

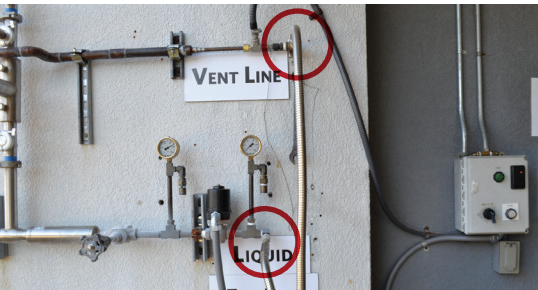
# How To Use A Nitrogen Fill Station

**⚠️ 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.



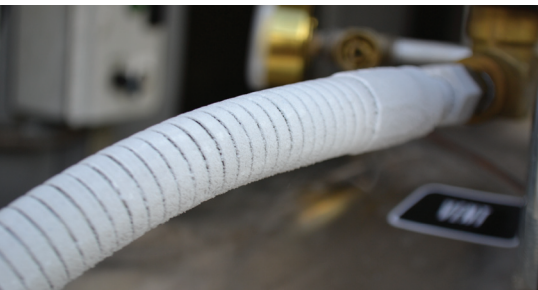
**5** Tap your MagLab ID card on the card reader.



**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.



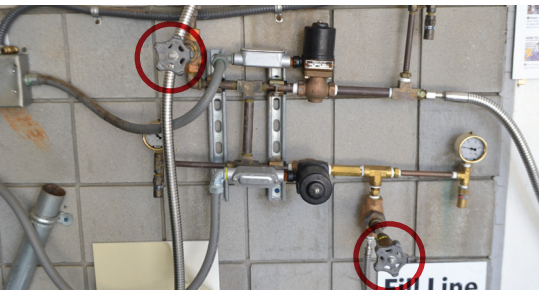
**2** Close the liquid valve first, then close the vent valve.



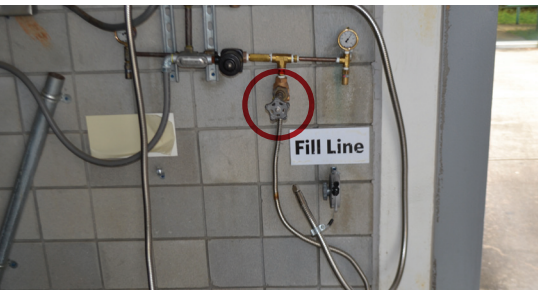
**3** Wait for connections to defrost, then disconnect lines.

## HOW TO FILL A 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.



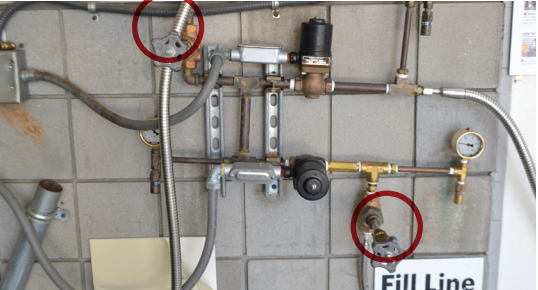
**6** **Open** both valves.



**7** Hold the fill line and safely fill the dewar.



**8** Once filled, press stop button on the portable hand dewar controller.



**9** Loosely cap hand dewar and **close** valves.