



## Hot Rocks Oven – PLC and HMI programming (GEN2)

### 1 – Gathering information

If you received a new replacement PLC and HMI they are not programmed. USB thumb drive contains all the programs needed and will be use to update the HMI if needed. The blank SD card will be loaded with the right program from the thumb drive to programme the PLC if needed. The first step is to identify the current version of the software in use and gather the parameters of the oven.

\*\*\*IMPORTANT\*\*\*

On USB key you have to programs 2.8 and 2.9.

- If your actual program version is 2.8 or less, choose 2.8. Copy the proper PLC files on the SD card and keep only the proper HMI files on the USB key.
- If your actual program version is 2.9 OR if your oven has been updated with the new TM3TM3 external expansion temperature card, choose 2.9.

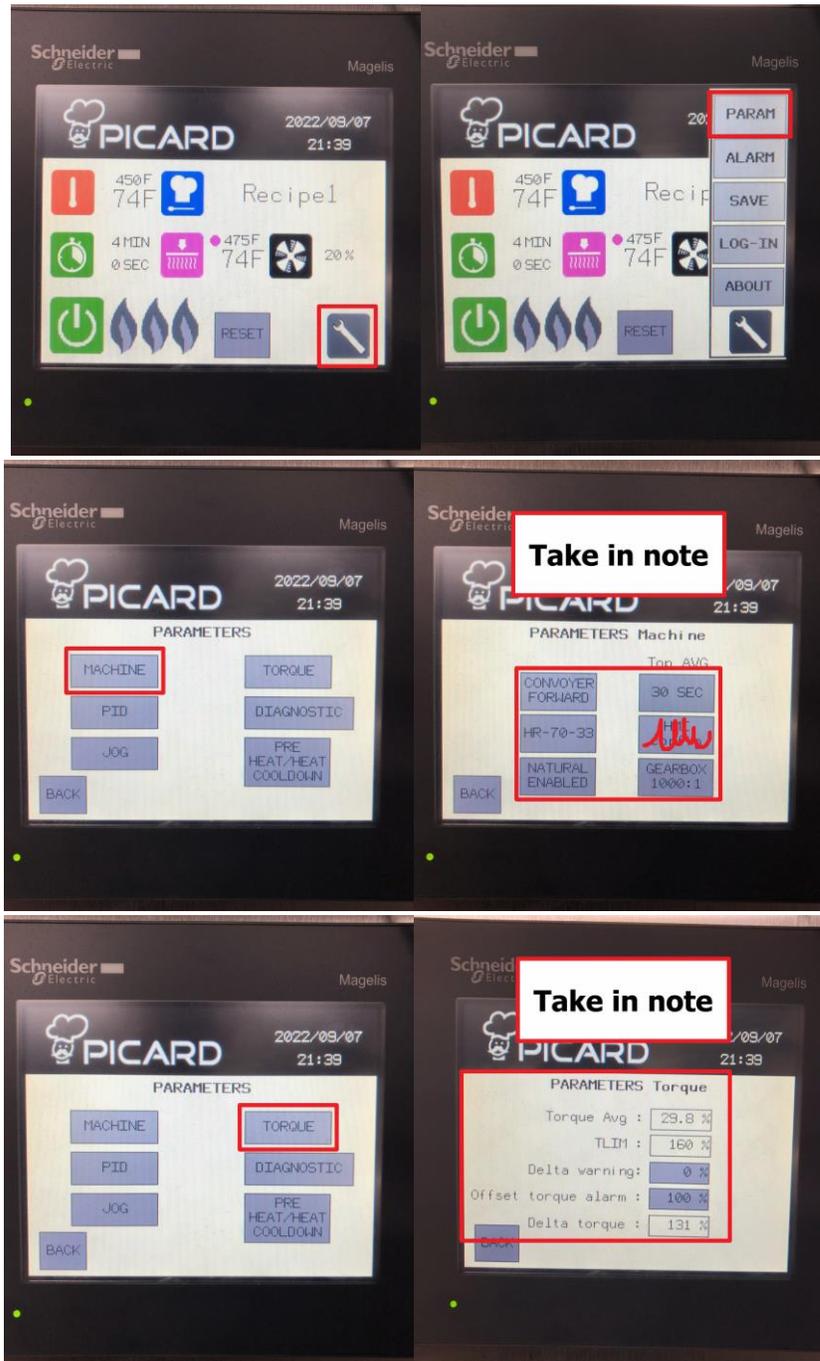
See following procedure for more details.

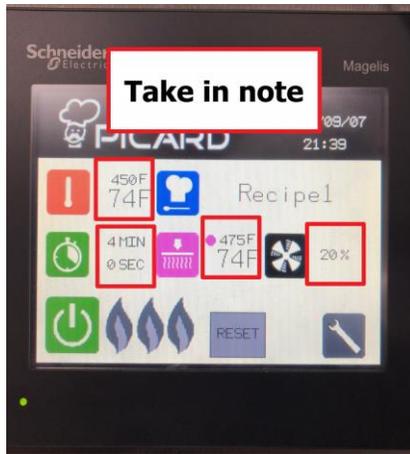
**Method A:** HMI screen is accessible

- / Press the **setting** button (the wrench) then the **ABOUT** button and take in note the HMI and PLC version.



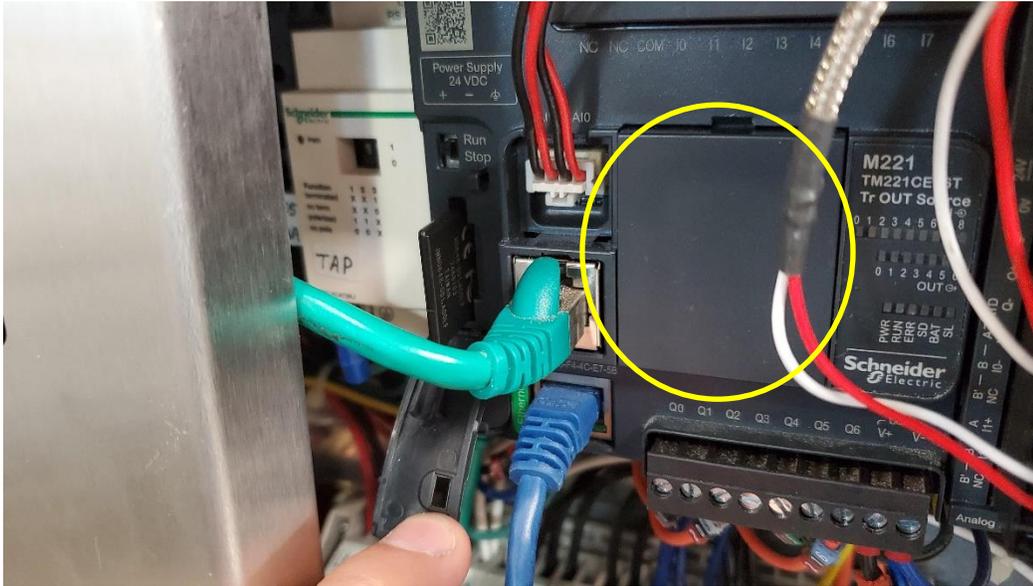
- / Login as SYSTEM user, (Name: SYSTEM, password : SYSTEM). Page 23 in the owners manual on the thumb drive for help.
- / Go to the PARAM page, take in notes the model number, the direction of the conveyor, the gearbox ratio, gas type and take in note the recipe(s) on the main screen.





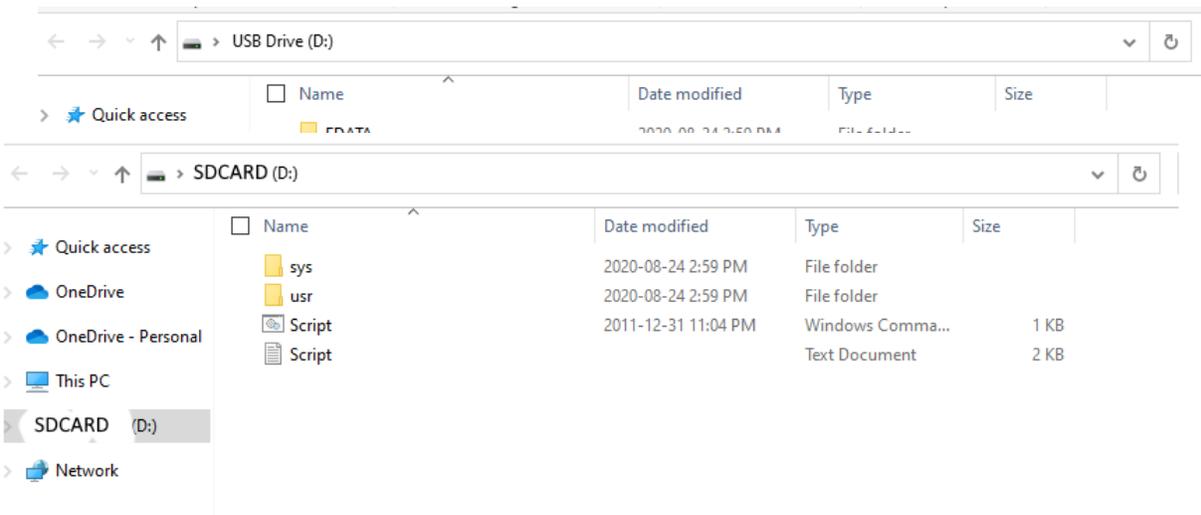
## Method B: HMI screen is not accessible

- / Close the gas main valve
- / Close the main electrical switch on the unit
- / Remove the back panels
- / Check if the PLC has a plastic cover in place. If it's the case, the version is 2.9 (picture below). If you find a temperature card in that location, the version is 2.8.



## 2 – SD card and thumbdrive preparation

- / Take all the contents of the thumbdrive and copy it in a folder on your laptop.
- / Erase all the content of the thumbdrive
- / If the version of the program is 2.8 or less, copy the content of the 2.8\_thumbdrive folder to the thumbdrive. Copy the content of the 2.8\_sdcards folder to the sd card. Make sure you copy the content of the folder, not the folder itself. Example Below.



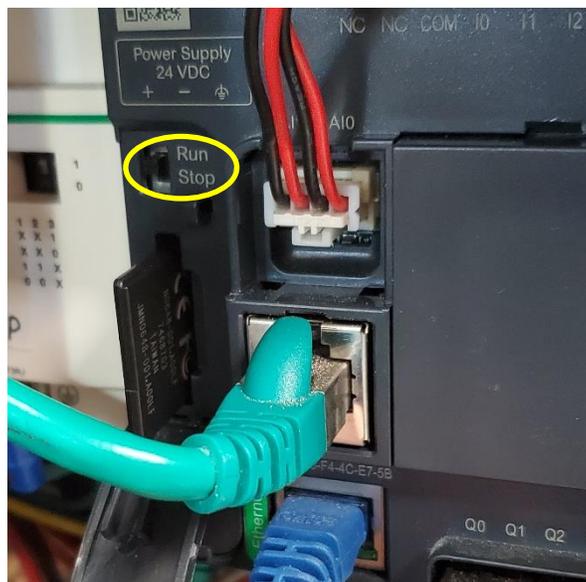
If the version of the program is 2.9, copy the content of the 2.9\_thumbdrive folder to the thumbdrive. Copy the content of the 2.9\_sdcard folder to the sd card. Make sure you copy the content of the folder, not the folder itself. Example above

### 3 – Secure the oven

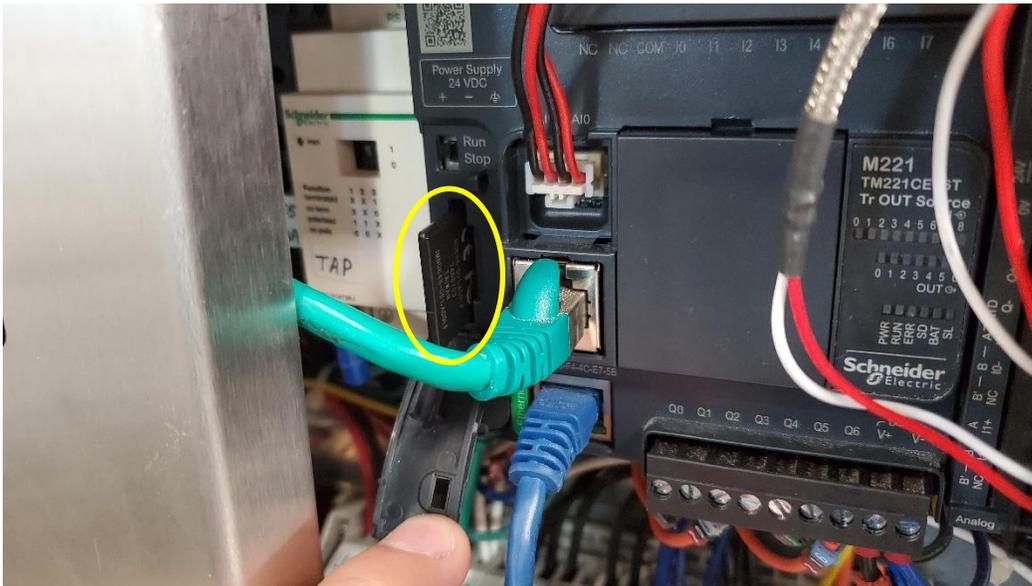
- / Close the gas main valve
- / Close the main electrical switch on the unit
- / Remove the back panels

### 4 – Update the PLC

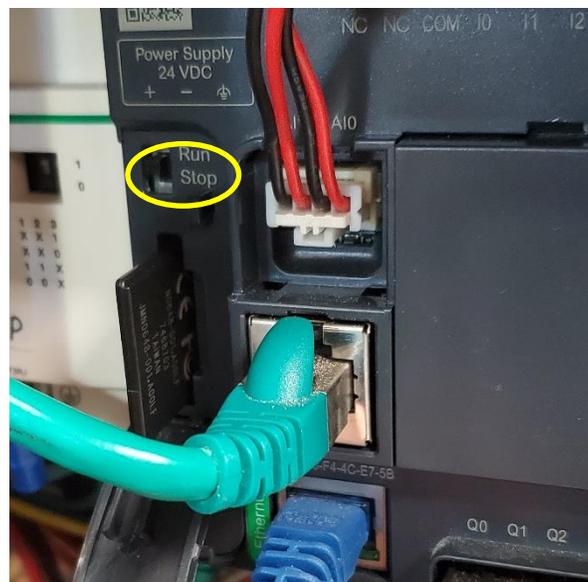
- / Set the PLC switch to the “STOP” position.



- / Insert the SD card into the PLC SD Card slot.



- / Turn on the main electrical switch on the unit.
- / Wait 5 minutes until the program is fully transferred.
- / Turn off the main electrical switch on the unit.
- / Remove the SD card from the PLC (push to release)
- / Turn on the main electrical switch on the unit and wait until the HMI is fully booted. (The SD light will stop flashing when the program has finished loading.)
- / Set the PLC switch to the "RUN" position

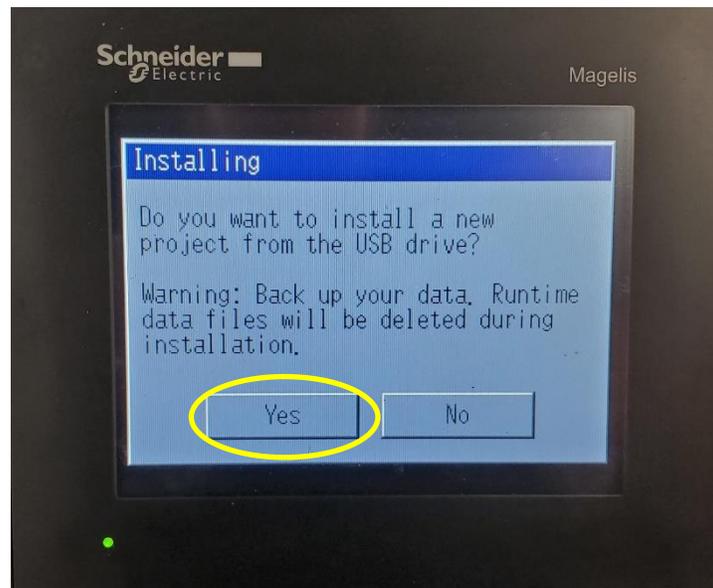


## 5 – Update the HMI

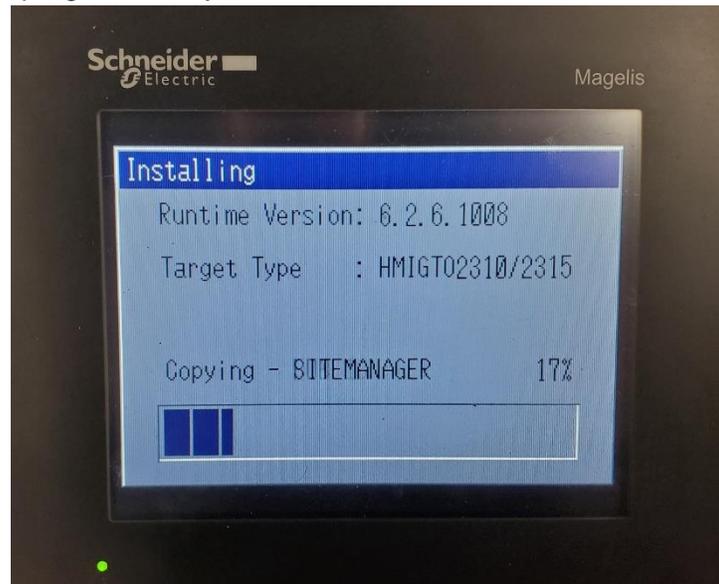
- / Turn off the main electrical switch on the unit.
- / Insert the USB thumb drive into the USB slot on the HMI and put power ON.



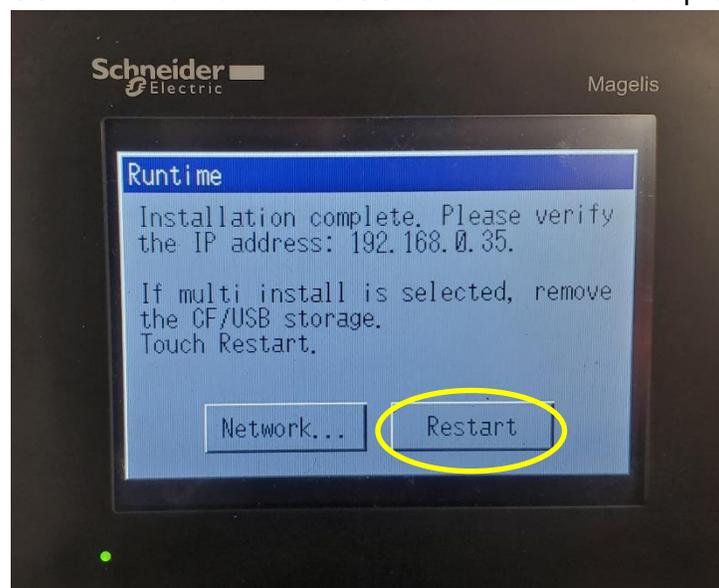
/ Accept the USB transfer on the HMI screen.



- / Wait until the program is fully transferred and the screen is booted into the new version.

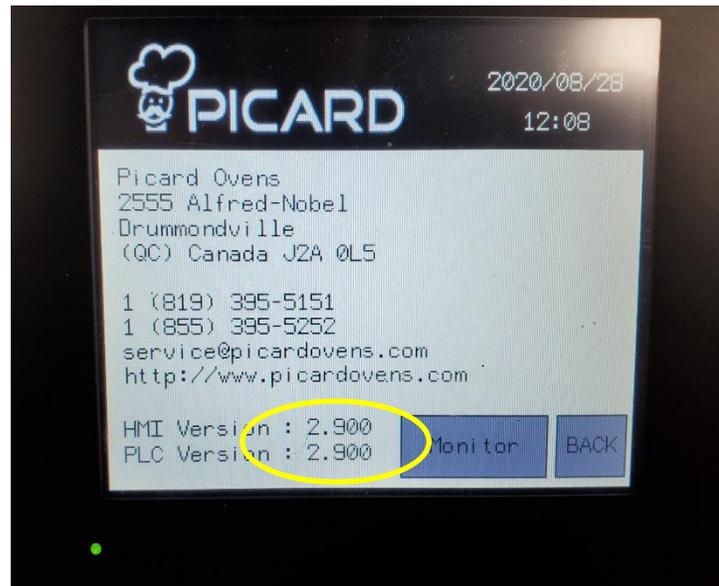


- / Remove the USB thumb drive from the USB slot on the HMI and press restart.



## 6 – Verification

- / Press the **setting** button then the **about** button and make sure the expected version is installed.



- / Go to the PARAM page, remake the step 1 by entering the notes you have taken in every parameters.
- / Replace panels and turn gas on.
- / Press start on the main page to make sure the oven is working properly.