

How To Use A Nitrogen Fill Station

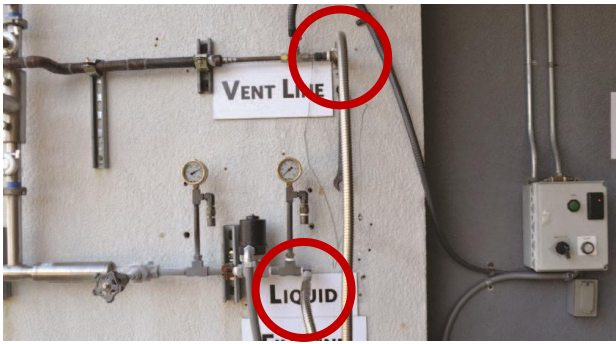


Note: To use a fill station, you need cryogenics safety training, card access and proper personal protective equipment (PPE), including gloves, long pants & sleeves, goggles and a face shield.

HOW TO FILL A LARGE DEWAR (SEE BELOW FOR HAND DEWAR INSTRUCTIONS)



1 Wearing proper PPE, make sure the pressure building valve is closed.



2 Identify the vent line and liquid (fill) line on the wall.



3 Securely attach vent line to vent port on dewar. Open the vent line valve and make sure pressure is below 20 psi.



4 Securely attach the liquid line to the liquid port on the dewar.



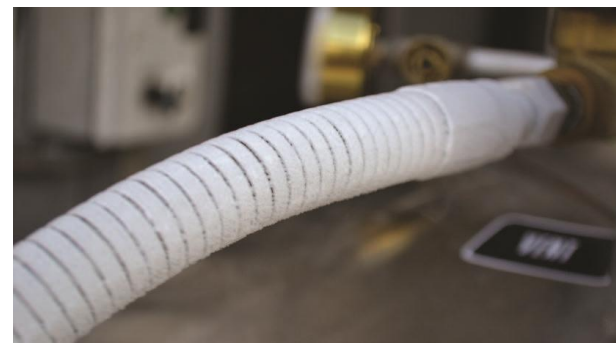
5 Tap your MagLab ID card on the card reader.



6 Turn switch to auto, then press the start button.



7 **slowly** open the liquid valve, maintaining pressure at about 20 psi — should take 3 to 4 minutes.



8 Both lines should ice up. It takes about 20 minutes to fill the dewar.

DON'T FORGET

The **wall pipe** can be used to hold the hose if an emergency should occur.

HOW TO DISCONNECT



1 Put on proper PPE to begin disconnecting lines.



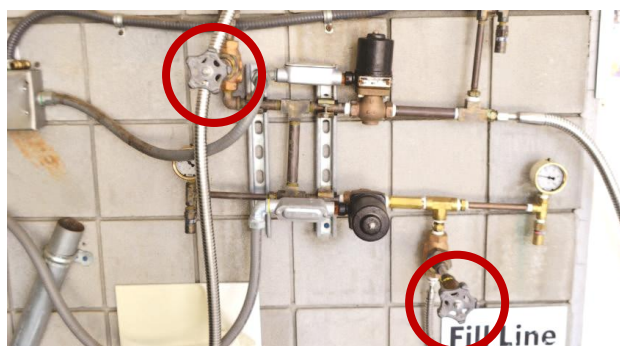
2 Close the liquid valve first, then close the vent valve.



3 Wait for connections to de-frost, then disconnect lines.

HOW TO FILL HAND DEWAR (SEE ABOVE FOR LARGE DEWAR INSTRUCTIONS)

Hand dewars should only be filled out of a large dewar or from the NMR fill station which has been equipped with a parallel system for filling hand dewars.



- 1 Wearing proper PPE, make sure the pressure building valve is **closed**.



- 2 Identify the liquid (fill) line on the wall.



- 3 Uncap hand dewar. Carefully insert the liquid line to the hand dewar.



- 4 Tap your MagLab ID card on the card reader.



- 5 Locate lower controller labeled *portable hand dewar*. Then press the start button.



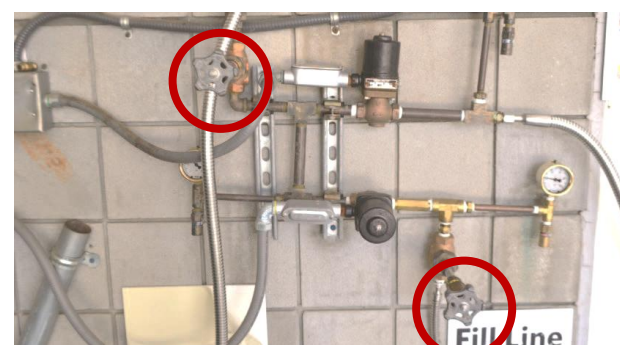
- 6 **Open** both valves.



- 4 Hold the fill line and safely fill the dewar.



- 5 Once filled, press stop button on the portable hand dewar controller.



- 6 Loosely cap hand dewar and **close** valves.