

ASML User Operation

Note: Failure to follow these guidelines will result in tool access revocation!

- 1) Reticles (photo masks) must be absolutely clean, with NO CONTAMINATION of any kind. Never load a mask without first stripping off the photoresist.
- 2) Wafers must have absolutely clean backsides. Failure to do this can result in wafer vacuum errors, wafer handler errors, and wafer chuck non-flatness.
- 3) Only approved DUV Photoresists are allowed on the tool. No e-beam resists, PMMA, or SU-8 without specific approval from tool managers.
- 4) NEVER CLEAR CLUSTER! Only Clear Stepper if asked by the system.
- 5) Fast Start-Up may be performed at any time.

All persons must be trained by Staff before operating this tool.

Log into the tool in NEMO.

Log into the ASML: User: CNF, Password: user

Select **Mat Hdl**, then select **Exchange Reticle Box**. Remove and replace SMIF boxes using one hand under the box at ALL TIMES.

Select **BATCH CONTROL**

Select **DEFINE BATCH**

Enter the **Batch ID** – this is any string you want to use to label the run.

Click the **Select** button under **Job Name**. Find your Job file and select it.

Click the empty space to the right of **Layer ID**, then select the required layer name.

Set **Control Mode**: enter W to specify the number of wafers to expose, or C to specify the number of wafer cassettes to run. Enter the number in **Batch Size**.

Select the **Batch Type**: P for Production (fixed dose and focus), E for Energy (dose array), F for Focus (focus array), or M for Matrix (focus and dose array). Examples of arrays are in the ASML manual.

Select the **Reticle ID**. This should be done automatically if the correct reticle is loaded.

Enter **Energy** and **Focus Offset** values. If you are exposing a test array, see the manual for explanation.

Select the **Illumination Mode**. If other than Default, select Conventional or Annular and enter the **Numerical Aperture** and **Sigma** values.

Select **Apply** to save your settings.

Select **Batch Data** to change Reticle or Wafer removal, or Wafer elevator definition.

Place your wafers into the Input elevator. Be sure *both* cassettes are properly seated, and that the doors are completely closed.

Select **Run**. Report any error messages.

When your job is complete, remove your wafers and reticles from the system. Select **Cancel**, then **Exit**, then **Exit**.

Log out of NEMO.