

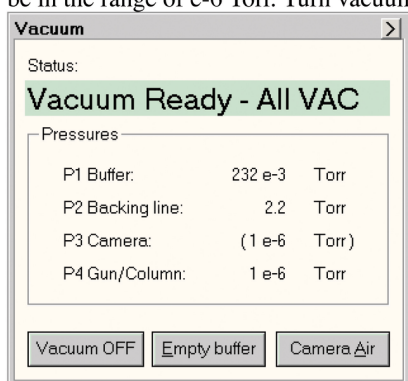
Morgagni FEI

Help = press F1

To turn EM ON:

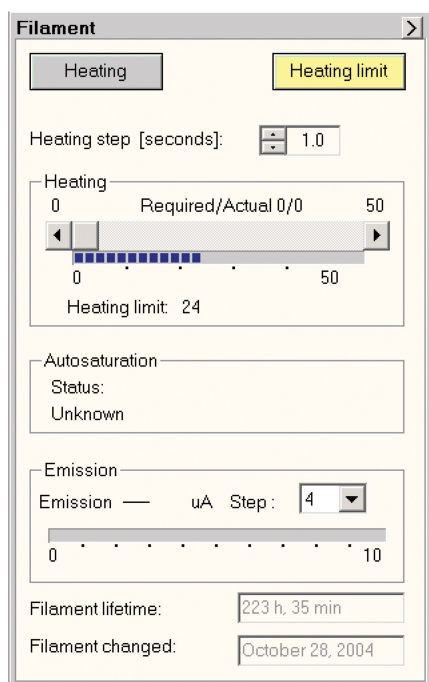
- Vacuum:

- check that vacuum is at 2-4 e-6 Torr.
- If error message, ask security people (porter) for technical staff to look at chiller.
- If vacuum is off, press vacuum ON (it takes 25 min until correct vacuum is reached).
- In the vacuum module, the status should show "Vacuum Ready - All VAC" on a green background. And P3 should be in the range of e-6 Torr. Turn vacuum *on* if it is *off*.










-High Tension:

- press longer than 0.5 sec the High Tension button on EM panel (listen for whizzing sound).
- wait for Emission stabilization.
- press "Heating" (on computer) once.







-Specimen holder:

Insert specimen:

- open grid clamp on cartridge with needle and put in the grid.
- insert specimen holder in the hole at 1 o'clock, wait for pumping, light off. 
- turn anticlockwise towards 12 o'clock, wait for pumping if necessary.  
- turn anticlockwise towards 6 o'clock.  
- enter specimen holder in the column.
- press button to release the cartridge and remove holder.
- turn clockwise towards 12 o'clock.  
- observe specimen.

Remove specimen:

- turn anticlockwise at 6 o'clock and don't let holder slip in yet!  
- press release button, keep your finger on it, **THEN** insert holder in the column, release button to catch the cartridge.
- pull out holder and turn clockwise towards 12 o'clock.  
- remove holder from the column.

On Panel:

- Dimmer: potentiometer desk light.
- Magnification: low mag - shadow mag - high mag.
In shadow or low mag, remove aperture by turning anticlockwise, to put back in for high mag, turn clockwise.
- Multi X, Y: alignment
- Shift X, Y: beam Shift
- Specimen movement: 2 movements fine (black) and coarse (silver colour)
- Intensity/spot size. **Make sure, X and Y don't move +/- 1000, otherwise stage gets stuck!**
- Intensity: to focus turn anticlockwise, defocus turn clockwise.
- Fine: for intensity

-Beam:

- “Beam Blanker”: When ON, some options such as dimmer, step... are not accessible.
- “Reset defocus” to have focus set to 0.

-“Intensity zoom” ON, keeps the same beam intensity when magnification changed

-Camera: I = IN and O = OUT

-press cam 1, 2 or 3. i.e.cam1 = live speed

cam3 = slow speed search before taking picture.

-To take picture press on the corresponding button, picture 1, 2 or 3.

-Picture: Histogram -auto

-manual change grey levels by arranging blue and red lines

-save on Morgagni data (i.e.: Name20080114)

-format: .psd no picture info or .tif with picture info in option

-Stage:

-To save a location press Add and go to the position...

-Reset to remove saved position.

To finish:

-switch off the camera and take camera OUT.

-switch off the filament by pressing Heating.

-switch off the high tension by pressing High Tension.

-switch off the desk light.

Troubleshooting:

Stage gets stuck if it is moved X and Y above or below 1000!!! Try to move back with the two “specimen movers” (movements fine (black) and coarse (silver colour))

If this doesn't work, loosen the stage. This is done at the top of the specimen mover poles:

Keep hold of thinner rod with one hand and with the other hand, try to loosen the grey outer rod. Then click Reset X/Y (found under stage).