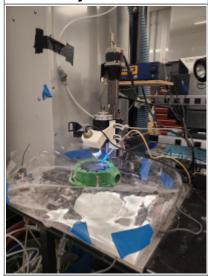
# **Crystalmark Etching Tool**

#### **Crystalmark**



Tool Type: Etching Tool
Location: Microfluidics Lab
Description: [SOMETHING]
Manufacturer: CrystalMark

#### **About**

The CrystalMark Etcher is located in the Microfluidics Lab on the middle table by the Haas CNC in 3430. It is attached to the Sherline CNC Diamond Drill.

It uses air pressure and aluminum oxide abrasive to cut or etch patterns in materials such as glass or silicon. The kerf of the cuts are 700 microns.

Patterns and pre-programmed holes can be uploaded via .dxf files to a program called **insert program here**, and holes can also be added manually.

### **Safety Concerns**

Inhaling large amounts of aluminum oxide can be hazardous. It is recommended to wear a mask and eye protection when using the CrystalMark.

# **Training Documentation**

CrystalMark SOP

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# **Detailed Specifications**

- Stepper motor mounts and couplers on X-, Y- and Z-axes
- 70-2800 RPM continuously variable by electronic speed control
- Maximum CNC travel positioning speed: 22 in/min
- Max clearance (table to spindle): 8.00" (203 mm)
- Travel axes x,y,z: 8.65" (220 mm), 5.00" (127 mm), 6.25" (159 mm)
- CNC Stepper motor holding torque: 136 oz-in

### **Reference Documentation**

Work in progress

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