

In This Issue

August 2015

[Product Information](#)  
[Helpful Hints / FAQs](#)  
[Accessories](#)

## MVE Chart Tech Tips

### PRODUCT INFORMATION

#### Chart MVE Doble Series Aluminum Tanks Featuring Advanced QWick Charge Technology

The MVE Doble Series aluminum tanks are units designed for both vapor shipment and liquid storage. The Doble QWick Series utilizes an absorbent wicking material that charges with liquid nitrogen in fewer than two hours, providing the capacity for same-day vapor shipping. A unique absorbent layer in the base of the storage tanks of both series enables them to be charged with nitrogen and employed as dry shippers with hold times of up to 30 days. Once at the final destination, the tanks can be filled with liquid and used for long term storage, therefore avoiding the need for return shipments.



#### Features Include:

- \* Liquid and vapor storage options
- \* Low liquid nitrogen consumption
- \* Convenient lightweight package
- \* **CHARGES IN LESS THAN TWO HOURS**

The MVE Doble Series is available in various sizes:

<u>Model</u>	<u>Canisters</u>	<u>Liquid Capacity (L)</u>	<u>Vapor Capacity (L)</u>	<u>Liquid/Vapor*</u>
Doble 11	6	10	3.1	37 days liquid 17 days vapor
Doble 20	6	18.5	2.8	116 days liquid 21 days vapor
Doble 28	6	28	8.4	50 days liquid 24 days vapor
Doble 34	6	32	6.7	100 days liquid 20 days vapor
Doble 47	6	46	8.4	74 days liquid 21 days vapor
Doble 47-10	10	46	9.6	72 days liquid 21 days vapor

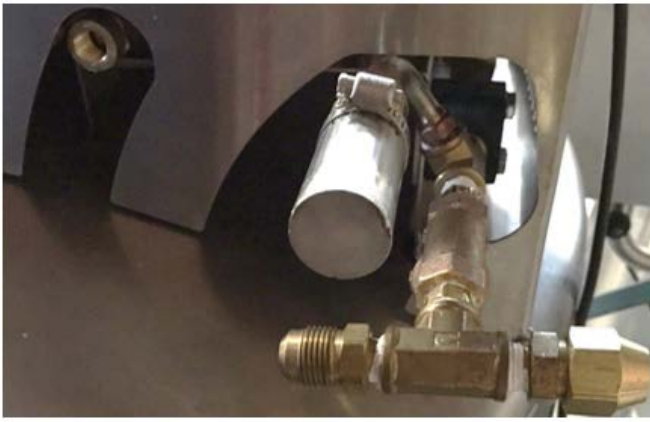
\* Estimated Hold Times

## HELPFUL HINTS / FAQ's

As a Chart Continuous Improvement Process production will remove the mufflers from HEco freezers before they are shipped; the muffler will be placed in the accessories bag that will be located inside the freezers.



HEco Freezer Accessories Bag



HECO Freezer without Muffler installed



HECO Freezer with Muffler Installed

**Q:** What is the recommended procedure to perform a plumbing leak check?

**A:** Leaky plumbing connections can create a host of problems including but not limited to:

- Slow fill times
- Nuisance Alarms
- High LN2 Consumption
- Inaccurate level readings
- Inaccurate liquid usage readings

Leaky plumbing connections are especially common on liquid cylinder supply systems, since the fittings are regularly loosened and tightened during liquid cylinder swap out.

1. With the supply system at operating pressure, thoroughly spray all transfer hose connections and freezer plumbing connections with leak detect solution
2. Allow leak detect solution to penetrate fittings for at least 30 seconds
3. Large leaks will be immediately apparent with large bubble formations
4. Small leaks will take longer to detect, with small bubble formation in the appearance of "foam"
5. Most leaks can be repaired by tightening the suspect fitting with a crescent or appropriate sized wrench.
6. If tightening the fitting does not fix the leak, check the fitting for cracks and or galling. If the fitting is damaged, replace.
7. Recheck any replaced fittings for leaks.

## ACCESSORIES

### LN2Transfer Hoses ½" ODT

Chart sells transfer hoses available in 4' and 6' lengths. Chart also sells a brass union fitting (P/N 1110862) which can join two transfer hoses.



Part Number	Description
9713159	4' (1.2 m) transfer hose
9713109	6' (1.8 m) transfer hose

### Low Level Alarm for Aluminum Dewars

Chart sells a low level alarm for our Aluminum dewars that is designed to alert when the level in the dewar is getting low. The Low Level Alarms include a probe that is inserted through the neck and placed at a user designed level. When the level of the LN2 goes below the probe, the alarm will sound. Chart sells two variations of these alarms. The Bat 1B alarm uses a 9V battery for power. The Therm-O-Lert uses a 110V or 230V AC supply as well as an internal, rechargeable battery.



Low Level Alarm: PN 11905817 (BAT1-B)



Therm-O-Lert Battery LN2 Level Alarm (230 V): PN 10769489  
Therm-O-Lert Battery LN2 Level Alarm (110V): PN 9710879