Ultimaker 3 Extended/S5 Dual FDM 3D Printer

Ultimaker 3/S5

Tool Type: 3D printer
Location: Innovation Workshop
Description: Duel extrusion FDM 3D printer
Manufacturer: Ultimaker

About

The Ultimaker 3 extended & Ultimaker S5 are filament fed fusion deposition 3D printers capable of simultaneously printing two different plastics at once. Typically the printer is set up with ABS as a build material, and PVA as a solvable support material.

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 warn when inserting and removing parts or basket from the tank.

Training Documentation

FDM Training SOP

Detailed Specifications

Ultimaker 3 Extended:

- Build Volume: 215 x 215 x 300 mm
- Filament diameter: 2.85 mm
- layer resolution: 60 to 600 microns depending on print head (see Specifications documentation page 11)
- XYZ accuracy: 12.5, 12.5, 2.5 microns
- Build plate temperature: 20-100 °C
- Nozzle temperature: up to 210 °C

Ultimaker S5:

- Build Volume: 330 x 240 x 300 mm
- Filament diameter: 2.85 mm
- Layer Resolution: 200 - 20 micron with 0.4mm nozzle (stock), 150 - 60 micron with 0.25 mm nozzle, 300 - 20 micron with 0.6 mm nozzle, and 600 - 20 micron with 0.8mm nozzle.

Reference Documentation

PVA Temps:
Extruder: 220 C Bed: Whatever structural filament recommends

ABS Temps:
Extruder: 230 C Bed: 100 C

quick_start_guide_ultimaker_3_v3.2.pdf
ultimaker_3_extended_specifications.pdf
um180129_ultimaker_3_manual_rb_v12_english.pdf
https://support.ultimaker.com/hc/en-us/articles/360012007119
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