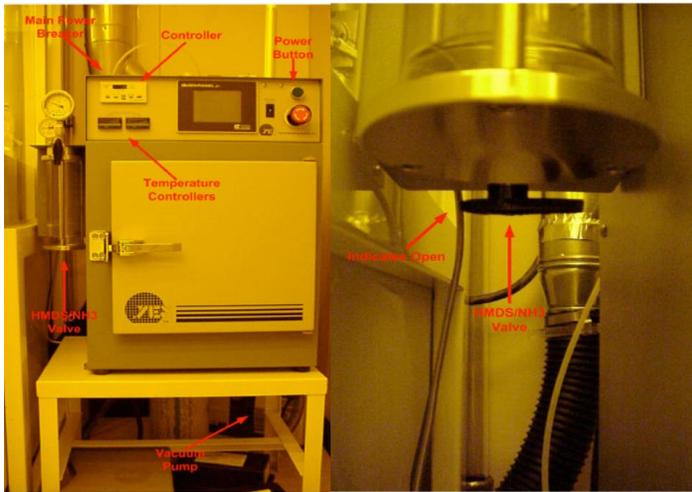


YES IMAGE REVERSAL & VAPOR PRIME OVEN

September 2020



SYSTEM START-UP:

1. Don't forget to login into your FOM account and login to the tool.
2. Turn **ON** power to the oven using the breaker located on the back, left corner.
3. Press green **Power On** button
4. Turn **ON** vacuum pump located behind oven on the floor.

VACUUM BAKE:

1. Turn HMDS/NH₃ valve to HMDS position (located behind glass cylinder, short end of knob indicates valve selection)
2. Select **4** on the Thumbwheel.
3. Set temperature for front/rear zones. Press and hold **SET BUTTON** (far left), set temperature to desired setting.

NOTE: Oven must be at set temperature before beginning processing.

Front Zone: 20-160°C

Rear Zone: 20-160°C

4. Press **S.P.** on the controller and check each set point.

Recommended Settings:

Set point 1 (Display Set Point) 600 Torr

Set point 2 (Set Point 2) 10 Torr

Set point 3 (Alarm 3 Low Limit) 1 Torr

Set point 4 no recommendation

Press **S.P.** to exit programming mode.

5. Using the touch screen press

GOTO Alarms Panel

GOTO Process Variables

6. Enter Process Variables.

To change, touch screen button for variable, enter number, press **Enter**, and then press **Done**.

Recommended Process Variables:

Number of dehydration cycle purges: **3**

Number of exit cycle purges: **1**

IR Wafer Warm Up Delay: **0**

Process duration: **Process dependent**

7. Press **GOTO OPERATOR PANEL**.

8. Load Samples.

9. When oven has stabilized at set temperature, press **START**.

10. When Process is complete Shutdown oven.

SHUTDOWN:

1. Turn **OFF** breaker on back of oven.

2. Turn **OFF** vacuum pump.

3. Logout from the tool in your FOM account.

VAPOR PRIME USING YES OVEN SOP

Purpose: To prepare the surface of a wafer for photoresist application by coating with HMDS primer.

YES System Start-up:

Log in to the tool by using FOM, it will turn on vacuum pump.

Vapor Prime:

1. Turn HMDS/NH₃ valve to HMDS position (located behind glass cylinder, short end of knob indicates valve selection)
2. Select **1** on the Thumbwheel.
3. Press S.P. on the controller and check each set point

Recommended Settings

Set point 1 (Display Set Point)	600 Torr
Set point 2 (Set Point 2)	10 Torr
Set point 3 (Alarm 3 Low Limit)	1 Torr
Set point 4	no recommendation



4. Using the touch screen press:

GOTO Alarms Panel
GOTO Process Variables

5. Enter Process Variables

Recommended Process Variables:

Number of dehydration cycle purges:	3
Number of exit cycle purges:	5
Process duration:	300 seconds

6. Press GOTO OPERATOR PANEL

7. Load samples

8. When oven has stabilized at set temperature, press **START**

9. When process is complete, acknowledge the alarm by hitting reset button on the touching screen.

Total time for the recommended process is approximately 31 minutes.

Shutdown:

Don't forget to logoff from the tool using FOM, which will turn **OFF** the vacuum pump.

Purpose: To convert image from positive to negative image with positive photoresist.

SYSTEM START-UP

1. Log in to the tool by using FOM, it will turn **ON** the vacuum pump.

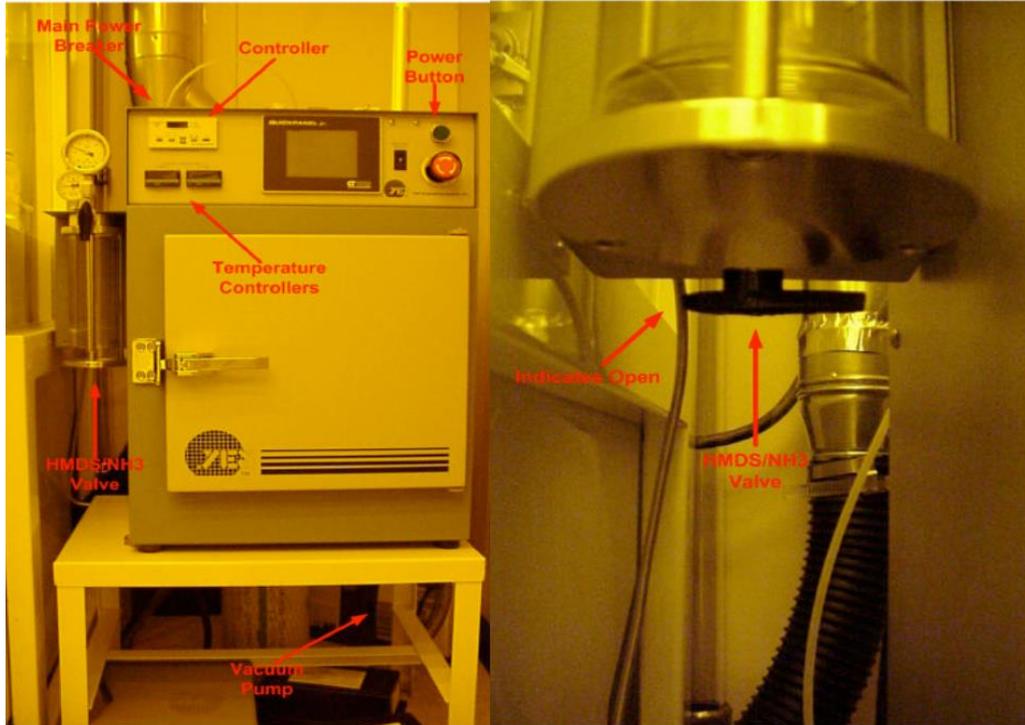


IMAGE REVERSAL:

2. Process wafer normally using standard soft bake and expose parameters.
3. Turn HMDS/NH₃ valve to NH₃ (located behind glass cylinder, short end of knob indicates valve selection)
4. Select 2 on the Thumbwheel.
5. Set temperature for front/rear zones. Press and hold **SET BUTTON** (far left), set temperature to desired setting.

NOTE: Oven must be at set temperature before beginning processing.

Front Zone: 90°C

Rear Zone: 90°C

6. Press **S.P.** on the controller and check each set point.

Recommended Settings:

Set point 1: (Display Set Point)	600 Torr
Set point 2: (Set Point 2)	100 Torr
Set point 3: (Alarm 3 Low Limit)	1 Torr
Set point 4:	500 Torr

7. Using the touch screen press:

GOTO Alarms Panel

GOTO Process Variables

8. Enter Process Variables

Recommended Process Variables:

Number of dehydration cycle purges:	3
Number of exit cycle purges:	5
IR Wafer Warm Up Delay:	10
Process duration:	2700 seconds (45 min)

9. Press **GOTO OPERATOR PANEL**

10. Load Samples

11. When oven has stabilized at set temperature, press **START**

12. After process is done, perform flood exposure using ABM

Recommended parameters:

1813	12 sec
1827	25 sec
SPR220	60 sec

13. Develop

NOTE: Total cycle time for the recommended process is approximately 90 minutes.

SHUTDOWN

14. Don't forget to logoff from the tool using FOM.