Yamoto DKN400 Convection Oven



Location: Microfluidics Lab

Description: Convection oven

Manufacturer: Yamoto

1/5/23 Haley

About

Mechanical convection ovens utilize a motorized fan to create a consistent distribution of flowing air that allows for quick and uniform heating.

Safety Concerns

- · High Voltage
- High Temperature
- No combustibles or hazardous materials
- Thermally insulating gloves must be worn when working with hot items. They can usually be found on the bench next to the ovens.
- No food may be placed in laboratory ovens.
- Never heat a sealed container.
- Do not operate the oven if it is damaged, or is not working properly. Please place a note on the oven to alert other users, and notify laboratory staff of the problem.
- Double containment is required for heating containers of liquid to prevent leaked material from contaminating the oven. This is especially true when heating PDMS molds.

Operating Procedures

- 1. Enter the set point temperature (see instructions for the different controllers below)
- 2. Place your items in the oven. Remember to place liquid materials on a baking sheet or other secondary container.
- 3. Set the countdown timer for the length of your run. If the timer reads zero time remaining another user who needs to use the oven may remove your items.
- 4. Remove your items from the oven and close the door.
- 5. The oven is left powered on.

Changing the oven set point

- 1. Press FIXED TEMP
- 2. Use the ↑↓ to adjust the temperature
- 3. Press the SET/ENT button

Setting the countdown timers

- 1. Press 1
- 2. Enter the run time (HMS buttons)
- 3. Press 1 to start the countdown
- 4. Press and hold 1 to reset

Detailed Specifications

- Temperature range: 5C-260CAmbient temperature: 23C
- Warming time: room temperature to 260C in approx. 60 minutes
- Cooling time: 260C to 50C in approx. 150 minutes
- Heater: 1.2kw SUS pipe heater
- Internal dimensions: 450mm x 400mm x 400mm
- Capacity: 2.5 cu. ft.
- 2 shelves

Reference Documentation

DKN400 Operation Manual

Laboratory Oven SOP

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