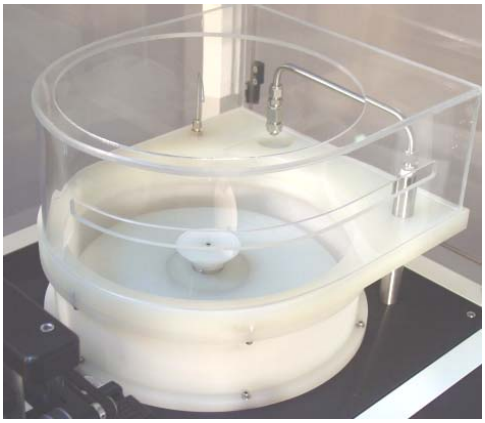
SCIENTIFIC MOTION

Spin Coating System

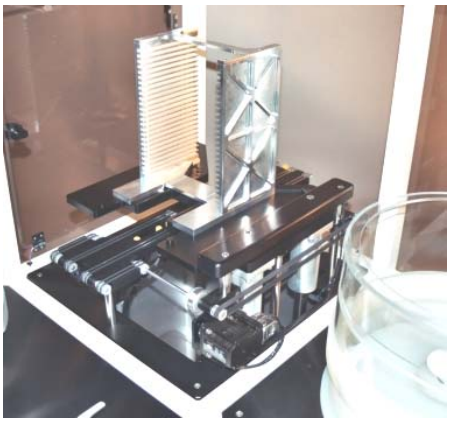


FACILITIES AND INTALLATION SPECIFICATIONS

Power	115V AC, 20 Amp, 50-60 Hz, 1Ø	Twist Connect
Vacuum	20 in Hg minimum	¼" Compression
Nitrogen	20 psi minimum	¼" Compression
Exhaust	200CFM	2" OD
Drain	House drain or container	½" Compression
Process Fluids	Process dependent	¼" Compression
Shipping Weight	Approximately 800lbs	
MTTF	1500 hours	
MTTR	3 hours	



Spin Coater Module



Buffer Module

CT-300 SERIES

TRANSPORT SYSTEM
-Asyst 407 3-axis robot
-Handles 100mm to 300mm wafers
-SmartCourse™ software for access to orthogonal stations
-Z-travel: 13.0 inch (330.2mm)
-Radial Travel: ±14.4 inch (365.7mm)
-Theta Travel: 365 degrees maximum
-Z axis Repeatability: ±0.001 inch (±0.025mm)
-R axis Repeatability: ±0.001 inch (±0.025)
-T axis Repeatability: ±0.006 degrees

SYSTEM CONTROLS
-Overall system controlled by Advantech 12" touch screen PC computer
-Individual process modules controlled by RCM 3200 Rabbit embedded controller
-Communication between process modules and Advantech PC computer via Ethernet
-Communication between Animatic SmartMotors™ and Rabbit controller via RS232
-Available communication between external equipment via SMEMA, SECS/GEM, Modbus, and Ethernet

SOFTWARE
-Advantech touch screen computer running on HTML platform under Lynux operating system
-Rabbit embedded controller uses C language

300mm FOUP LOAD PORT
- Configurable with Asyst, Brooks, or any Semi Standard 6 bolt hookup FOUP handler
- Wafer Mapping (configurable with RFID Tag Reader)
- Configured to work with Personal Guided Vehicle (PGV)
-Single or double FOUP load ports

SPIN COATING MODULE
-Servo-drive dispense arm with programmable z-direction and sweep (linear and hyperbolic)
-Servo-drive spin chuck with programmable ramp, speed, and time (1 to 8000RPM)
-Up to four process fluids per coater module
-Polypro or Teflon process bowl
Options:
  -High pressure DI water dispense using a Haskel Pump (up to 3000 psi)
  -Topside EBR
  -Bottom side EBR

BAKE MODULE
-Up to 400ºC ±0.5ºC temperature uniformity
-Programmable proximity bake with servo-drive lift mechanism

BUFFER MODULE
-Handles wafer sizes from 100mm to 300mm
-Encoder feedback to match adjacent oven belt speed for smoother transition
-Individual capacitive sensors for each wafer size

APPLICATIONS
-Flux dispensing
-Wafer cleaning
-Photoresist coating and developing
-Backside Etching

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