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## MVE Chart Tech Tips

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### PRODUCT INFORMATION

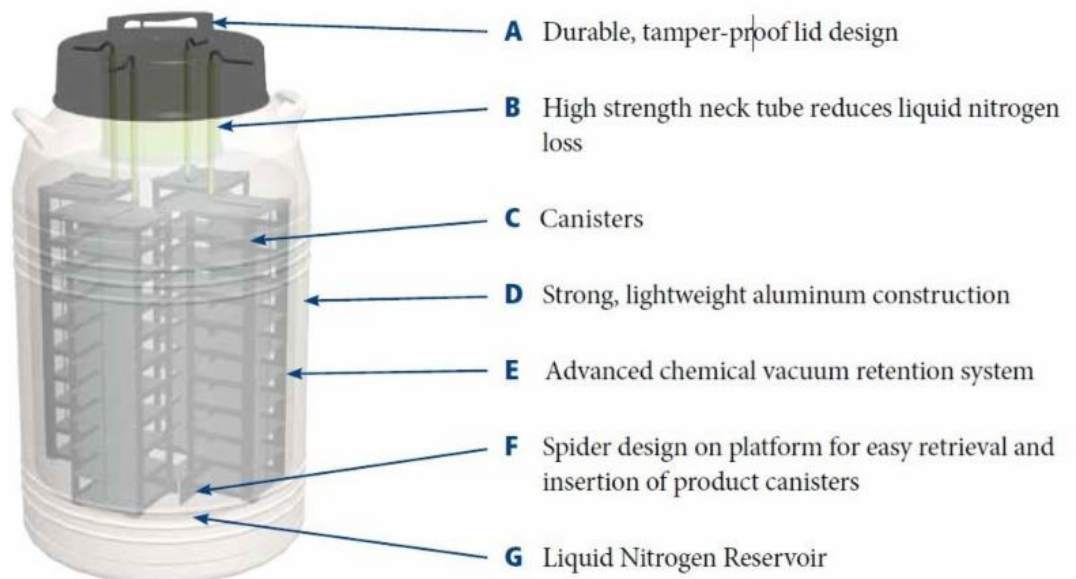
#### MVE CryoSystem Series

The MVE CryoSystem Series combines the benefits of low nitrogen consumption with mid-range vial capacity to meet the diverse needs of today's professionals worldwide. The lightweight and low-space demands of these containers make them the most economical units in their class.

#### Features Include:

- \* Designed for large capacity storage
- \* Low liquid nitrogen consumption
- \* Convenient lightweight package





	CryoSystem 750	CryoSystem 2000	CryoSystem 4000	CryoSystem 6000
<b>Maximum Storage Capacity</b>				
Number of Canisters	6	4	4	6
Number of 1.2 & 2.0 ml vials 100/box	-	2,000	4,000	6,000
Number of 1.2 & 2.0 ml vials 25/box	750	-	-	-
Boxes per Rack	5	5	10	10
<b>Performance</b>				
LN2 Capacity L	47.4	61.0	121.0	175.0
Static Evaporation Rate* L/day	0.39	0.85	0.99	0.99
Working Volume L	47	51	111	165
Normal Working Duration**, Full Days	76	38	70	104
<b>Unit Dimensions</b>				
Neck Opening in. (mm)	5.0 (127)	8.5 (216)	8.5 (216)	8.5 (216)
Overall Height in. (mm)	26.50 (673)	27.25 (692)	38.00 (965)	37.75 (959)
Outer Diameter in. (mm)	20 (508)	22 (559)	22 (559)	26 (665)
Weight Empty lb. (kg)	42 (19.0)	58 (26.3)	81 (36.7)	103 (46.7)
Weight Full lb. (kg)	126 (57)	182 (82.5)	300 (136)	425 (193)

Note: Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

Note: Normal Working Duration is an arbitrary reference, to estimate container performance under normal operating conditions. Actual working time may vary due to current atmospheric conditions, container history, manufacturing tolerances and any individual patterns of use.

## HELPFUL HINTS / FAQ's

**Q:** What basic troubleshooting steps can one take to determine why a freezer is overfilling?

**A:** Reference the TEC 3000 Technical Freezer Manual Troubleshooting Steps on page 128.

1. Verify LN2 source pressure is 22-35psi (1.5 to 3.4 bar)
2. Verify freezer lid is not sealing against freezer neck
3. Verify the resistance of the fill solenoid 50 to 70 ohms (single) dual 25 to 35ohms (parallel); replace if necessary; reference page 121 of the TEC 3000 Technical Freezer Manual

4. Verify the freezer level sensing line is not blocked; reference page 126 of the TEC 3000 Technical Freezer Manual

**Q:** If it is suspected that one of the electrical components is not operating properly, what are the resistance values to check during an evaluation?

**A:** Below is a list of specifications for select items normal resistance values

1. Fill Valves (Dual 24 VDC): 30-35 ohms
2. Fill Valve (Singular 24 VDC): 60-70 ohms
3. Bypass Valve: 60-70 ohms
4. Bypass Sensor:
  - a) Room Temp: 1,000-1,100 ohms
  - b) Cryogenic Temp: 200-300 ohms
5. Humphrey 3 way: 140-145 ohms
6. Temperature Probes
  - a) Room Temp: 1,000-1,100 ohms
  - b) Cryogenic Temp: 200-300 ohms

## ACCESSORIES

### SUC Canister Racks

If storing SUC canisters (PN 9710491) in freezers, Chart offers two racking options to conserve space. These racks work as a two-stage shelf, which allows two layers of racks to be stored in the freezer. One of the available racks holds two SUC canisters, PN 11392644, storing one over the other. The second, PN 11395896, holds eight of the canisters, storing four on each shelf.

Part Number	Number of SUC Canisters (PN 9710491)
11392644	Holds two SUC Canisters
11395896	Holds eight SUC Canisters



PN 11395896



PN 11392644

## MVE Freezer Series Optional Vapor Platforms

Chart offers optional vapor platforms for the MVE Series. When ordering, please keep in mind that vapor platforms occupy approximately 4 to 5 inches of the freezer's usable space, that will affect the necessary rack size.

Freezer	Vapor Platform Part Number
MVE 205	10544837
MVE 510	10544853
MVE 616 and MVE 616 Cabinet Series	11509726
MVE 808	10544861
MVE 1318	10544896
MVE 1426 and MVE 1426 Cabinet Series	10544888
MVE 1839	10544909

## Upcoming Events

### Trade Shows

We will be present at the following trade shows and would love to see you at our booth!

#### World Dairy Expo

September 29 - October 3

Madison, WI

Booth # 226-227

#### ESBB

September 30 - October 2

London, England

#### ASRM

October 17-21

Baltimore, MD  
Booth # 101

**AABB**  
October 24-27  
Anaheim, CA  
Booth # 1274

**Medica**  
November 18-21  
Dusseldorf, Germany

**World Stem Cell Summit**  
December 10-12  
Atlanta, GA

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