**CEE Spinner/Hotplate**

To be used for coating e-beam exposure samples. This spinner is NOT used for contact or stepper lithography substrates. Special care is needed to maintain sub-micron resist thickness coatings required for the Nabity e-beam.

Idle condition check:
- The spinner/hotplate should be on and the hotplate should be at 90°C
- There should protective wipers or foil in the bowl to capture any excess material

Programming the Spinner
- Press Reset on the control panel and ensure the display reads “CEE – 100CB Spinner” if it reads “CEE – 100CB Hotplate” press the Opt button. If “CEE – 100CB Spinner” is still not displayed press Reset again.
- To create a new Program press the Prog. key and then choose a number to store the new program under.
- Enter a final RPM value you wish to spin the wafer at then press Enter.
- Next enter a value for the ramp rate and press Enter.
- Finally enter the total spin time and press Enter.
- Multiple spin stages can be programmed by repeating the above steps for each stage. When the final stage is programmed instead of entering a RPM value for another stage press Clear to enter the END parameter.

Loading a sample
- Select an appropriate chuck. One that is too large will cause insufficient vacuum errors and one that is too small will not adequately hold the sample.

- Line up the notch on the bottom of the chuck to the pin on the spindle, tighten the special screw being extremely careful not to drop it.

- Lower the centering arm and pull the spring-loaded centering pins toward the vacuum chuck. Load wafer onto chuck and make sure the edge of the wafer comes into contact with both pins on the centering arm.
- Adjust the pins of the centering arm to accommodate different sized wafers by loosening the knob

- Move the pins to the new desired setting and retighten the knob

- Release the spring-loaded pins and raise the centering arm.

- Press Run followed by the program number of the recipe you wish to run.

- Press Start on the panel to begin the spin.
- After the sample as stopped spinning lift the lid and remove the sample.

Baking
- Programming a bake recipe is very similar to that of a spin but the parameters are temperature, time, and contact method. The hotplate is usually kept at 90° and should not be set any higher.
- To run the bake press the Opt. Button if “CEE – CB100 Hotplate” is not displayed press the reset button. Next press Run and the program number you wish to use followed by enter.
- Place your sample on the chuck against the pins and press start.
- Remove the sample when the process is complete

Possible Errors
- Insufficient Vacuum: Check to make sure the vacuum pump is plugged in and running. Also check to see that the vacuum lines are not bent or otherwise obstructed.

Spinning
- Apply the material to be coated to the wafer.

- Close the lid.