

Instructions for Filling Liquid Nitrogen Tanks

1. Inspect LS-160 (DEWAR) tank. Make sure tank is empty, free of defects, has adequate plugs, and pressure gauge reads zero.
2. Put on face mask and loose-fitting welding gloves.
3. Connect hose marked "liquid" to valve on tank marked "liquid" and hose marked "vent" to valve on tank marked "vent". Connections must be snug.
4. Open liquid and vent valves on tank.
5. Open black handled valve on main feed line.
6. Turn on main switch on control panel. The green light should go on.
7. Press left or right start button for tank in use. High pressure in main feed line may cause safety valve on tank to allow some gaseous nitrogen to escape into filling room. Oxygen alarm will sound when oxygen concentration in ambient air falls below 19.5%. Vent solenoid valve will shut system down automatically when liquid nitrogen passes through valve.
8. Tank is full when vent solenoid valve shuts system down.
9. Close liquid and vent valves on tank, and black handled valve on main feed line.
10. Wait a few minutes. Open vent coupling on tank slowly to release pressure. Carefully avoid splashing of residual liquid nitrogen in vent hose.
11. Open liquid supply coupling slowly by wiggling the coupling connection. Avoid splashing of residual nitrogen. Make sure that there is no residual liquid nitrogen in feed line by allowing line to drain on floor.
12. Hang liquid and vent lines in appropriate positions.
13. Remove tank with a 4-wheel tank carrier. Do not roll filled tank because it is very heavy and nitrogen escaping from the safety valve may cause injury to tank and handler.