

Use of the Wencesco hot plate

The hot place can be used for thermal annealing of substrates under inert atmosphere.

Note that the hot plate is capable of reaching temperatures high enough to cause a large increase in the temperature of the glovebox atmosphere. Use of the hot plate above 175 °C should be done with caution. If possible, high-temperature (>175 °C) annealing should be done either in the vacuum oven or at night when the glovebox is not in use. Special instructions for high-temperature annealing on the hot plate are below.

Instructions for annealing below 175 °C:

1. After starting your reservation in NUcore, you can turn on the temperature controller using the switch located on the hot plate controller.
2. If you wish to preheat the hot plate, set it to the desired temperature. There is an IR thermometer available to check the exact temperature of the plate.
3. Place your substrate on the hot plate using forceps.
4. When you are finished annealing, remove your substrates.
5. Shut the temperature controller off, and end your reservation in NUcore.

Instructions for annealing above 175 °C:

1. After starting your reservation in NUcore, you can turn on the temperature controller using the switch located on the hot plate controller.
2. If you wish to preheat the hot plate, set it to the desired temperature. There is an IR thermometer available to check the exact temperature of the plate.
3. While the hot plate is preheating, turn the circulation OFF using the controller.
4. Set the purge time for the length of time you will be using the hot plate, and turn the purge ON.
5. Place your substrate on the hot plate using forceps.
6. When you are finished annealing, remove your substrates.
7. Shut the temperature controller off.
8. Monitor the hot plate temperature using the IR thermometer. Once the temperature of the hot plate has dropped below 150 °C, you may turn the purge OFF and the circulation ON.
9. End your reservation in NUcore.