Operation Manual for WS-650 spinner
(for electron-beam resists only)

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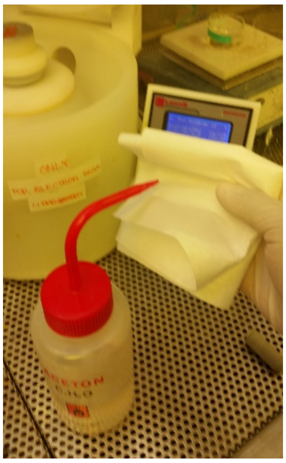
Do ALWAYS

- If you have any doubts or questions, FEEL free to contact the person in charge or a general clean-room manager (Marco Lopes: 96261, Marco.Lopes@unige.ch).
- CLEAN it and CLOSE the lid after use (see Section 2 for details).



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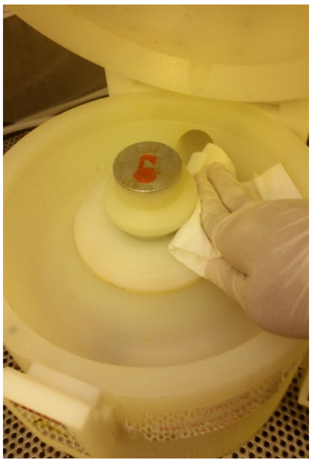

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- CLEAN UP the wet bench.

NEVER do

- NEVER use it alone if you are not familiar with.
- NEVER change parameters of someone else’s process.
- NEVER spray solvent (such as Acetone) directly onto the keypad surface.
- NEVER flood a spin bowl (see below for a description) with solvent or chemicals.
- NEVER allow chemicals or solvents to enter the vacuum path.

Description

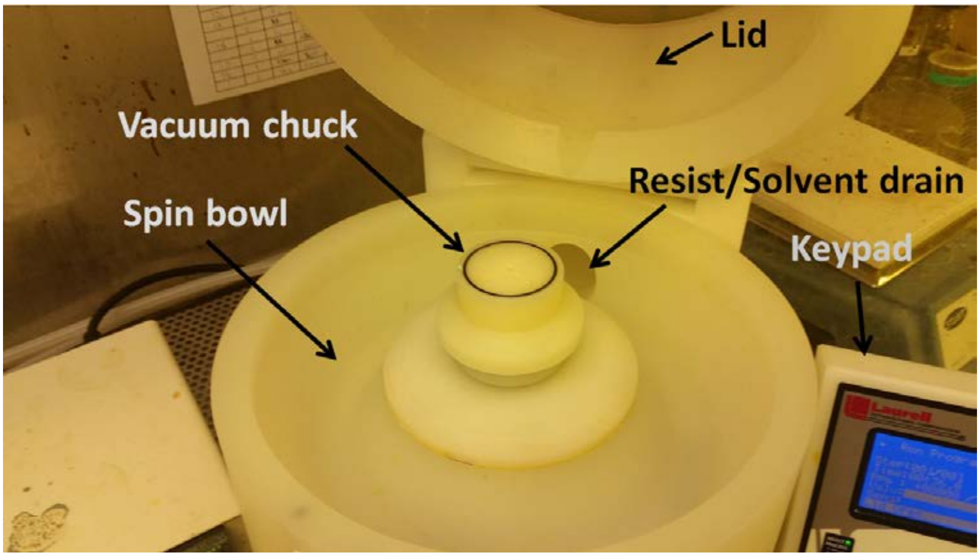


Figure 1. Spinner

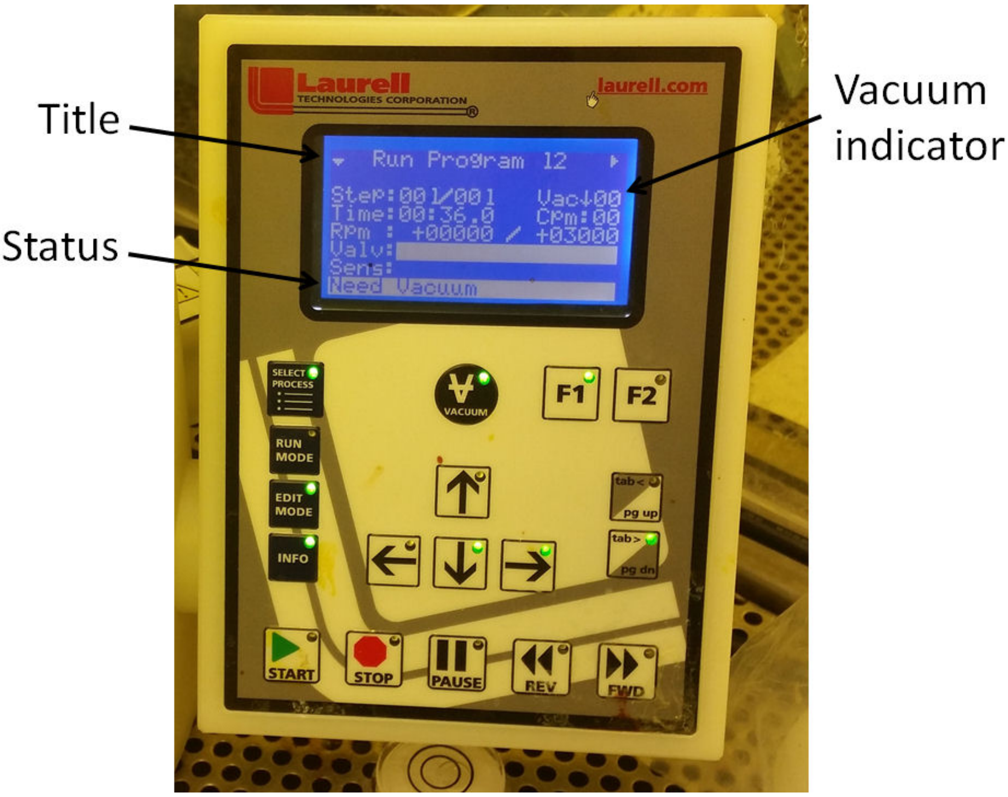


Figure 2. Keypad

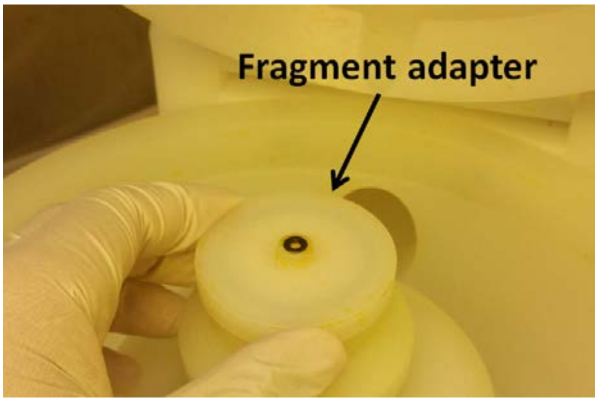


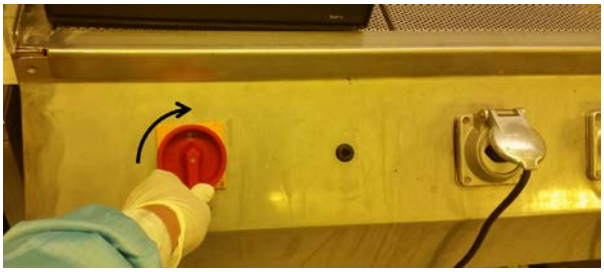
Figure 3. Fragment adapter

1. Operation

1) Turn on the pump before entering clean room.

2) Enter the clean room by following a basic procedure described elsewhere.

3) Switch on main power of the wet bench.



4) If necessary, turn on the hotplate and set the temperature.

5) Press “Select Process” (1) and use “Up” or “Down” button (2) to highlight the process that you want to run.

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Select Process
1: dynamic      (  4)
2: speed test   ( 13)
3: static       (  3)
4: Program   4  (  2)
20  Processes Stored
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6) Select the highlighted process by pressing “Run mode”.

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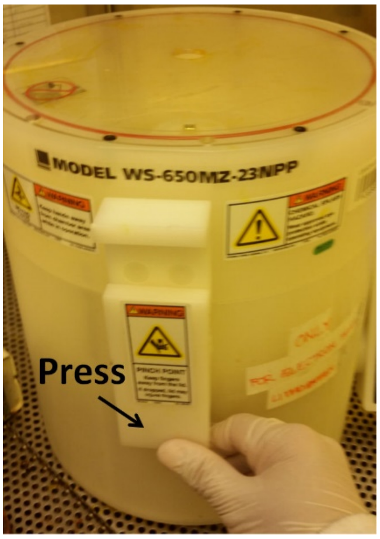
7) Open the lid.



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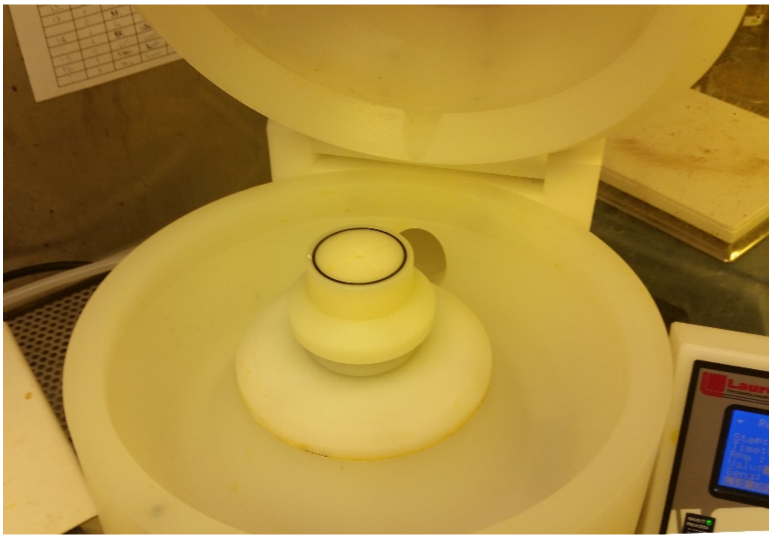
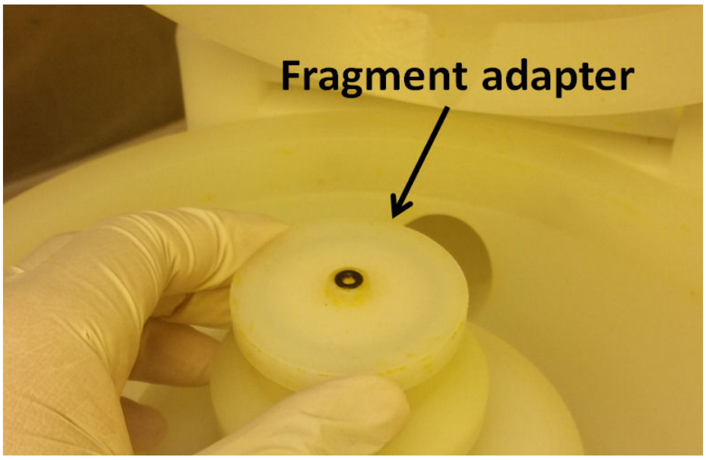
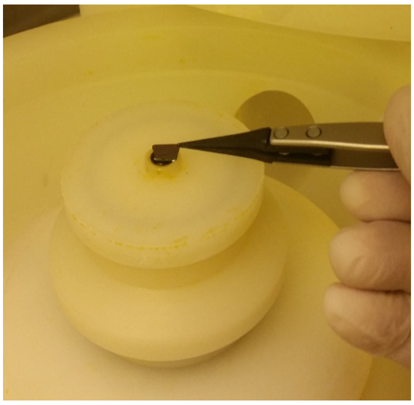


8) Place a fragment adapter on the vacuum chuck.



9) Put the sample on top of the fragment adapter (Make sure that the sample covers the entire hole).



10) Press “Vacuum” in the keypad (Make sure that the vacuum is good, ≥ 24).

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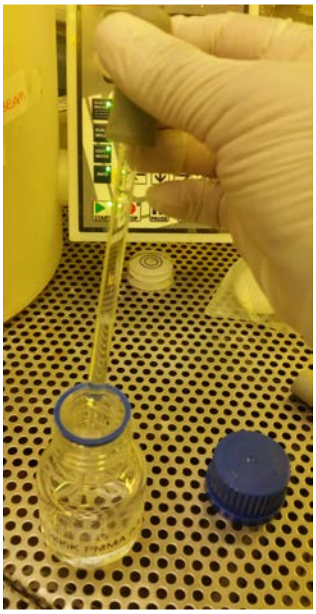
11) Close the lid and drop the resist on top of the sample (Note: only electron-beam resists are allowed except for LOR resists).



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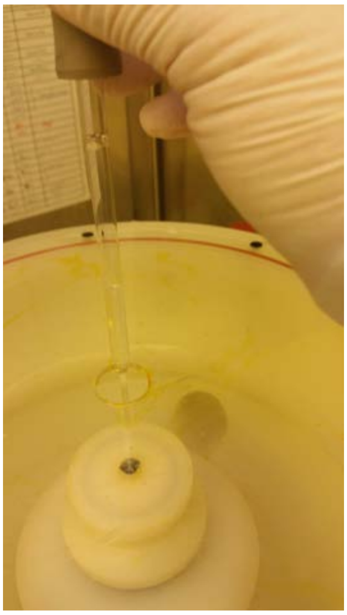

12) Press “Start” to run the process.

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13) When the process is done, open the lid.

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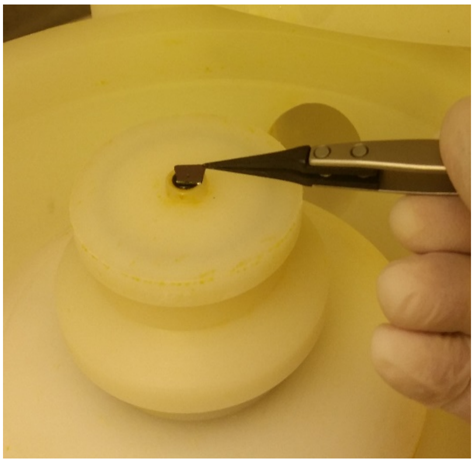
14) Press “Vacuum” to release the sample.

15) Take out the sample and put it onto the hotplate if needed.



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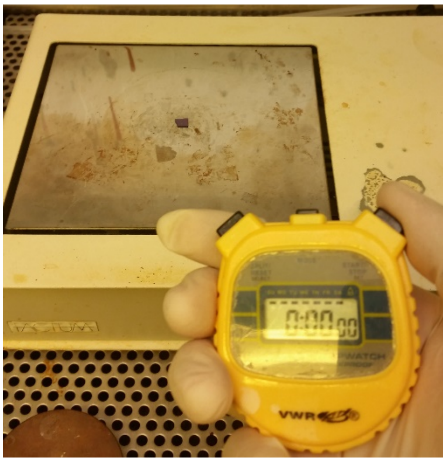

16) Repeat the process from the step 9 if needed.

17) After dumping the remaining resists, dispose of the glass pipette to the right place (no plastic pipettes or syringes are allowed to the yellow box below).

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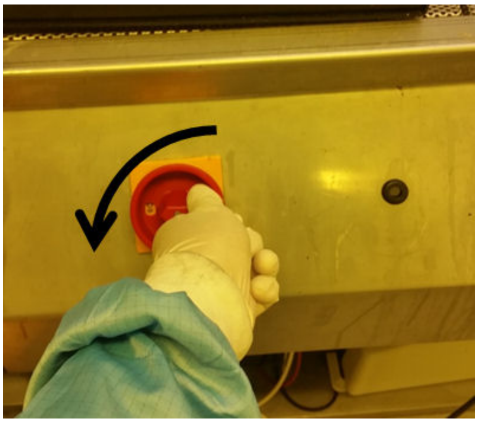
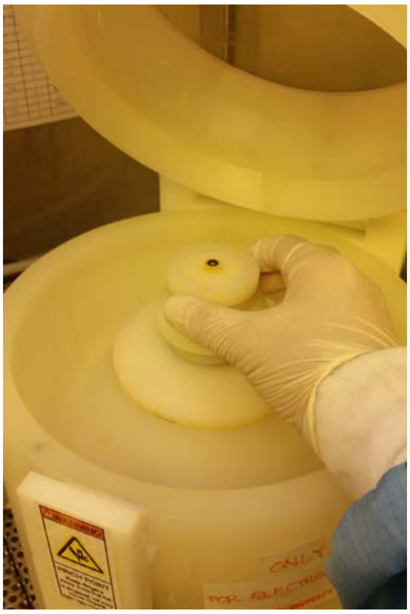
18) Clean the spinner (see the next Section for details).

19) Turn off the power of the wet bench if no one else is using it.



2. Cleaning

1) Cover the vacuum chuck (Important to protect the vacuum path).



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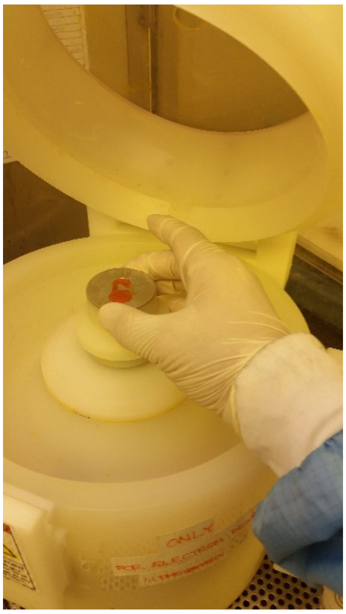
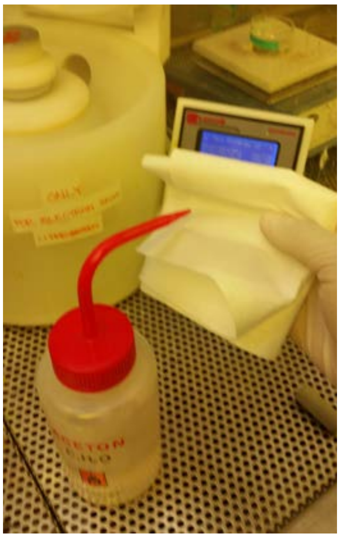


2) Press “Vacuum”.

3) Wipe the spin bowl and the inner surface of the lid with Acetone using a clean-room grade wiper.



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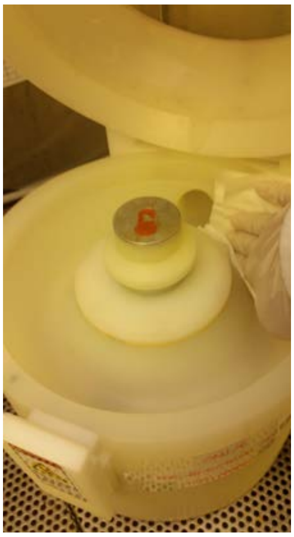

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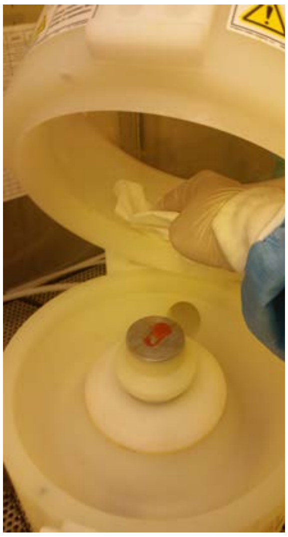

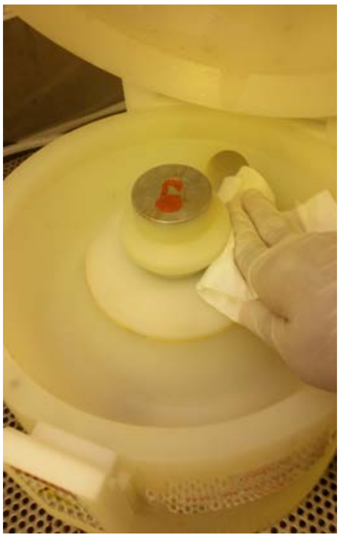

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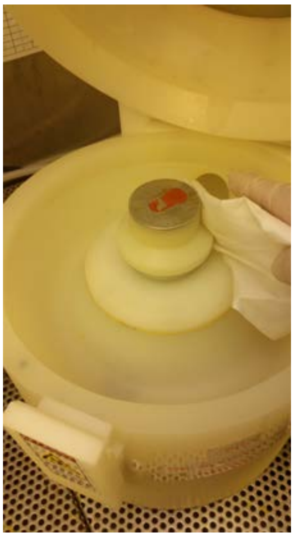
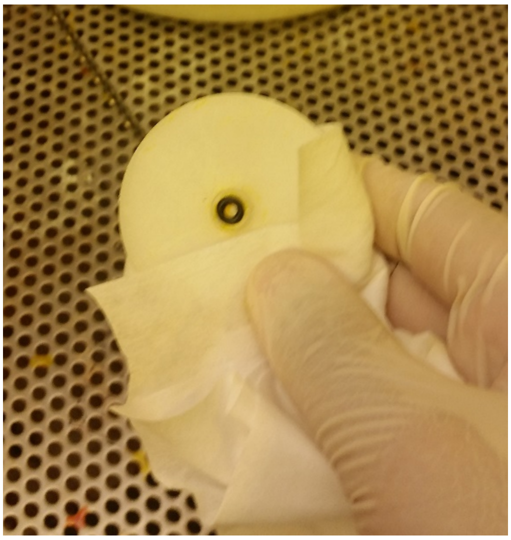


4) Wipe the fragment adapter with Acetone using a clean-room grade wiper (Prevent Acetone from touching O-ring at the center).



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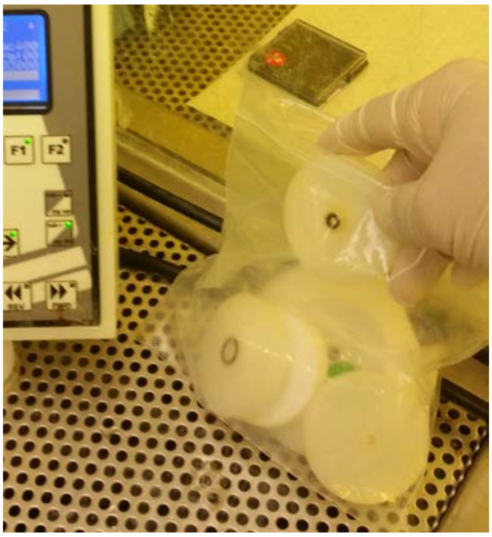

5) Remove the cover by pressing “Vacuum”.

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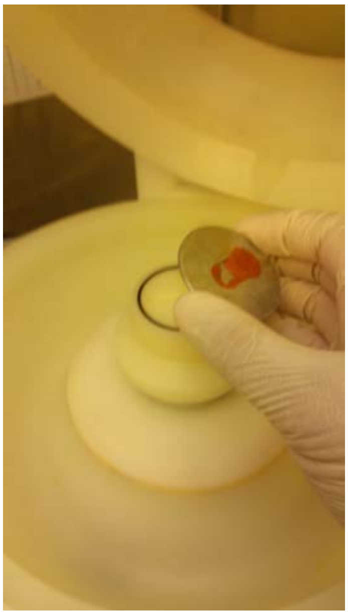

6) Close the lid and press “Select process” for next user.

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7) Dispose of wipers into a trash bin.

Thank you!!