

YES POLYIMIDE VACUUM OVEN SOP

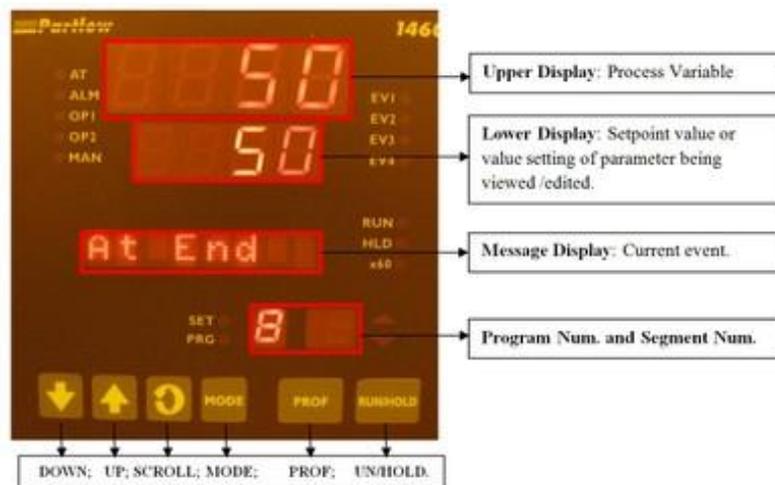
YES-550PB6/8/12-2P-CP

September 2020

YES POLYIMIDE OVEN

The YES high temperature cure oven is designed to provide a controlled ramp curing process for temperatures up to 550°C in an oxygen-free environment. In addition, YES ovens provide a cleaner process in a controlled environment, so you'll get higher yields. Critical steps in any cure process include complete removal of residual solvents, uniform temperature distribution, pressure control, ability to maintain dry inert atmosphere, and control of heating and cooling rates.

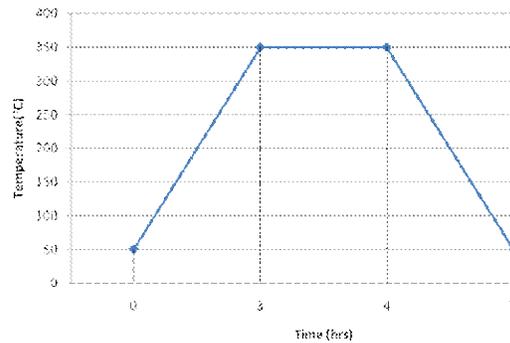
Enter the program profile:



1. To enter the program profile, press **UP** arrow and **SCROLL** key simultaneously until the unlock message appears and release the keys. Using UP arrow, increase the number to 10 (unlock number). Press **SCROLL** key and release.
2. Press **PROF** (Profile) key until the desired program # (1-8) appears in the **SET PRG** display and then press **RUN/HOLD** key to enter the programming mode.

Set up a program:

Generally, 6 steps will be required to be programmed for the above temperature profile. Please notice that for each ramp state a hold band **MUST** be performed to ensure the actual temperature reaching the setting temperature. If not, the hold band will keep ramping up or down until temperature reaches the set point. Each step has three parameters: **Desired Temp., Time, and Event**. Please follow the following steps to finish your first program.



Step 1:

1. Use **UP/DOWN** arrow to select desired temperature, e.g. 350°C. Then press **SCROLL** key.
2. Set up Time for current temp. (Idle) to reach desired temperature, e.g. 3.00 (hrs). Then press **SCROLL** key.
3. Select event: 0000 for ramping up; then press **SCROLL** key to enter the second step. 0000 (ramping up), 0001 (ramping down), 0010 (dwell state).



Step 2:

1. The temperature would be the previous temperature for hold band, “_ _ _ _” represents previous temperature in **Step 1**. Or use **UP** or **DOWN** arrow to set T to 350°C. Then press **SCROLL** key.
2. The time for hold band is always 0.01 (1 min). Then press **SCROLL** key.

3. Select event: 0000 for ramping up; then press **SCROLL** key to enter the third step.



Step 3:

1. The temperature would be the previous temperature for dwell state, “_ _ _ _” represents previous temperature in **Step 2**. Or use **UP** or **DOWN** arrow to set T to 350°C. Then press **SCROLL** key.
2. Set up the time you want hold, e.g. 1.00 (hrs). Then press **SCROLL** key.
3. Select event: 0010 for dwell state; Then press **SCROLL** key to enter the fourth step.



Step 4:

1. Use **UP** or **DOWN** arrow to select the desired temperature, e.g. 50°C. Then press **SCROLL** key.
2. Set up the time you want current temp. (Idle) to reach the desired temperature, e.g. 3.00 (hrs). Then press **SCROLL** key. Usually choosing 0.01 (min) if you want the oven cooling down **ASAP**.
3. Select event: 0001 for ramping down; then press **SCROLL** key to enter the fifth step.



Step 5:

1. The temperature would be the previous temperature for hold band, “_ _ _ _” represents previous temperature in **Step 4**. Or use **UP** or **DOWN** arrow to set T to 50 °C. Then press **SCROLL** key.
2. The time for hold band is always 0.01(1 min). Then press **SCROLL** key.
3. Select event: 0001 for ramping down; then press **SCROLL** key to enter the final step.



Step 6:

1. The temperature would be the previous temperature for hold band, “_ _ _ _” represents previous temperature in **Step 5**. Or use **UP** or **DOWN** arrow to set T to 50 °C. Then press **SCROLL** key.
2. Keep pressing **DOWN** key until “END” appears. Then press **SCROLL** key.
3. Press “MODE” twice until the “EXIT” appears in Message Display.



Run a program:

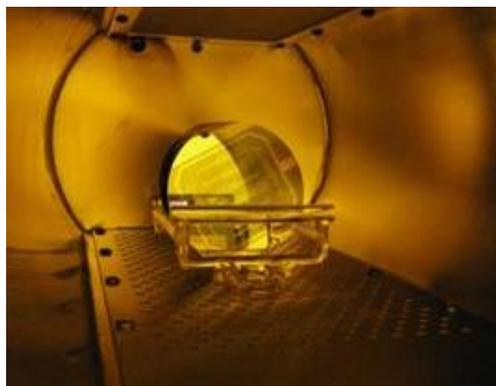


Operator's Touch Screen Panel

1. While you can program the YES Oven without logging in to FOM, to run a process you must log in or it will fail.
2. Press **ENTER RECIPE NUMBER**, type in the program number, e.g., 4, press **ENTER**, then **DONE**.
3. Press **ACCESS AND ALARM PANEL** »»» **ENTER ACCESS CODE: 1984**. **ENTER** and then **DONE**
4. Press **GO TO RECIPE SET UP PANEL** »»» **GO TO RECIPE 4 SET UP PANEL**.
5. Enter the optimized value in the following pictures if N₂ is only used gas.

NOTE: **ENTER RAMPE UP WAIT ABORT TIME IN MUNITES** should be longer than the time in your ramping up step.

6. Press **"EXIT"** and open chamber and load samples vertically using the glass wafer boat.



7. Close chamber and press **PRESS TO START PROCESS**.
8. When the process was completed, press **PRESS TO STOP PROCESS** and open chamber to unload your samples.
9. Logout from the tool in your FOM account.