

# Carbon 3D Printer



**Tool Type:** "3D Printer"

**Location:** "Elings 2436"

Supervisor	Tool Lead
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**Description:** "Carbon 3D printer"

<b>Manufacturer:</b> "Carbon"
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## About

The Carbon Printer is located in the Elings Hall 2436.

The Carbon 3D printer is a liquid resin stereolithographic 3D printer capable of producing high resolution accurate models out of a variety of materials. Liquid resin printer use a bath of reactive resin which is precisely cured using specific wavelengths of light. This printer is particularly well suited for thin high aspect ratio features and models requiring great surface accuracy.

Based on the material and application, some prints will benefit from post process UV curing to strengthen and harden the finished part. See part curing documentation in APM LED V-Cube II Ultra-violet oven reference documentation.

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## Training Documentation

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## Detailed Specifications

Build Volume: 189 x 118 x 326 mm (L x W x H)

X,Y Accuracy: 75 microns

Layer Thickness: 25-100 microns

General Accuracy: up to +/- 70  $\mu\text{m}$  +1  $\mu\text{m}$  per mm dimension size

Production Repeatability: up to +/- 40  $\mu\text{m}$

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## Safety Concerns

The resin used in the Carbon 3D printer is considered hazardous. Gloves are to be worn when replacing or removing build plates, build tanks, and resin cartridges. Refer to SDS for disposal and health hazards.

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## Reference Documentation

[carbonresinguide.pdf](#)

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