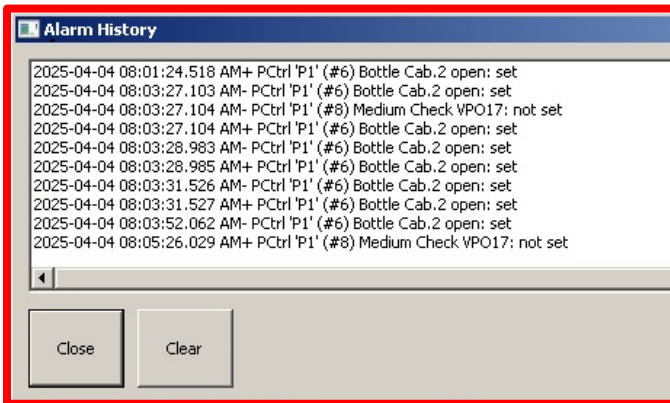
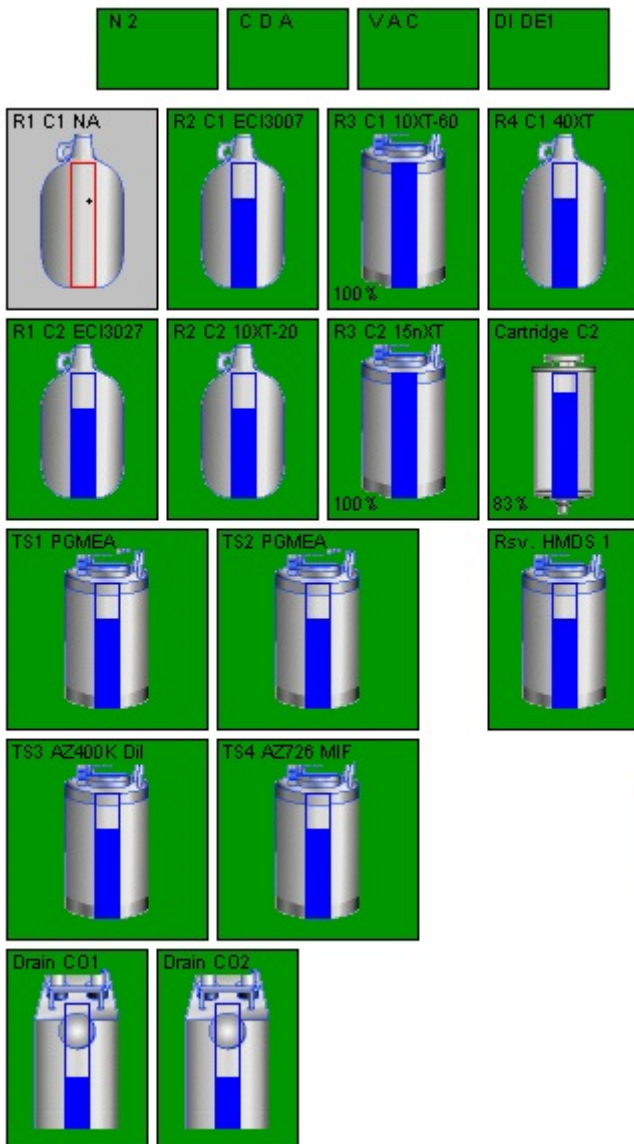


Information about previous (and maybe more relevant) alarms can be accessed in the "History tab".



3) Check the status of all media (water, CDA, N₂, vacuum, photoresist, solvent, developers) on the left-side of the UI. Background colors should be "green".

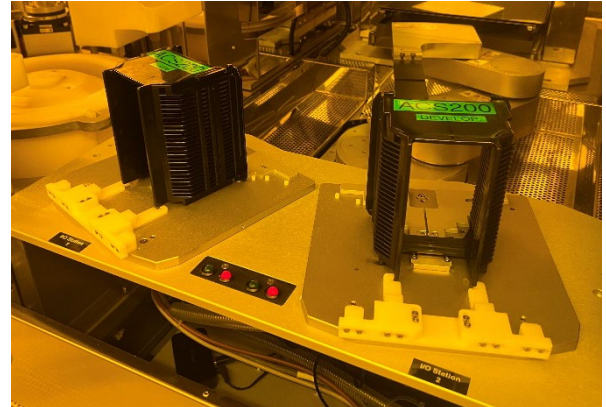


Media monitoring: STATUS OK

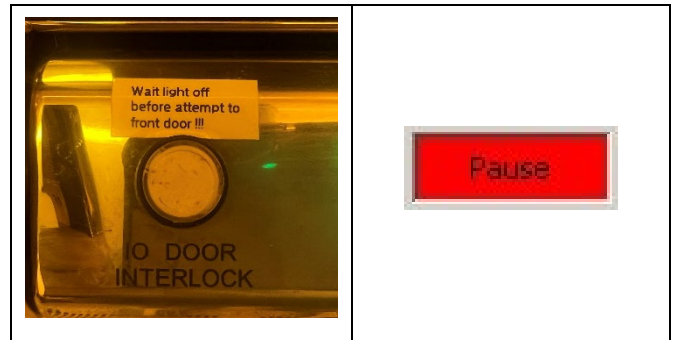
4. Loading wafers

The ACS 200 features two input-output (IO) stations for standard wafer cassettes. By default, stations are assigned to:

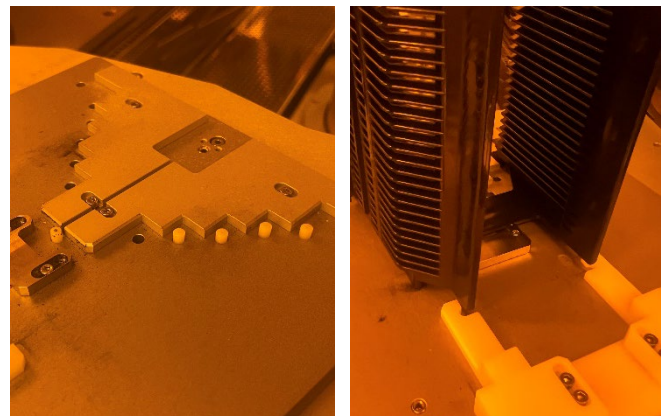
- Station N°1: coating
- Station N°2: development



To access the stations, the IO door needs to be unlocked by pushing the "IO DOOR INTERLOCK" push-button in front of the mouse pad.



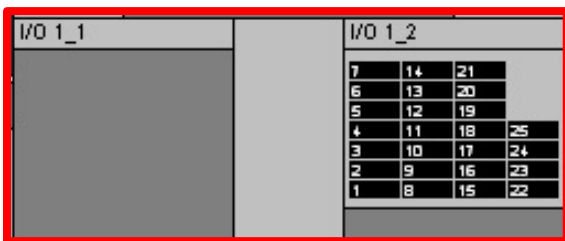
The light will turn off and the equipment will transition to "pause" mode. In this mode, the front door is unlocked, and users can take the cassette(s) out of the tool to load wafers inside.



Pay attention to the position of the cassette in the station. Cassette which are placed correctly in the tool will be visible in the UI and confirmed by a blinking red LED.



No blinking red LED = cassette missing or wrongly placed



UI: I/O 1_1 cassette missing or wrongly placed

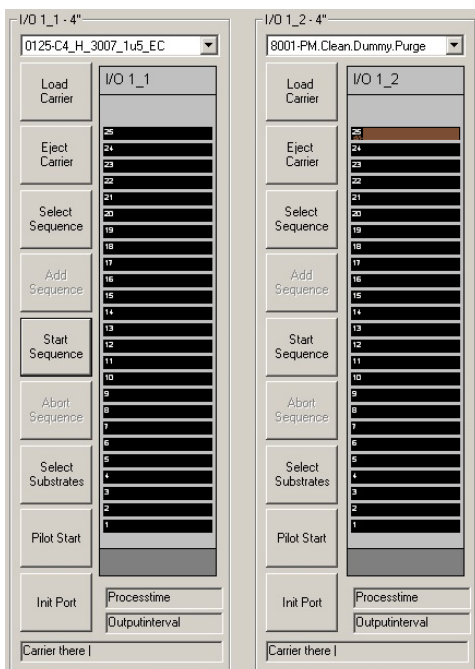
When the cassette with wafers is properly in position, close the IO door and push the **"IO DOOR INTERLOCK"** button again.

The system should be back to status "Auto"



5. Starting a batch

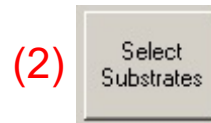
Jobs are started from the "Jobs" tab.



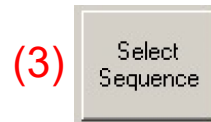
The first operation after loading the cassette and locking the door it to scan the cassette for detection of occupied slots. This is achieved by pressing on "Load Carrier":



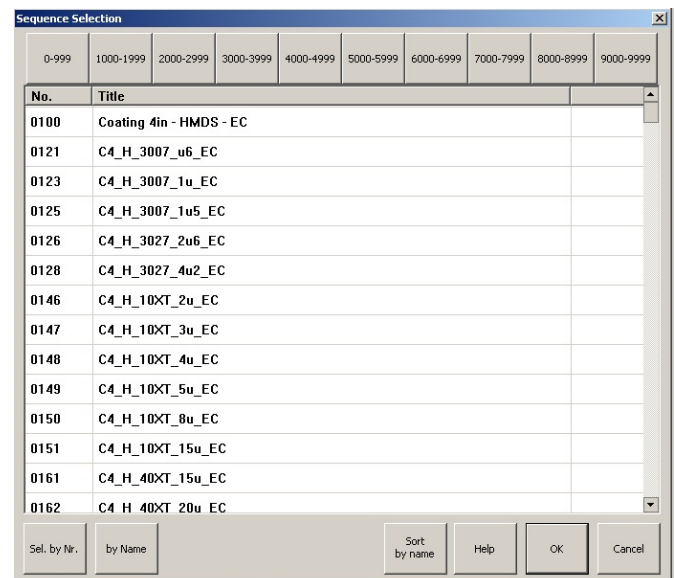
Wait for the completion of the laser scan. Slots occupied by a wafer will show up with a **"brown"** background. All these wafers will be assigned to the next running sequence.



To unassign a wafer, users can use the "Select Substrates" button and unselect specific wafers. The slot background colour will turn "white".



The sequence will be selected by pressing on "Select Sequence". The recipe window will pop up.



Standard recipes are numbered from 0 to 10000. Tabs are available on top to filter to specific thousands range. Current organisation:

- 1) Sequences 0 to 999: Photoresist coating on 4inch wafers.

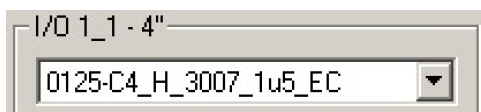
- 2) Sequences 1000 to 1999: Photoresist development on 4inch wafers.
- 3) Sequences 2000 to 2999: Photoresist coating on 6inch wafers. *Note: These sequences are only available when requesting a 6inch configuration in the CMi booking interface.*
- 4) Sequences 3000 to 3999: Photoresist development on 6inch wafers.
- 5) Sequences 4000 to 4999: Sequences optimized for photoresist coating on 4inch wafers with high topography.
- 6) Sequences 8000 to 8999: Sequences for preventive maintenance and cleaning (staff).
- 7) Sequences 9000 to 9999: User-specific sequences, created by the staff on request.

For coating, several options are available:

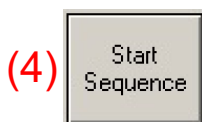
- Surface preparation: HMDS (H), dehydrate (D) or none (N)
- Solvent clean: edge clean (EC), edge bead removal (EBR) or none (N)

After selection of the recipe, users will proceed by clicking on "OK".

Before starting the batch, double-check that the correct recipe is loaded in the IO panel:



Then press on "Start Sequence" to start the process.

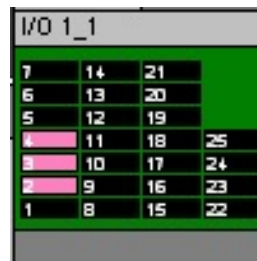


Note: At that point, a new batch of wafers can immediately be selected with "Select Substrates", and a second sequence can be selected and started.

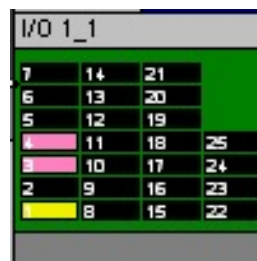
The process is monitored in the "Overview" window. Pay attention to the wafer/slot background color in the I/O and overview UI:

- Before 'start', empty slot
- Before 'start', wafer assigned
- Before 'start', wafer ignored
- After 'start', process preparation
- After 'start', wafer in process
- Process complete, no issues
- Process complete, with warnings

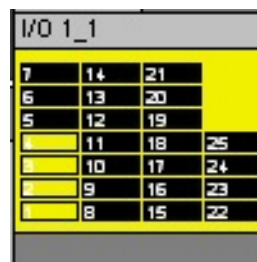
Wait until all assigned wafers are processed in the equipment. At that point the cassette background color will swap to "yellow". It is now safe to open the IO door and unload the cassette.



Cassette in « process» (green background). First wafer is inside, next three wafers are waiting.



First wafer is finished (yellow background), second wafer is in, next two wafers are waiting.



All wafers are processed (yellow background) and all jobs in the cassette are finished (yellow background) → open the door to unload

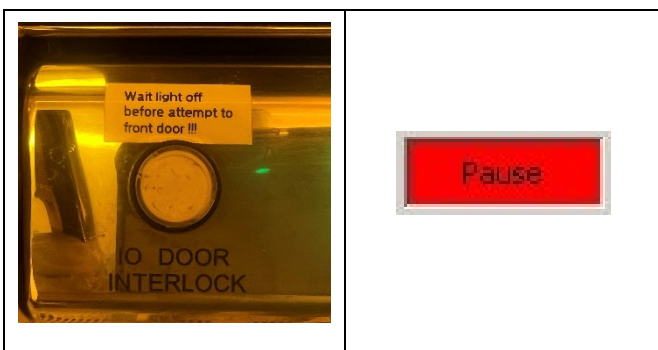
WARNING: Never remove a cassette which is currently in use (green background) from the IO station or wafers might get stuck waiting on the robot. If one cassette is inadvertently moved, make sure to scan it again with "Load Carrier" to confirm that slots are still empty to receive wafers.



6. Parallel coating & development flows

On the ACS200, it is allowed to process batches of wafers for coating (from Station N°1) and development (from Station N°2) simultaneously.

In practice: If a batch of wafers is currently being coated, it is possible to unlock the IO door and put the equipment in pause by pushing the **"IO DOOR INTERLOCK"** push-button



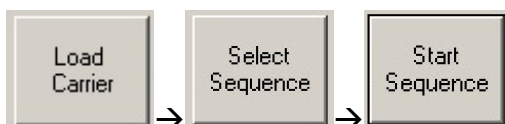
In that state:

- ➔ Processes running inside the modules (coater, HMDS, hotplates) continue as normal until the end.
- ➔ The robot no longer transfers wafers between modules, so the flows are paused until the equipment is back to "AUTO".

In most cases, this is not critical as wafers can wait a few seconds after coating but users should avoid to extend the softbake time of photoresist.

In consequence, always check that the remaining hotplate processing time is sufficient to put the system in pause and prepare the second cassette.

During that time, users can prepare the developer cassette (load wafers and place it back on the station), and then access the "Jobs" tab to start a new sequence:



7. Job finished and logout

When all jobs are finished:

- Place both coating/development cassettes back in the IO stations
- Close the IO door and lock it with the interlock push button to have the system in "AUTO" mode.
- Perform logout from the CAE computer.