

# The Laurell Advantage

## Choosing your best spin processor

### All Laurell Technologies 650 series spin processors come with the following benefits

**650 Digital Process Controller** — easy to program without a manual with many advanced capabilities

**Time:** 1 second to 99 minutes 59.9 seconds in 0.1 second increments

**Programs:** twenty 51-step programs or manual mode — number of steps/programs can be user reconfigured through SPIN 3000

**SPIN 3000** field-proven advanced PC interface software included, not required to program system

**Class 1 Bluetooth® (100 meter / 328 ft range)** — offered as standard (no cable or converter)

**Fluid-control lid** directs materials towards rear drain — no drips encountered when opening chamber

**Clear ECTFE lid** with Ø3/4" (Ø19 mm) center opening

**Ø1.5" (Ø38 mm) NPP Drain Port and Nitrogen purge**

**Safety door interlock** (disallows rotation when door is open)

**Safety door latch** (requires deliberate action to open process chamber)

**Safety door lock** (prevents chamber opening while program is running, or during chuck rotation after program ends)

**Vacuum interlock** (disallows rotation when there is insufficient vacuum)

**Corrosion-proof configuration** (no exposed metal — therefore, no degradation using strong acids or bases)

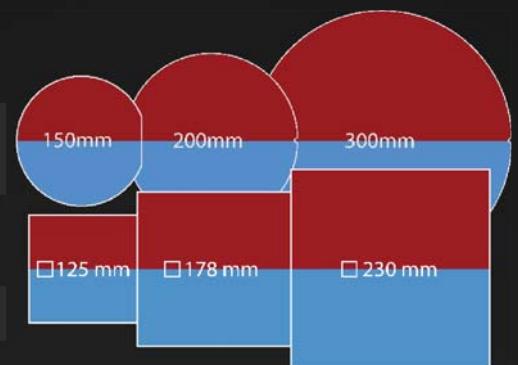
**Glovebox-ready configuration** (Continuous seal purge with CDA or inert gas required)

**Lifetime Process Support**

### Choose a size that fits your substrate

	23 Series	8 Series	15 Series
<b>Round substrates up to:</b>	150 mm/ 6 inches	200 mm/ 8 inches	300 mm/ 12 inches
<b>Square substrates up to:</b>	125mm/ 5 inches	178 mm/ 7 inches	230 mm/ 9 inches

*The indicated measurements for square substrates are the length of a side*



WS-650Mz-23NPP



WS-650Hz-8NPP



WS-650Hz-15NPP

### Required facilities



95 - 250v AC at 47-63 Hz



60-70 psig (4-5 bar) of N<sup>2</sup> or Clean Dry Air



20-28 inches (~504-711mm) Hg.  
1.7 - 4.5 SCFM (0.127 M<sup>3</sup>/min.)

## Choose the housing material based on your process and chemistry:

### Polypropylene Copolymer

- An exclusive copolymer resistant to solvents, strong acids, and bases

### Teflon®

- Widest chemical resistance available
- Required for processing aggressive chemistries such as "Piranha" etch and certain acids at high concentrations

## Choose the motor performance that suits your process, now and in the future:

### Mz Standard Performance Motor

- Brushed motor suitable for N<sub>2</sub> or Ar environments
- Speed range from 100 to 12,000 RPM
- Acceleration up to 13,000 rpm/second\*

*\*Substrate size / weight dependent*

### Hz High Performance Motor

- Brushless motor
- Speed range from 1 to 12,000 RPM
- Acceleration up to 30,000 rpm/second\*
- No measurable speed error
- Powerful: Spin larger, heavier substrates
- Forward/Reverse rotation
- Programmable Agitation
- Limited lifetime warranty

## Choose the accessories that will help you achieve your best results:

### Dispense Solutions

- **UD-3** center dispense
- **UD-3b** off center dispense and Edge Bead Removal
- **Single Shot Dispense** from an open container
- **Single syringe** manual dispense
- **Multi-syringe** manual dispense

### Chucks: Standard and Custom

- **Non-vacuum** chucks
- **Minimum contact** chucks
- **Fragment** chucks
- **Basket processing** chucks
- **CD/DVD** chucks
- **High-Porosity** chucks
- **Lens** chucks
- **Embedded** chucks

### Wireless Control

- **Laurell Touch** wireless tablet interface
- **Remote vacuum** switch
- **Footswitch**
- **Multi-System** control

## Choose the experts:

Since 1985 **Laurell Technologies** has created a broad range of unique solutions for our customers.

**Laurell EDC** systems for aqueous processing are custom designed to fit your specific chemistry, process requirements, and ensure your safety

Discuss your needs with our experienced engineers for a complete solution.



All Laurell products that carry the ETL mark meet, or exceed, specific US and Canadian product safety standards



**Telephone:** 215-699-7278  
**Fax:** 215-699-4311  
**Email:** sales@laurell.com

Laurell Technologies Corporation  
441 Industrial Drive  
North Wales, PA 19454-4150