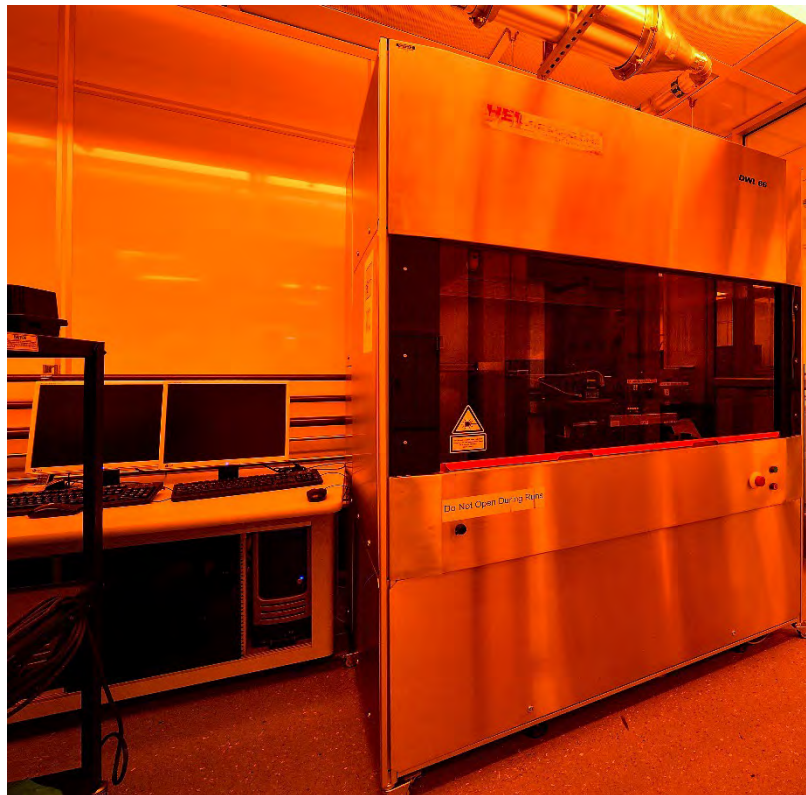


# Heidelberg DWL 66 Laser Writer SHORT SOP

4/20/2020

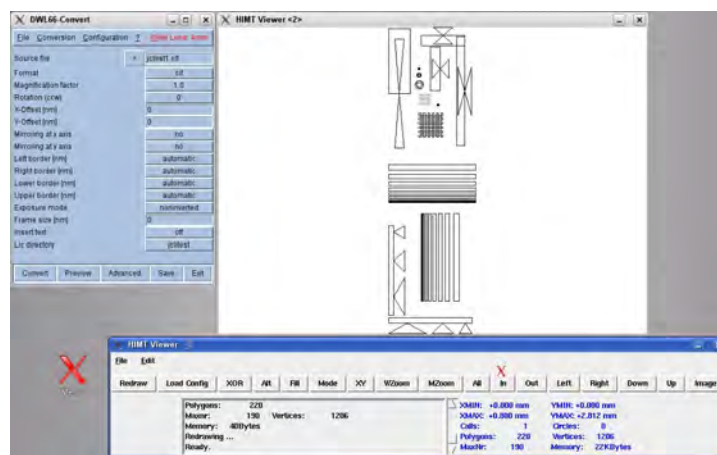


# 1 DATA PREPARATION AND CONVERSION

1. Prepare pattern in AutoCAD and save it as “dxf 2000” version with names that DOES NOT have any space and not too long.
2. Copy the file into the DXF folder. Open the X DWL66 convert software:



3. Click on Write Lens (upper top of menu in Red) and select desired write head 40/4 mm.
4. Click “>” sign next to Source file to load your file
5. Click “Configuration” tab on the top to choose DXF=>create new new dex.cfg. Then choose proper layer. “SAVE” and “Exit”
6. Click “Preview” to see your pattern. Double check the dimensions.



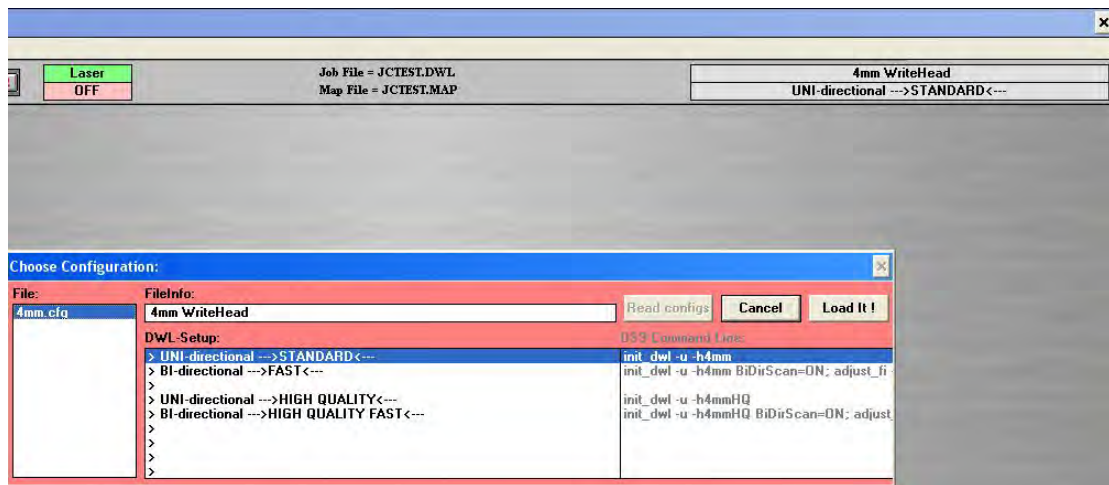
7. Lic Directory to choose “other name” to name your directory (Short and no space with 4/40 mm at the end)

8. Click “Convert” to convert the file.
9. Go to “File” and “Transfer Lic files”

## 2 DWL 66 OPERATING PROCEDURE

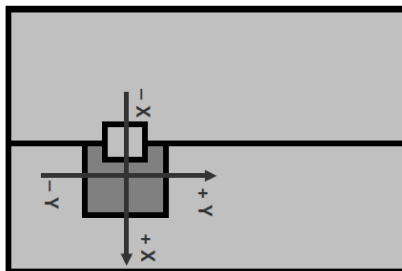
### LOG IN FOM.

**Never touch the interferometer mirrors. Before operating: You should hear a hissing sound coming from the write head when the air is on.**



1. Load sample: For small samples, an adapter mount is required. Make sure your sample covers all the holes on the adapter. Align the adapter mount with the pins and the lines.

Note that the coordinate system for the stage is;

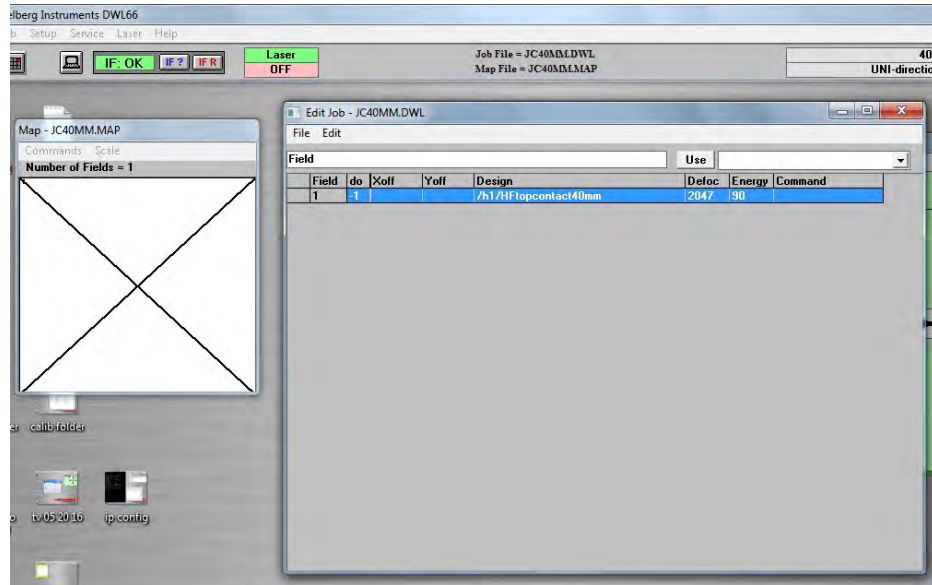


Front of DWL 66

**Be extremely careful not to touch the mirror or interrupt the red laser beam to the right of the stage.**

2. Turn on the vacuum switch from horizontal position to vertical position. Verify by gentle push on the adapter and sample.
3. Verify or choose the Environment on the upper right corner eg. “40 mm writehead UNI-directional standard”

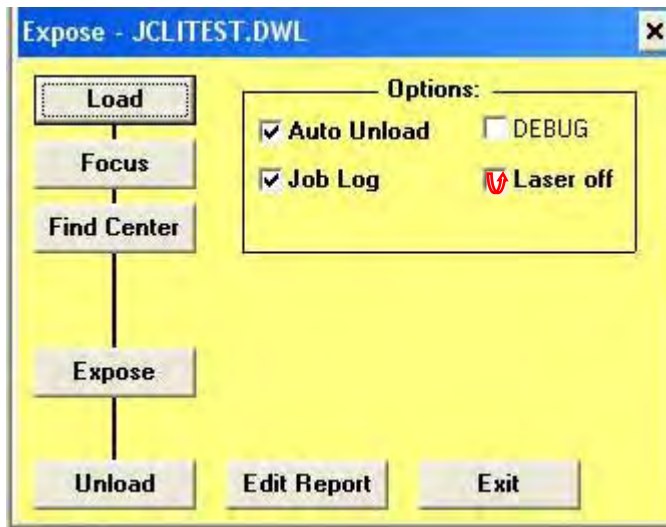
4. Make sure the proper writer-head is installed and proper filters are installed on the system based on the writing environment.
5. Go to “Job”=> “make job” to setup your pattern configuration. “File”=> “Designs” to transfer pattern file to the “Design” column in the job form by clicking “To Job”



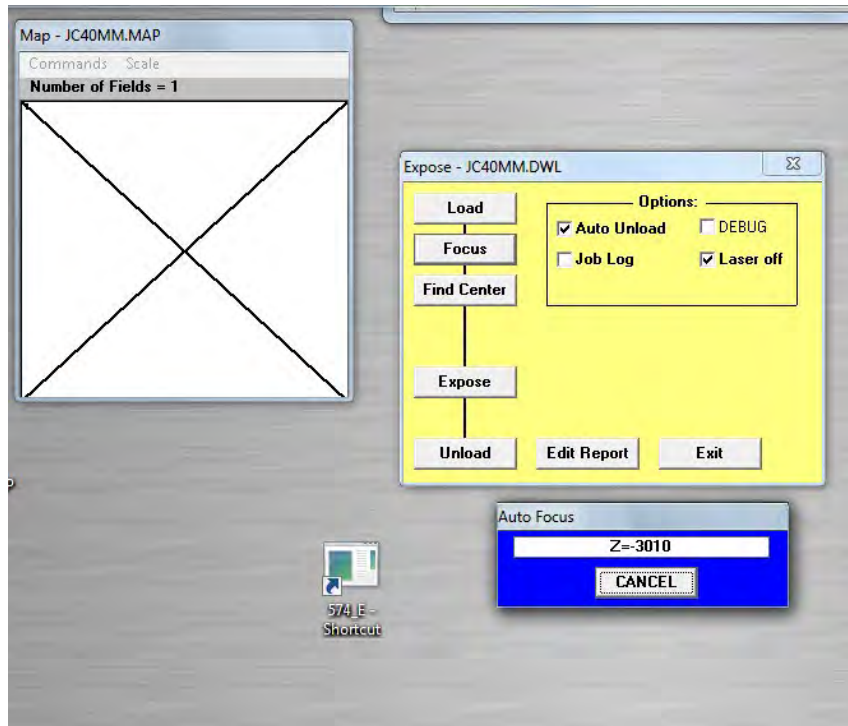
6. Run Job: First verify desired write head, IF R (green), that the proper job file and map files are loaded.

Always check “Laser off” and “Auto unload

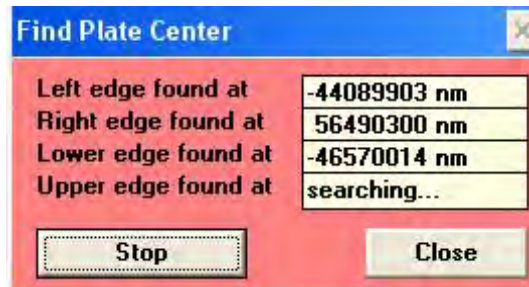
1. Load: if already loaded, click and follow the instruction.



- Focus: lens will be lowered to the surface of sample. **Make sure to “CANCEL” to prevent lens from crashing on the sample!**  
**If the Z > -4000 with adapter.**  
**If the Z > -5000 without adapter**



- “Find Center” and click “Start”. Verify the size info after it finds the center.

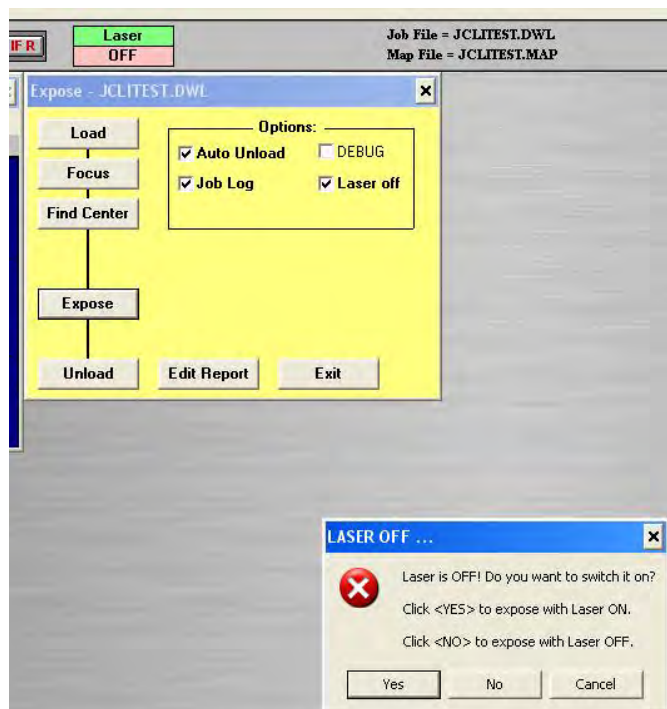


- Expose: turn on the laser by clicking “ON”

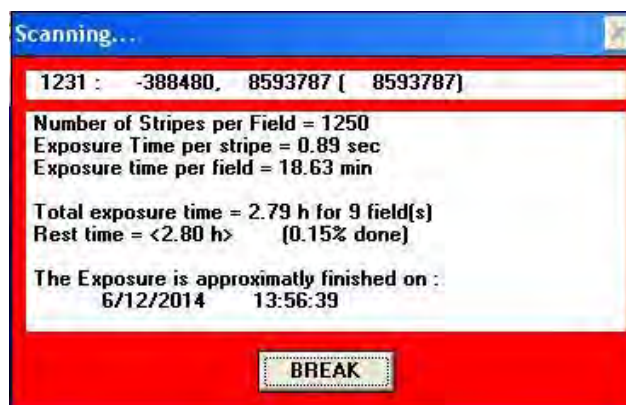


Press “Expose” to begin exposing the plate.

If Laser is off, Click “ Yes” to turn on the laser for exposure



5. Once the exposure starts, it will show an estimate time for finishing the exposure.



6. Once the expose is done. It will show green in the field which means it is successfully done. Click "EXIT" to end the job.
7. Log out of FOM.