

University of Minnesota Nano Center

Soft Bake Oven-Standard Operating Procedure

Badger Name: n/a

Model: Lab-Line Imperial III

Location: Keller-Bay 2

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1. Scope

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

2. Tool description

2.1. This is an exhausted oven with a monitored temperature setting between 85 °C – 105 °C. The **Temperature Set LED** is set at **95 °C**, the **Hi-Safety Thermostat dial** is set at **40 °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 between 85 °C – 105 °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.