

# Standard Operating Procedure for the CEE 100 Spin Coater

Version: 28 APR 2021

## General Information and Precautions

- a. The Cee 100 spin coater is designed to apply uniform films to substrates.
- b. The tool is capable of storing ten programmable presets, with five steps per program. Available parameters per step are:
  - Step time (1 s to 999 s)
  - Acceleration rate (1-30000 r/m/s, unloaded)
  - Held angular speed (1-6,000 r/m)
- c. 2.25" (57.2 mm) and 0.3125" (7.9 mm) spin chucks are available for a variety substrate sizes.
- d. Spin parameters for various photoresists are available in the appropriate datasheets. These datasheets can be accessed from the logging computer.

## General Use Procedure:

### 1. Power On the Tool

- a. Power on the tool using the red rocker switch on the front console of the Cee 100.
- b. Power on the vacuum pump next to the tool using the toggle switch.

### 2. Run a Spin Program

- a. After installing the spin chuck and positioning a substrate on the chuck, press **RUN**.
- b. Select a program number (0-9), then press **ENTER**.
- c. Press **START** to conduct a centering test. To re-test, press **0** (zero).
- d. To start the program, press **START**. The display will the current step and spin speed and remaining time as it proceeds through the program.
- e. An alarm will sound when the program is complete. Press **CLEAR** to cancel the alarm.
- f. To abort a process mid-program, press **STOP**.

### 3. Edit or View Spin Program Parameters

- a. Press the **PROG** button.
- b. Select a program number (**0-9**), then press **ENTER**. Note that the most recently used program number will be displayed after pressing the **PROG** button, but any program number can be selected.
- c. The velocity for the first step (0) of the selected program will displayed. If the value is acceptable, press **ENTER**. Otherwise, enter a new value (1 - 6000), then press **ENTER**. If a mistake is made entering the value, press **CLEAR** and enter the correct value.
- d. The acceleration for the first step (0) will now be displayed. If the value is acceptable, press **ENTER**. Otherwise, enter a new value (1 - 30000), then press **ENTER**.
- e. The time for the first step (0) will now be displayed. If the value is acceptable, press **ENTER**. Otherwise, enter a new value (1 - 999), then press **ENTER**.
- f. The velocity for the *second* step (1) of the selected program will displayed. If you want to include additional steps in the program (up to 9), continue accepting or editing values as outlined in steps **c** through **e** above. Otherwise, press **CLEAR** then **ENTER** for the velocity step; this will clear all subsequent steps and save the program.
- g. To exit the programming process without saving, press **RESET**.