


# MiiCraft 50 3D Printer

<b>MiiCraft 50</b>

<b>Tool Type:</b> 3D printer
<b>Location:</b> Innovation Workshop
<b>Description:</b> High-resolution resin DLP 3D printer for microfluidics tool fabrication.
<b>Manufacturer:</b> MiiCraft

Last updated 1/4/23 Haley

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## 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.

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## 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](#)

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## Detailed Specifications

Build Volume: 57x32x120 mm  
XY Resolution: 30  $\mu$ m  
Layer Thickness: 5-200  $\mu$ m

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## 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](#)

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