



MAGIS Bakeout/Vacuum Tunnel Access Workshop July 12 Update

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MAGIS involvement - Bakeout planning – Vacuum consult – Installation consult

Bakeout Access Requirements at Installation

- Install (20 total) TC / Diagnostic boxes to the strongback frames located near each connection node, 2 boxes may be needed at the atom source locations.
- The TC / Diagnostic Box size specifications are 10" wide x 12" tall x 6" deep. The box weighs about 5 lbs (2.27 kilograms).
- The Box will be attached to either side of the strongback, not in front or back. Possibly below the connection node oven box (but not connected to it) which will provide some protection from water.
- Each box will require 16 Thermocouple wire plug connections, 12 BNC connectors, a 120V supply and one ethernet cable.
- Connect at least 150 heater element 120V power leads, if oven boxes are utilized at ALL connection nodes & bottom mirror section. (At least double the number, if oven boxes aren't used)
- Questions/comments?

Bakeout Access Requirements Prior/During/After Bake

- Tracing bake cables during pre-bake checkout.
- Connect ion pump heater 120V cables at the atom source connection nodes. Plus IP flange & exposed flange tubing heaters. (9 total connections)
- Install/remove the oven boxes, plus the insulation and heaters associated with them. (Boxes not designed yet)

Questions/comments?

Vacuum Access Requirements

- Connect vacuum flanges at all connection nodes.
- Connect atom sources to connection nodes.
- Ion pump HV connector & TSP sublimation cable to each IP.
- Gauge connectors at each connection node and two pumping stations.
- Opening manual right angle valves at both pumping stations.
- Plug in and turning on/off roughing pumps.
- Connecting turbo molecular pump power cables.

Questions/comments?