

# Stratsys F270 FDM 3D Printer



Stratsys F270 FDM 3D Printer	
Tool Type: "F3D printer"	
Location: "Innovations Workshop"	
Supervisor	Tool Lead
David Bothman	"Andrew Furst"
(805) 893-4125	(801) 928-8869
bothman@cnsi.ucsb.edu	"andrewfurst@ucsb.edu"
Description: "FDM duel extrusion 3D printer"	
Manufacturer: "Stratasys"	

## About

The F270 is a fast and precise filament fed fusion deposition printer. Typically set up with ABS and a soluble filament that is dissolved in a heated caustic bath.

## Training Documentation

[FDM Printer SOP](#)

## Detailed Specifications

Build area: 308 x 254 x 308 mm

Dual extrusion 3D printer (build and support material)

capable of printing PLA, ABS, ASA, QSR

.254 mm min layer thickness

XY tolerance of +/- .200 mm

4 spool bay

---

## Safety Concerns

- The print heads can be very hot - do not touch them with bare hands unless positive they are cool.
  - As with any automated machinery make sure that your body is clear of the moving parts to avoid injury.
  - The support removal tank for the F270 is filled with heated caustic chemicals that dissolve the support material. An apron, Gloves, and a face shield must be worn when inserting and removing parts or basket from tank.
- 

## Operating Procedures

1. On the F270 printers computer, launch GrabCad Print
  2. Select File → New Project → Add Models → Import desired models
  3. Move models around on virtual build tray so that models on a used build tray do not overlap any previously printed spots
  4. the purge block and printed model should be placed close together to minimize print time
  5. Select "Print Settings" from the menu on the right hand side
  6. From menu, select desired slice height, and verify that the first layer material is set to support.
  7. Open and place build tray into F270, making sure that the tray is locked in place by pulling up on the front locking arm until arm is PARALLEL to build tray.
  8. Select print, and send the job to the F270 3D printer
  9. on the F270 touch screen, select your job, and then select print.
- 

## Post-Processing

[SCA 1200 HT NaOH parts bath](#)

---

## Reference Documentation

[Notes on Post Processing](#)

[Failed 3D print Procedure](#)

[FDM Support Removal](#)

[Operation and Maintenance rev. A](#)

[Ecoworks filament MSDS](#)

[User Manual](#)

[GrabCAD Tips, Guides, and FAQs](#)

[Changing F270 filament](#)

[Printing using the F270](#)

From:

<https://microfluidics.cnsi.ucsb.edu/wiki/> - **Innovation Workshop Wiki**

Permanent link:

[https://microfluidics.cnsi.ucsb.edu/wiki/doku.php?id=stratasys\\_f270&rev=1672877047](https://microfluidics.cnsi.ucsb.edu/wiki/doku.php?id=stratasys_f270&rev=1672877047)

Last update: **2023/01/05 00:04**

