

Start with Klipper on Ender 5+ MicroSwiss

Version 1.0 20231208 Jacques De Jonghe

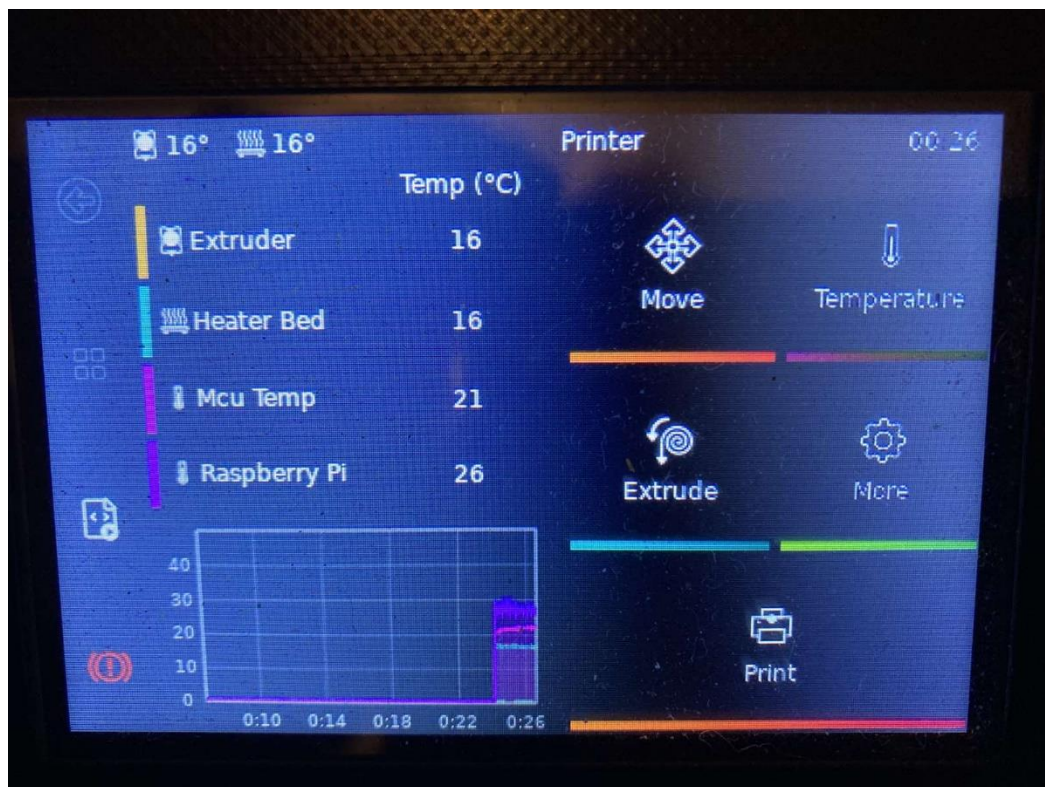
1. Assumptions

- 1.1 A working Ender 5+ MicroSwiss Extruder-Hotend with an installed Klipper+KlipperScreen connected to 220V

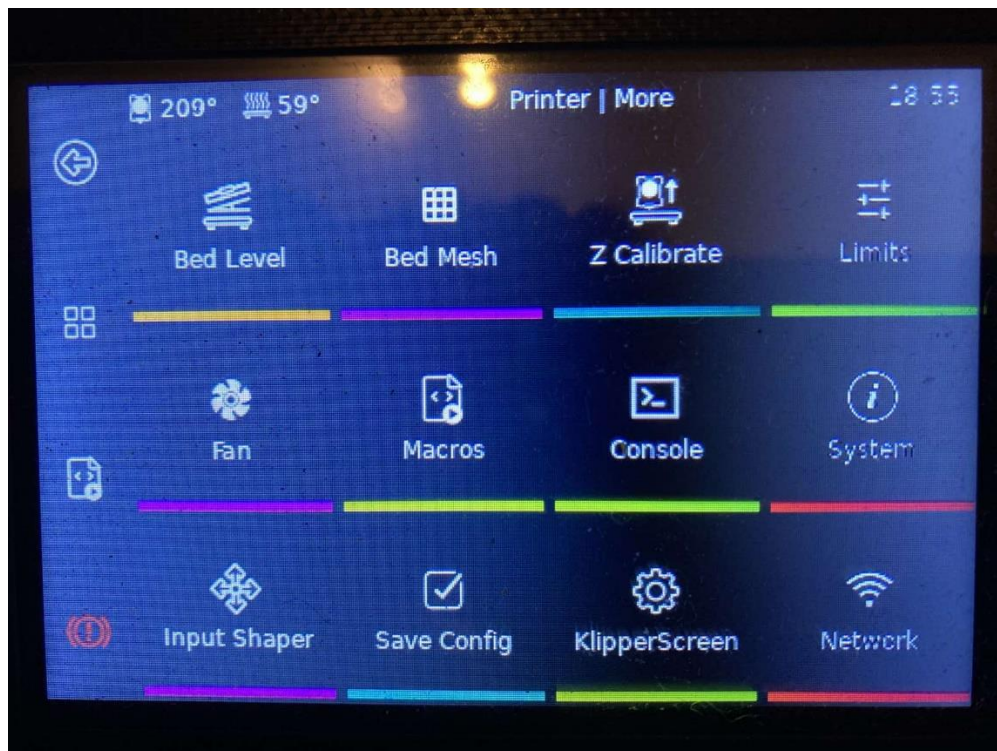
2. Printer startup and connect to the network

- 2.1 Power-up the printer

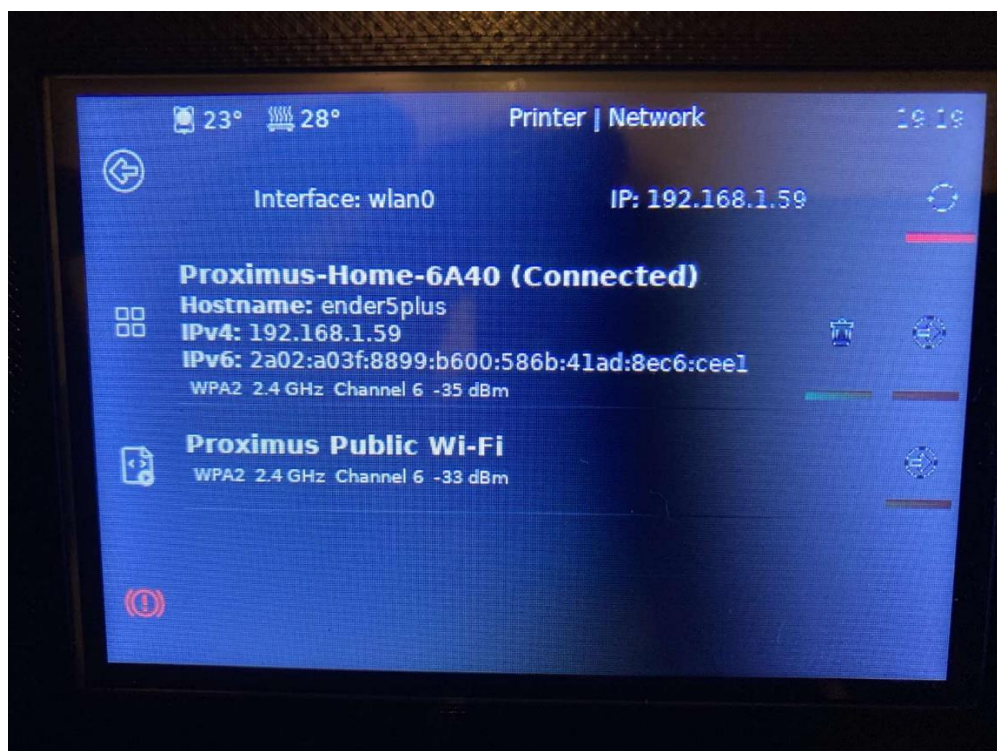
- 2.2 After about 1min, you will get the following screen:



2.3 Select the “More” icon:

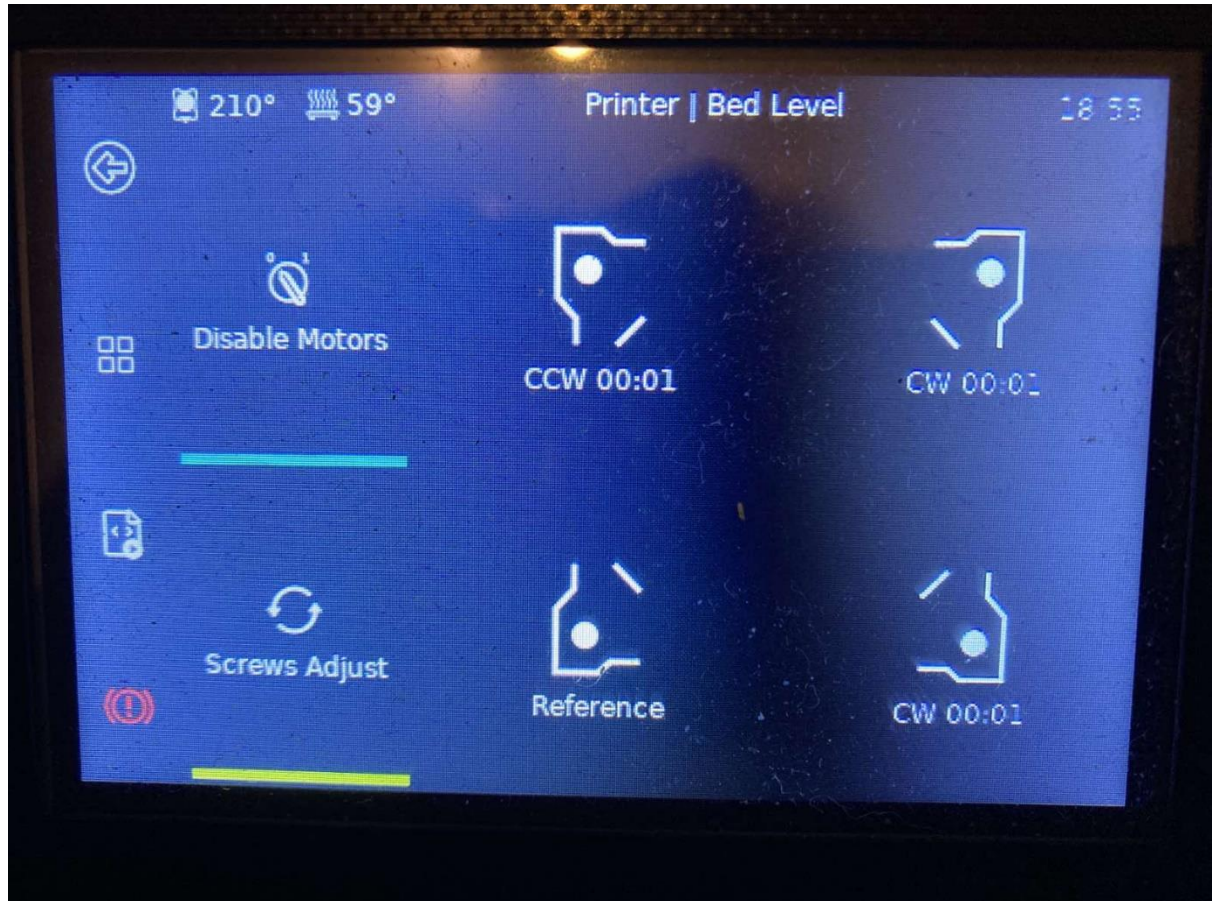


2.4 Select the “Network” icon and here you can connect to your wifi, enter your password and get the IP address of the printer, here: 192.168.1.59



3. Level the bed

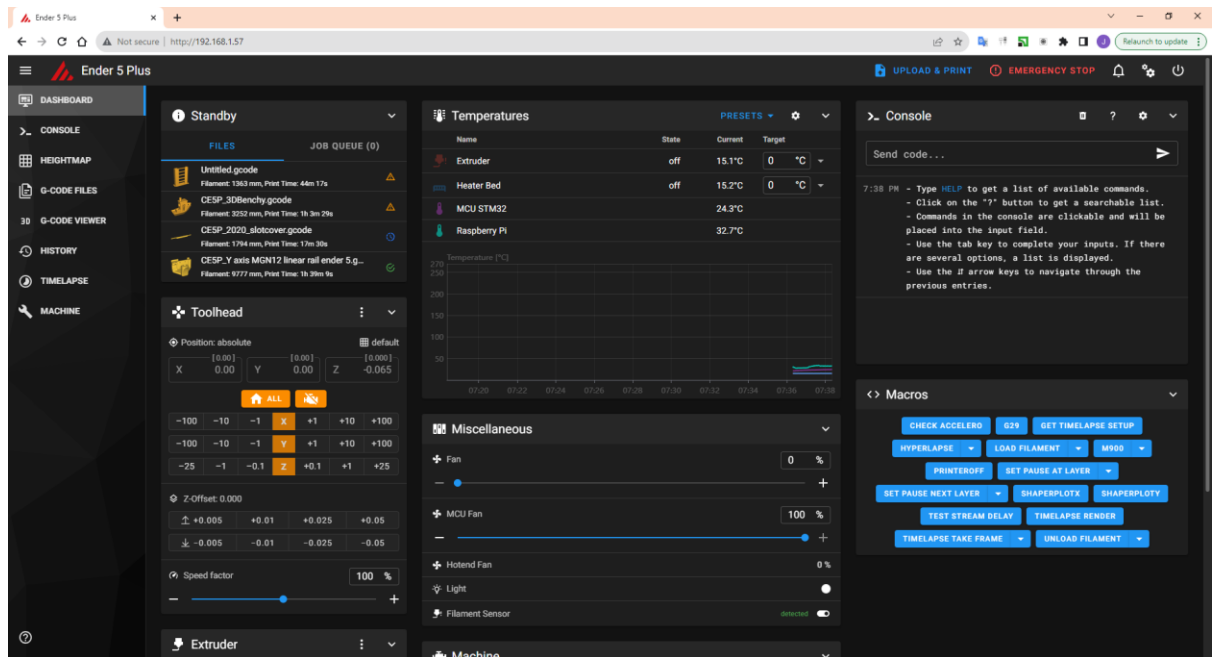
3.1 From the “More” menu, go to “Bed Level”, here you Select the “Screws Adjust” menu and the printer starts measuring the height of the bed with the BL-Touch



3.2 Adjust ClockWise (CW) or CounterClockWise (CCW) the different bed screws. Then restart the measurement process with “Screws Adjust”. When you reach that every screws has a deviation of less than 00:10 (or even 00:05), you are good to go.

4. Mainsail

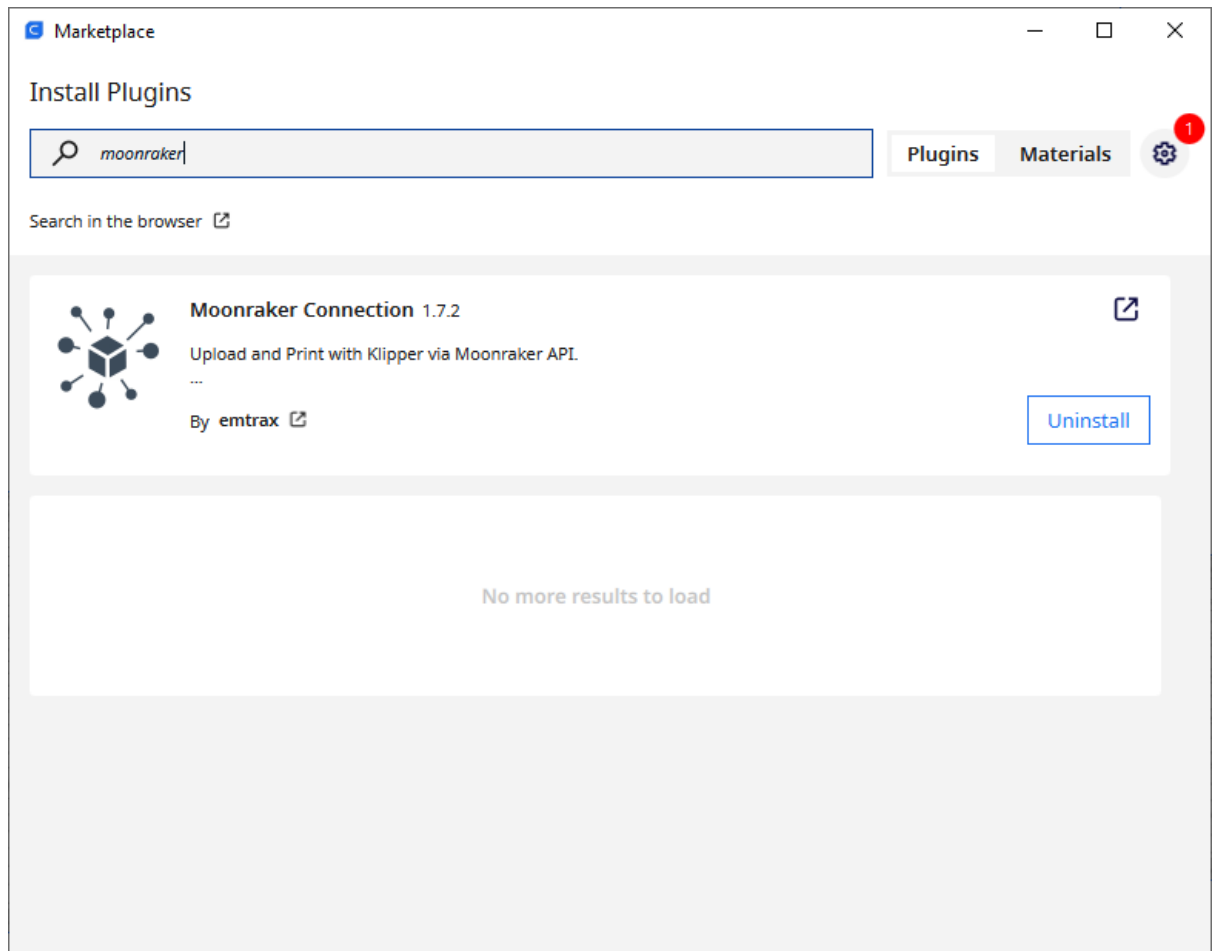
4.1 Enter the IP address in a browser and you will connect to the printer via Mainsail



4.2 In Mainsail, you can completely manage your printer (homing, set temperatures, start a print...)

5. Cura setup

5.1 Start Cura and install the Moonraker Connection Plugin in MarketPlace



5.2 Add a non-networked printer, Creality Ender 5-Plus Printer

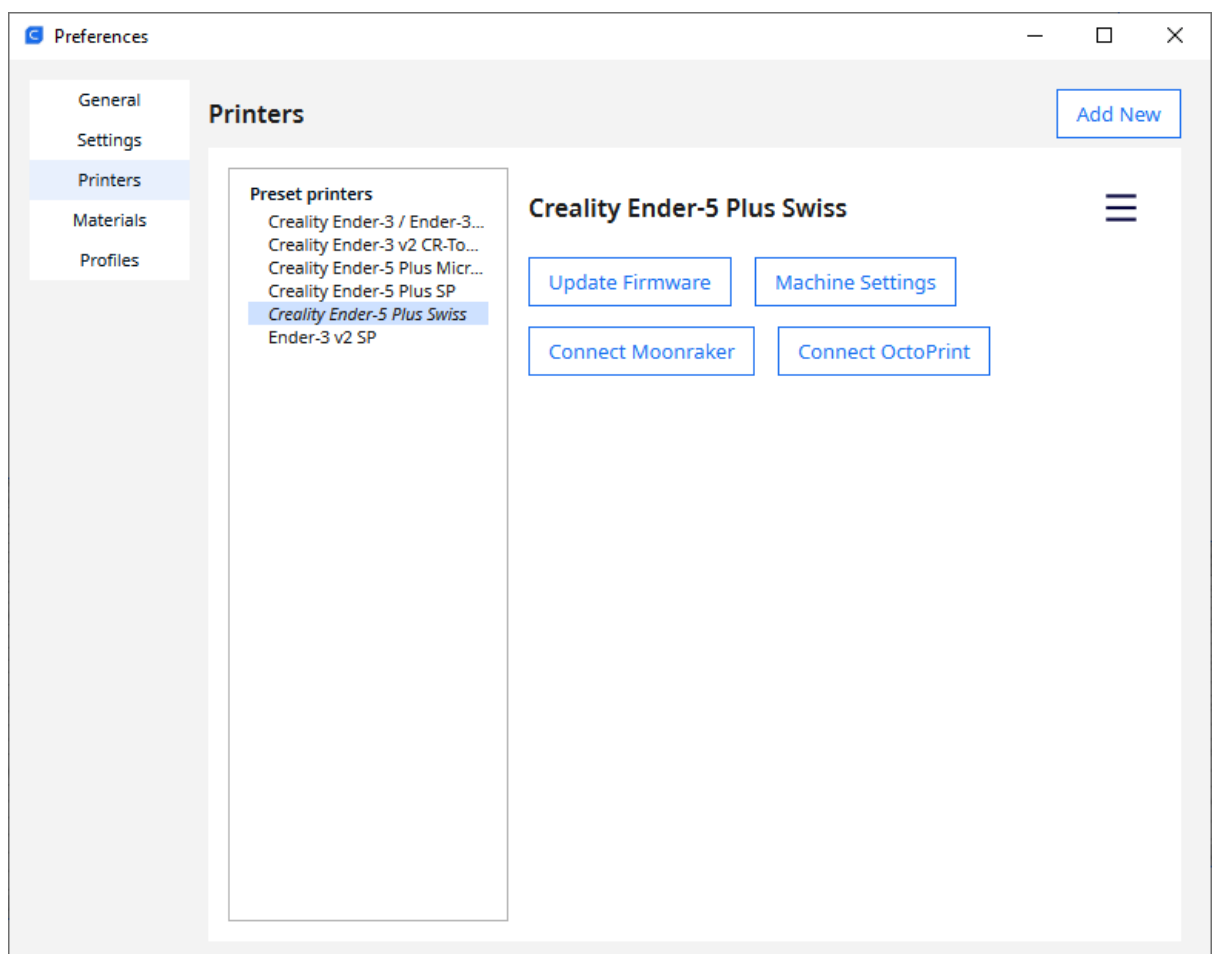
5.3 Replace the Start G-code with the following

M220 S100 ;Reset Feedrate
M221 S100 ;Reset Flowrate

G28 ;Home
;M420 S1 Z2 ;Enable ABL using saved Mesh and Fade Height
;BED_MESH_CALIBRATE ;
BED_MESH_PROFILE LOAD=default

G92 E0 ;Reset Extruder
G1 Z2.0 F3000 ;Move Z Axis up
G1 X10.1 Y20 Z0.28 F5000.0 ;Move to start position
G1 X10.1 Y200.0 Z0.28 F1500.0 E15 ;Draw the first line
G1 X10.4 Y200.0 Z0.28 F5000.0 ;Move to side a little
G1 X10.4 Y20 Z0.28 F1500.0 E30 ;Draw the second line
G92 E0 ;Reset Extruder
G1 Z2.0 F3000 ;Move Z Axis up

5.4 Click Next and Click on the printer again in order to setup the connection to Moonraker



5.5 Click “Connect Moonraker” and enter the IP address with “http://” before of the printer in the tab “Connection”

The screenshot shows the 'Connect Moonraker' dialog box with the 'Connection' tab selected. The title bar says 'Connect Moonraker' and the main title is 'Creality Ender-5 Plus Swiss'. There are three tabs: 'Connection', 'Upload', and 'Monitor'. The 'Connection' tab contains the following fields:

- Address (URL): A text box containing 'http://192.168.1.59'.
- API-Key (Optional - if the network is untrusted): An empty text box.
- Power Device(s) (Name configured in moonraker.conf): An empty text box.
- Retry interval in seconds (Optional - default: 0.5 [20 iterations]): An empty text box.
- Frontend (alternative URL instead of Moonraker's address for "Open Browser"): An empty text box.

At the bottom right, there are two buttons: 'Create' (blue) and 'Cancel' (white with blue border).

5.6 In the tab “Upload”, select “UPF with Thumbnail” and click “Create”

The screenshot shows the 'Connect Moonraker' dialog box with the 'Upload' tab selected. The title bar says 'Connect Moonraker' and the main title is 'Creality Ender-5 Plus Swiss'. There are three tabs: 'Connection', 'Upload', and 'Monitor'. The 'Upload' tab contains the following options:

- Format:
 - ☐ G-code
 - ☒ UPF with Thumbnail
- Process:
 - ☒ Upload Dialog
 - ☐ Fire & Forget
 - ☐ Remember state of "Start print job"
 - ☐ Auto hide messagebox for successful upload (30 seconds)
- Filename Translation: `filename.translate(filename.maketrans(input[], output[], remove[]))`
- Input:
- Output:
- Remove:

At the bottom right, there are two buttons: 'Create' (blue) and 'Cancel' (white with blue border).

5.7 Now you need to modify the default Cura Profile with the following parameters:

- Printing Temperature: 210C for PLA (10C higher than typical due to the all-metal hotend)
- Speed: 150.0mm/s
- Retraction Distance: 1.5mm
- Retraction Speed: 35mm/s

Now, you are ready to print!