Printer: Formlabs Form 3 (SLA)



Purpose: A thermoset resin based 3d printer based on the Stereolithography Apparatus method to print

parts with 25 μm resolution

Materials: A wide range of resins provided by Formlabs

Build volume: $145 \times 145 \times 185$ mm

Slicer: PreForm

Operating temperature: 18-25 °C

Printer: Markforged Mark two (FDM)



Purpose: Printing thermoplastic polymer-based composite parts reinforced with continuous glass or carbon fibers.

Materials: Filaments provided by Markforged: (Polymer: Onyx, Nylon White, Precise PLA/ Fiber: Aramid Fiber (Kevlar), Fiberglass, HSHT Fiberglass)

Build volume: 320 x 132 x 154 mm

Slicer: Eiger

Maximum printing temperature: 300 °C

Printer: AON3D AON M2+ (FDM)



Purpose: Printing large high-performance thermoplastics in a heated chamber.

Materials: Open filament system (including Composite-Ready filaments)

Build volume: $450 \times 450 \times 565$ mm

Slicer: Open-market slicers

Maximum printing temperature: 450 °C

Printer: Creality Ender3 (FDM) x3



Purpose: Printing thermoplastics for prototyping, experimenting, learning, etc.

Materials: Open filament system (1.75mm)

Build volume: 220 x 220 x 250 mm

Slicer: Open-market slicers

Maximum printing temperature: 240 °C

Printer: CEAD 6 axis FGF robot



Purpose: A large-scale thermoplastic composite 3D printer integrated with CNC milling equipment

Materials: A wide range of thermoplastics granules, from high-performance polymers reinforced with carbon fibres to commodity materials reinforced with glass or natural fibres.

Build volume: 2m by 1m, 3m by 1m and 4m by 2m.

Software: Siemens NX

Maximum printing temperature: 400 °C

Printer: Stratasys Objet 30 (PolyJet)



Purpose: A thermoset 3D printer based on the Polyjet technique that prints high-resolution and versatile prototypes for a variety of applications.

Materials: Five different materials including a polypropylene mimic

Build volume: 294 x 192 x 148.6 mm

Software: Objet Studio

Operating temperature: 18-25 °C

Contact: ilyass.tabiai@etsmtl.ca