LIDT chamber bake out

- Start the vacuum log. Pump down the chamber a relatively stable pressure $(10^{-5} \text{ or } 10^{-6} \text{ torr})$
- Remove the anodized plate with optics for the laser layout to a clean environment
- Dismount the gas line from the chamber. Clean the area around the chamber from other parts that potentially can melt or burn



- Turn off the flow bench
- Apply hitter tapes around the chamber as uniform as possible. Three tapes can be managed by one controller. The contact area of the chamber's bottom and the table should be minimized by placing the chamber on some kind of legs. The hitter tapes should go around the bottom as well. Do not apply the hitter tapes to the door of the chamber.



- Place a thermocouple under each hitter tape. Make sure it has a good contact and fixed properly.
- Wrap the chamber with Al foil for insulation. Do not wrap the door of the chamber. Insulation tapes are not recommended to use in the clean room environment.



- Turn on the hit. Shortcut procedure about how to use the Omega controller see here <u>https://dcc.ligo.org/DocDB/0126/T1600205/001/Omega%20thermo%20controller%20manual%2</u> <u>Oshortcut.pdf</u> (Omega thermo controller manual shortcut.pdf)
- Recommended temperature to bake out LIDT chamber is about 115[°] C. Never go above 170[°] C!
- Now the pressure should start increasing. Continue baking out for at least 48 hours and at maximum of 7 days.
- During the bake out pressure should go back down slowly and go eve more down after it is cooled.
- Wipe down the cabinet inside and the chamber outside after it's cooled and the hitter tapes were removed.