

# Mounting the Solvent Annealing Chamber

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You will need:

spacer plates J1, J3, J4

Cu water-cooled block

3 long M6 screws

4 short M6 screws

7 1"x1/4-20 screws

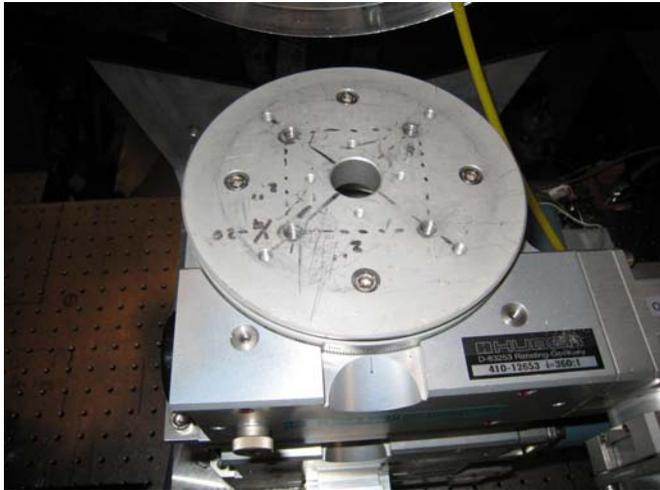
Solvent annealing chamber

cable for solvent annealing chamber

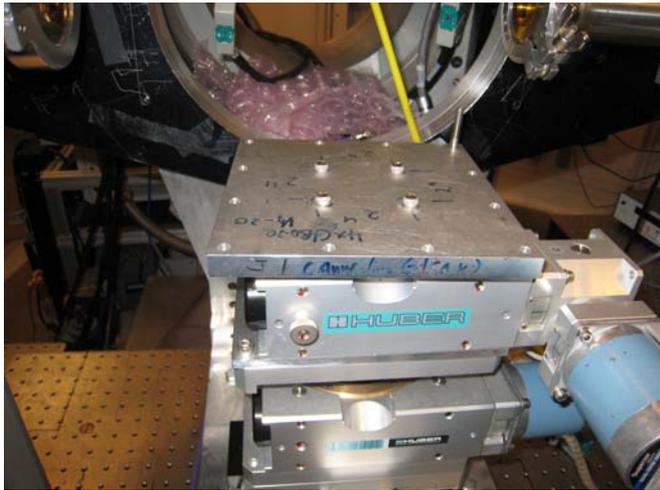
*optional:* auxiliary power supply for solvent stage

*optional:* second orange terminal block and banana plug

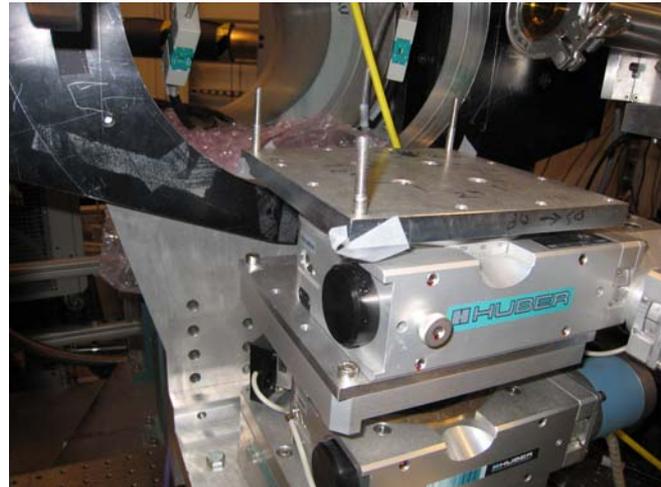


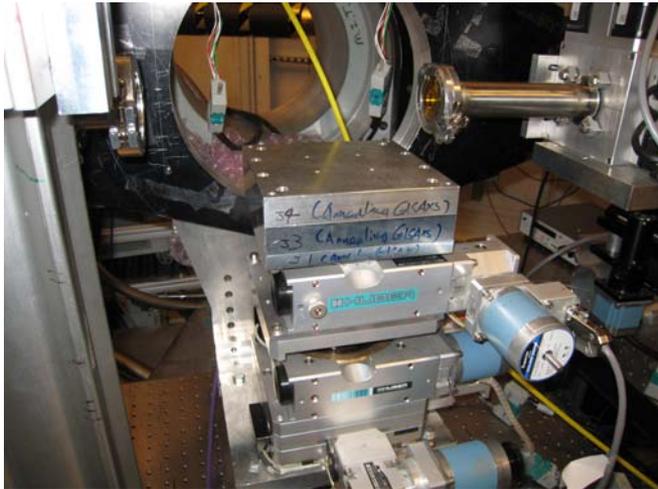


Start from bare phi circle on sample stage.



Mount J1 spacer plate using 4 ¼-20 screws, but first, put in M6 screws and secure with tape.





Stack J3 onto J1, then stack J4 on top of J3. J4 has threaded M6 holes for the long screws at the corners. Secure the screws.

The Cu block goes on top, secured with 3 ¼-20 screws.

Total height off the phi circle:

J3: 1"

J4: 1:

Cu block: 1"

J1: ½ "

sample chamber

(base to sample block): 1.15" (29 mm)

Total: 4.65 " or 118 mm

Then correct sample height at  
samz = 28 mm



Connect cable to sample chamber.

The cable is wired as follows:

pins 1,2 = brown, black (Peltier 1 under the sample stage)

pins 4,5 = yellow, black (Peltier 2 under solvent stage)

pins 6,7 = blue, black (temp sensor 1 for sample stage)

pins 8,9 = green, black (temp sensor 2 for solvent stage)

pins 3,10 = white, black (temp sensor 3 for bottom plate)

pins 11,12 = red, black (temp sensor 4 for cell frame)

The leads connect to the orange terminal block (tb) as follows:

tb 1,2: Peltier

tb 3,4: resistive heater

tb 6,7: temperature sensor A

tb 8,9: temperature sensor B

If independent control of Peltier 1 and 2 are required, connect 2<sup>nd</sup> orange terminal block (tb2) to additional power supply via banana plugs. Connect leads for Peltier 2 to tb2 3,4. The additional power supply is not computer interfaced.

This is the power supply for the Peltier under the sample stage. The green light indicates that the supply is under remote control. It comes on when you execute the “peltier\_enable” command in spec. The values are set with the 8idg:PS1 EPICS interface, or via standard spec macros (cool\_low, heat\_low, peltier\_reset, etc.)

