

BSC-100

Spinner SOP

Equipment Uses and Restrictions

Each spinner in the NRF is dedicated to certain materials. The list of approved materials for each individual spinner is located near the spinner. These are the **ONLY** materials you may spin. If you have a new material, contact NRF Staff for review. If approved, it will then be added to the spinner approved materials list.

Safety

- Moving Components – The User should be aware at all times of the moving components associated with this tool. The spinner lid must be closed while processing your sample.

Equipment Specifications:

Maximum RPM: 6000

Max sample size: 4" diameter

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Operating Instructions:**1) Chuck Selection****1. Fragments / 2 inch wafer**

- (1) The proper chuck must be used or your sample may be broken, or cause damage to the motor. Your sample MUST be larger than the o-ring or photoresist will be sucked into the motor and damage it.



- (2) Two inch wafers must be used with the chuck with the larger o-ring. DO NOT USE THE LARGE, FLAT CHUCK (55mm) because the wafer is smaller than the vacuum area and resist will be sucked into the motor.

2. 4 inch wafers

- (1) Use the large, flat chuck shown below




2) Operation

1. There are two modes of operation... Easy and Normal. When you first log in, the tool will be in Easy mode which means it is a single spin step only, and will display "Easy Mode" on the screen.

2. Single step operation

- (1) Remain in "Easy Mode"
- (2) Press and hold the 'Set' button for 3s to enter edit mode
- (3) Use the 'Left/Right' arrows to move the cursor and the 'Up/Down' arrows to change the values
- (4) Press and hold the 'Set' button for 3s to exit edit mode
- (5) Press the 'Pump' button to turn on vacuum and ensure that it is **greater than 20 in. Hg**, otherwise your sample may fly off.




- (6) Press the start button  to start the process. This button can also be used to stop the process before the time ends, if needed.

3. Multi-step operation

- (1) Press the 'Mode' button to switch to standard mode
- (2) Press the 'Left/Right' arrows to cycle through the 5 recipes, labeled A through E.
- (3) Press and hold the 'Set' button for 3s to enter edit mode
- (4) Use the 'Left/Right' arrows to move the cursor and the 'Up/Down' arrows to change the values for that step
- (5) Press the 'Set' button to move to the next step and repeat step (4) to edit
- (6) Press and hold the 'Set' button for 3s to exit edit mode
- (7) Press the 'Pump' button to turn on vacuum and ensure that it is **greater than 20 in. Hg**, otherwise your sample may fly off.



- (8) Press the start button  to start the process. This button can also be used to stop the process before the time ends, if needed.

3) Cleaning

1. Grab the bowl and lift, to remove it from the spinner. **Do not try to clean or spray solvents in the bowl with it still on the spinner!**
2. Use isopropanol and wipes to remove the bulk of the material. If the material is dried in the bowl (i.e. it's been more than 1 hour since it was dispensed) use AZ EBR 7030 to clean the bowl.

3. Wipe the entire bowl and lid with clean wipes. Apply more solvent and wipe again until the both are extremely clean. The final clean should be with acetone. There will be no more color changes to the wipe when the bowl is clean.
4. SU8 USERS...after removing the bulk of SU8 with propanol and acetone, your final cleans should be with SU8 Thinner.
5. Wipe down the vacuum chuck with isopropanol and then acetone.
6. Place contaminated wipes in the solvent waste can.
7. FAILURE to clean the bowl properly will cause you to loose privileges on this spinner.