MiiCraft 50 3D Printer

MiiCraft 50

Tool Type: 3D printer
Location: Innovation Workshop
Description: High-resolution resin DLP 3D printer for microfluidics tool fabrication.
Manufacturer: Miicraft

Last updated 1/4/23 Haley

About

The MiiCraft 3D printer is located in Elings Hall 2442. It is a Digital Light Processing (DLP) printer, which is functionally similar to SLA printing but uses a projected light source rather than a laser. With its proprietary resin, this printer is capable of printing small, high-resolution parts. The MiiCraft is commonly used to print molds for microfluidic devices due to its high accuracy.

Safety Concerns

The resin used for casting PDMS molds is highly toxic.

- Wear gloves and a lab coat when handling.
- Follow proper fume hood procedure when cleaning parts.
- Transport prints in dedicated transport containers to prevent resin spillage.
- Dispose of liquid waste in labeled waste jugs and solid waste in the yellow waste bin

resinworks3d_msds.pdf

Training Documentation

MiiCraft 50 SOP

Detailed Specifications

Build Volume: 57x32x120 mm
XY Resolution: 30 µm
Layer Thickness: 5-200 µm

Reference Documentation

miicraft125_manual_printerv1.5.pdf

ccw-_startup.pdf

miicraft_builder-manual-v006.pdf

miicraft_calibration_data.pdf

notes_on_preparing_a_miicraft_pdms_mold_for_casting.pdf

ucsb-iw_miicraft_50_operating_checklist.pdf

transferring_the_resin_sop.pdf

miicraft_exporting_recipe_and_manual_recovery_procedure.pdf

miicraft_best_practices.pdf
