

Loading a POWGEN Mail-In Sample

1. Receive Cans-

There should be **n**- V cans, **n**- AL lids, **n+1**- gaskets, and a spreadsheet, where **n** is the number of cans requested.

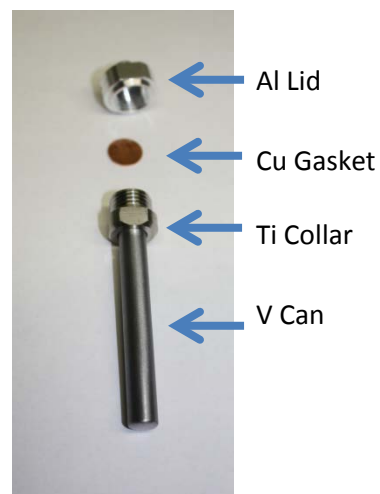
2. Log ID from can on spreadsheet (PACXX#####) under Can#.

XX denotes can size :

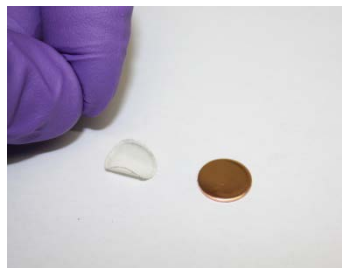
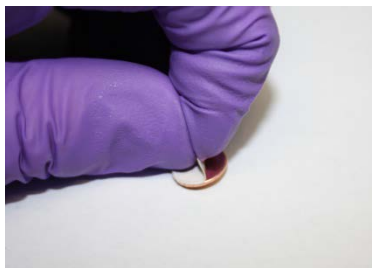
06- 6mm

08- 8mm

10- 10mm



3. If present, remove film from Cu gasket to expose the mirrored surface. This may not be necessary as some gaskets have no film and are polished on both sides.



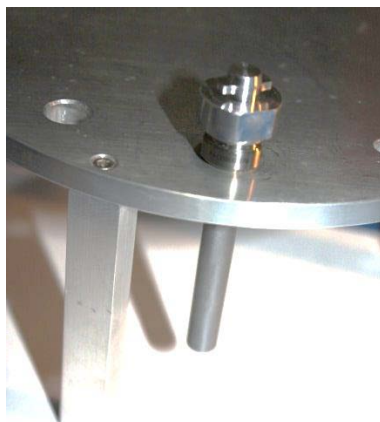
4. Clean the cans. Cans should be received empty and clean; however, we recommend cleaning cans.

- Clean cans with alcohol and cotton swabs or kimwipes.
- Use compressed air for drying to remove alcohol. Holding the can upside down works well.

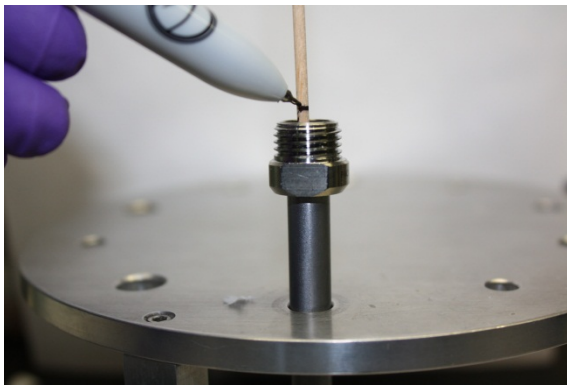


5. Weigh V can, Cu gasket and Al lid and log the weight on the spreadsheet under Empty Can Weight (g).

6. Support V can upright. Note: An upside down funnel often works well as a holder.



7. Fill can to desired height and weight. NOTE: Any sample filled above the titanium collar will not be in the beam.
8. Measure height of sample using an appropriate tool and log it on the spreadsheet under Sample Height (mm). NOTE: This is required for PDF.



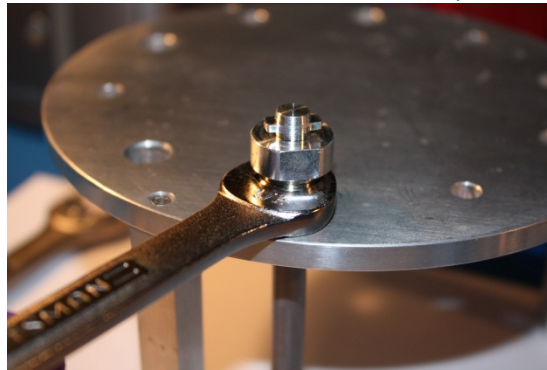
9. Place the Cu gasket on top of the can. MAKE SURE TO CAREFULLY CENTER THE GASKET. This is necessary for a proper seal to be made. A poorly-centered gasket can lead to leaks.
10. Thread lid with gasket onto the can and hand tighten.

11. Tighten the lid using wrenches.

- a. ONLY USE WRENCHES WITH FLATS. Using a wrench with teeth will damage the can and may compromise your experiment.



- b. Place a 1/2" wrench on the 2 flat sides of the collar on a sample can.

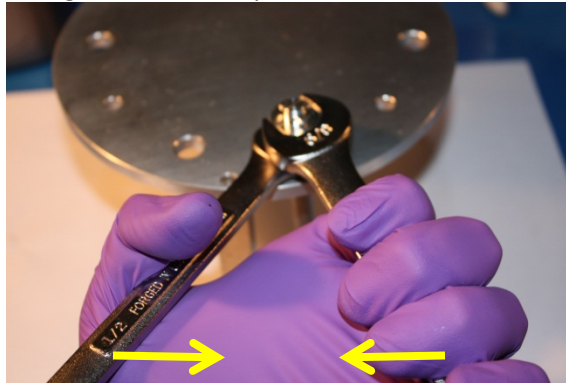


- c. Place a 5/8" wrench on the 2 flats on the Al lid.



- d. The wrenches should be held approximately 30-90 degrees apart so that the top wrench is to the right (CCW) of the bottom wrench.

- e. Squeeze the wrenches together so the top wrench moves clockwise until tight.



- f. Repeat as necessary.
12. Weigh the full can and log the weight on the spreadsheet under Full Can Weight (g).
13. Place sealed cans into an appropriately labeled bag. Include the sample composition and PI name.