

Standard Operating Procedure for Stratasys Objet 500 Connex3 3D Printer

1. ALWAYS OPEN THE LID OF THE 3D PRINTER TO CHECK IF EVERYTHING IS CLEAR AND HAVE NO 3D PRINTED PARTS FROM THE PREVIOUS USER.

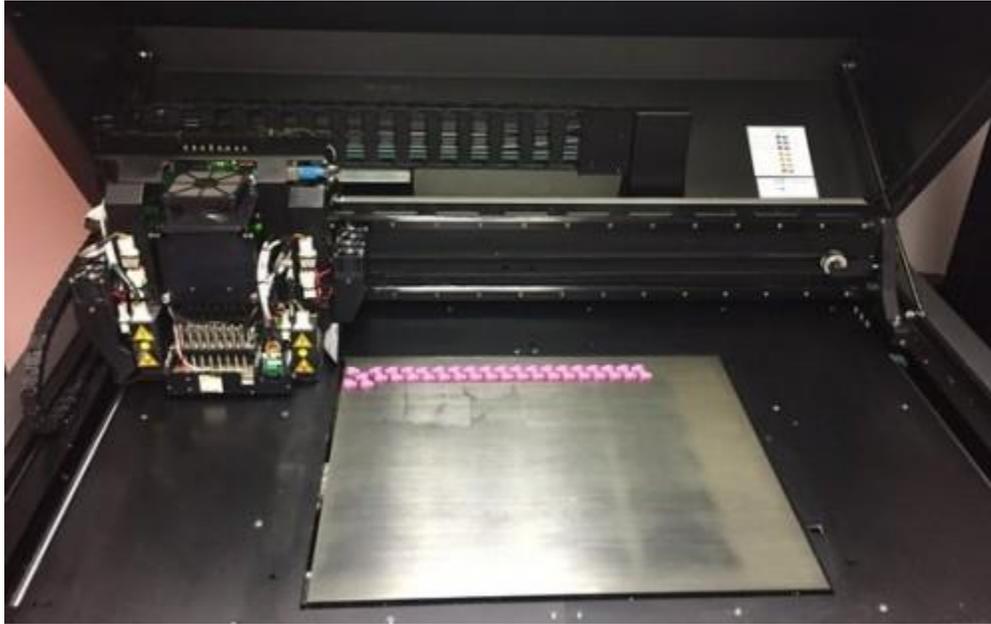


Figure 1: The tray of the 3d printer

2. Insert your flash drive Copy the STL files and paste it into Job History -> 2019 -> Your Name (Ex. Sayeed) -> "Save your STL File"
3. Open Objet Studio; a window will come up asking if you want to allow the program to run. Click Run and wait for the Objet Studio to come up.

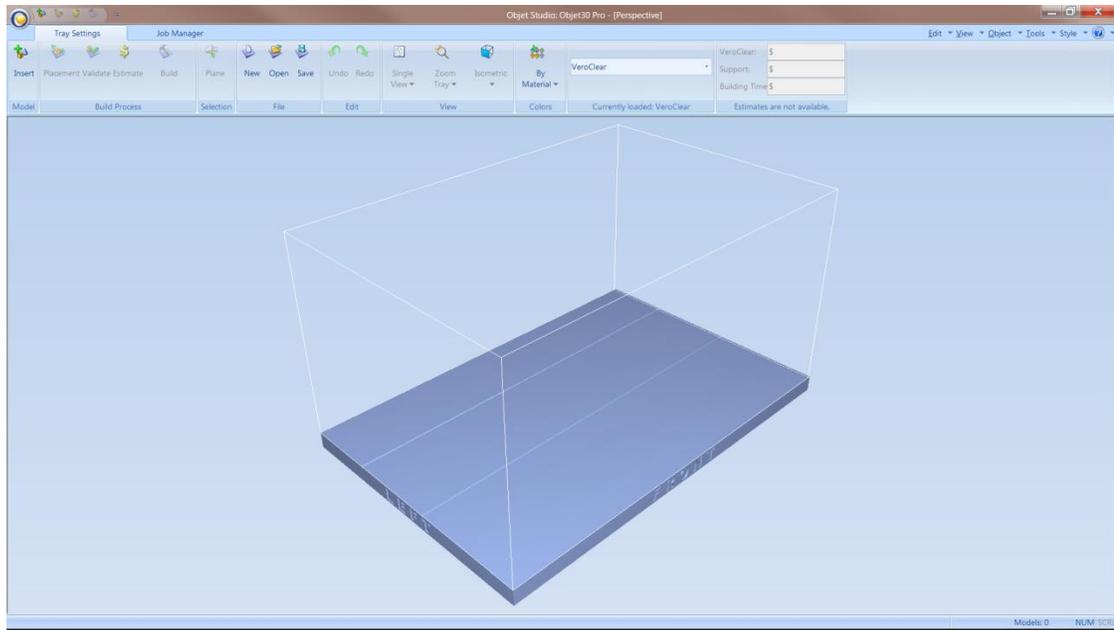


Figure 2: Objet Studio tray settings tab

4. Click on the Insert button and find the file names of the parts needed to print. Note: the files must be STL in order for the printer to read them.
 Tip: To make multiple parts of the same file on the printer bed display window, click on the part and press Ctrl+C followed by Ctrl+V.

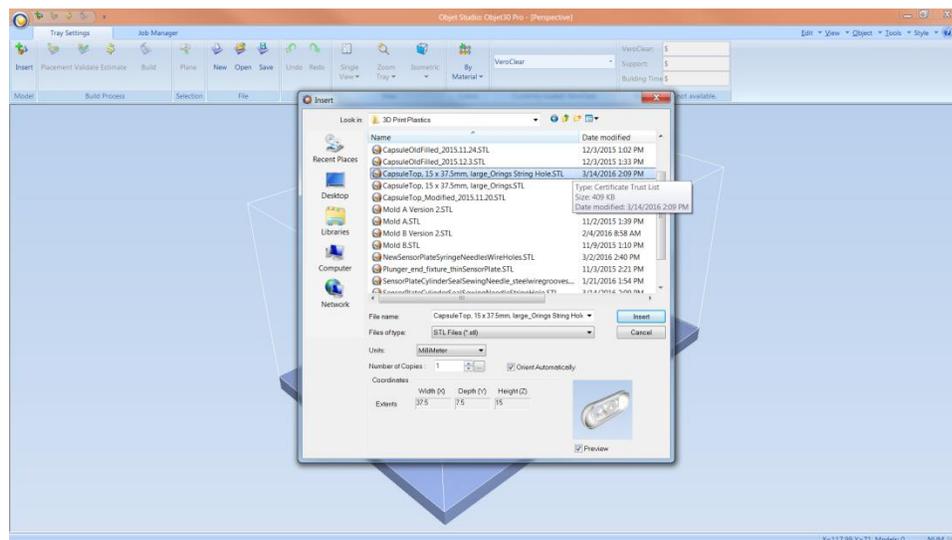


Figure 3: Inserting an STL file onto Objet Studio

5. Once all parts are on the printer bed, select all the parts and change them from Mattle to Glossy. This change is to make the surface of all parts is less rigid and use less material in the print job.

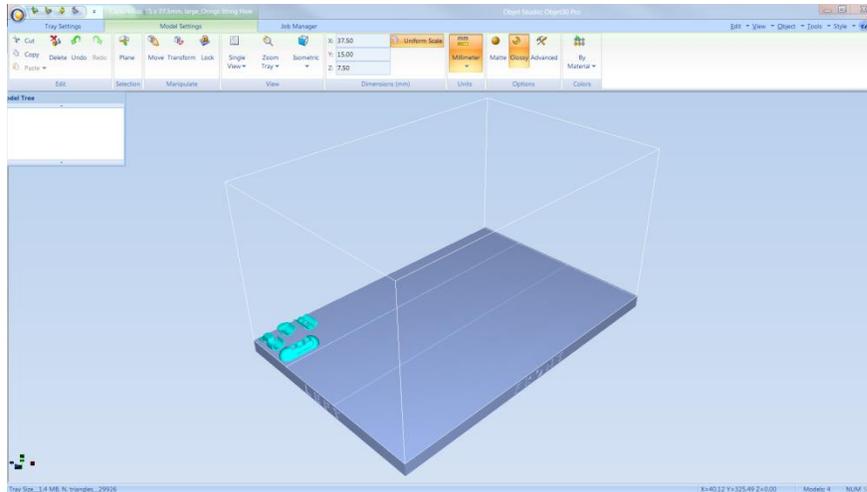


Figure 4: Glossy parts

- Under the Tray Settings tab, click the Placement button followed by the Validate button to move all the parts to the back left side of the printer bed. This is done to decrease the time taken to print the parts.

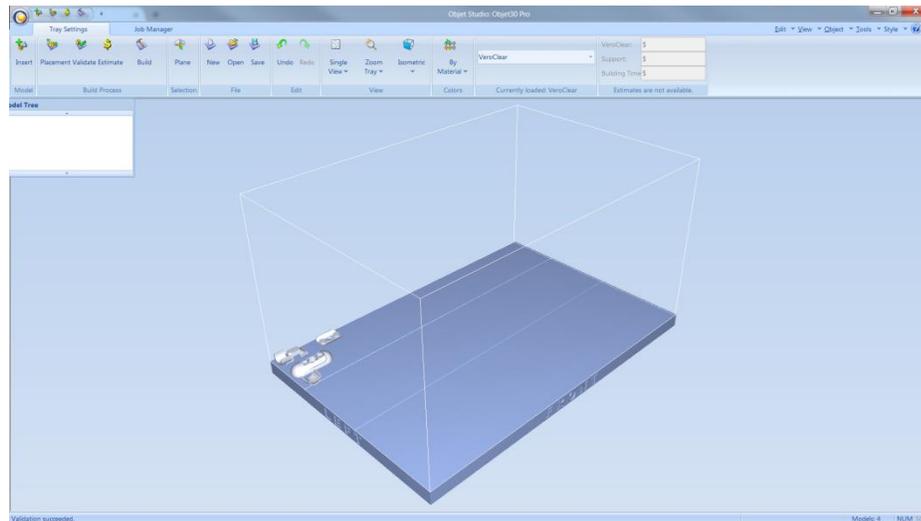


Figure 5: Parts oriented to the back left side of the printer bed

- Click the Estimate button and record the amount of grams used for both material and support in the Objet print info excel spreadsheet.
- Click the Build button to begin the print job. Save the print file in Job History -> 2019 -> Your Name (Ex. Sayeed) -> Tray -> Save as Ex. 1_22_19_Name of the File.

- The printer will now begin the print job if there is enough Support and Material available. If there is insufficient Support and Material under Available Resources, refill or replace the appropriate cartridges.

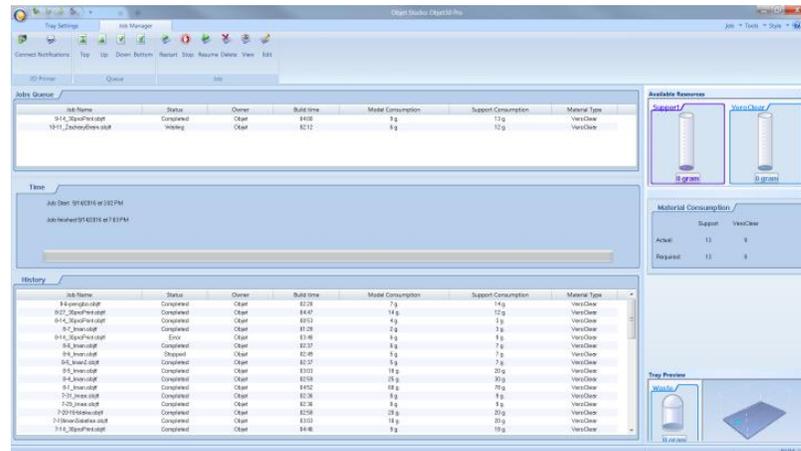


Figure 6: Job Manager tab displaying print job

- After hearing the sound “Printing has been started” then you have to switch the computer screen to 3D printer screen. On the MASTER VIEW KVMP SWITCH, press the left button to change desktop on the computer and open the Objet Printer icon on the desktop.



Figure 7: MASTER VIEW KVMP SWITCH box

- Open Objet Studio and click on the red button on the window to set the printer to Online mode. Afterwards, press the right button on the MASTER VIEW KVMP SWITCH and return to the main desktop.

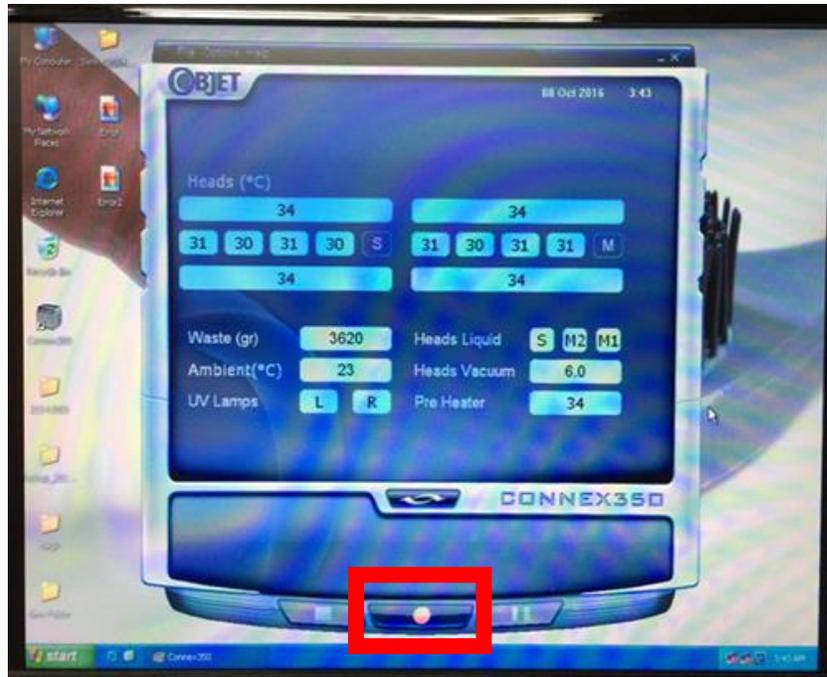


Figure 8: 3D printer desktop showing current readings of the printer such as printer bed temperature and amount of materials left