

# University of Minnesota Nano Center

## Hard Bake Oven-Standard Operating Procedure

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**Badger Name:** n/a

**Model:** Lab-Line Duo-Vac

**Location:** Keller-Bay 2

**Revision:** 4

**Revisionist:** Laura Parmeter

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### 1. Scope

1.1. This document provides detailed instructions on how to properly operate the Hard Bake Oven.

### 2. Tool description

2.1. This is an exhausted oven with a monitored temperature setting of 120 °C. There is a center rack for placing substrate boats. The left dial, the **Control Thermostat** is set at 50 °C the right dial, the **Dial Safety** is set at 70 °C.



*Figure 1 The ovens in Keller Hall-Bay 2.*

### 3. Safety

3.1. Take caution when unloading your hot substrates when the bake time is complete.

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### 4. Restrictions

4.1. Wafers may have material on the surface that could outgas fumes such as photoresist.

This oven is **exhausted**.

4.2. Do not change the temperature of this oven; it is to remain at 120 °C.

### 5. Tools and Equipment

5.1. 120V electrical outlet.

5.2. Quartz boat (optional)

### 6. Procedure

#### 6.1. Setup

6.1.1. Place your substrate perpendicular in the quartz boats provided or place them on a handmade foil boat.

6.1.2. Users must supply their own method of timing the length of bake.

#### 6.2. Operating Instructions

6.2.1. Open the door and place substrates in the oven on the rack and close the door.

### 7. Problems/Troubleshooting

7.1. If the settings are not at the above set point, notify MNC staff.