

# MVE's HE ADVANTAGE



- **Only freezer on the market** specifically designed for vapor storage.
- Unequaled quality of vacuum with industry leading **5 year warranty**.
- **Efficient thermal design ensures 95% of system surface area enclosed by vacuum** - compare to typical 60% in standard freezers.
- **Lowest under lid temperature in the industry** with minus 150°C guaranteed. This ensures an increased safety margin below the Glass Transition Temperature and better long term sample viability.
- **Lowest liquid usage** - typically 40% below equivalent standard tanks of similar capacity. Note that NER's for competitive tanks are calculated before the addition of the vapor sleeve, which will increase consumption of LN<sub>2</sub> by 50% or more.
- **No artificial aids required to lower and maintain temperature** as with competitive tanks. HE gives lowest running cost/sample.
- Liquid reservoir below sample platform will **maintain temperature for more than 14 days** typically.
- **Validated to maintain temperature of samples for at least one hour with the lid removed.**
- **Compact design** means highest number of vials stored per square foot of laboratory space.
- **Differential pressure level measurement** - seamless measurement is important in vapor systems as the LN<sub>2</sub> level is a small range - typically 4 to 8 inches only.
- **Temperature measurement by RTD, the most accurate system available.** 2 point calibration ensures compliance with GLP and GMP.

# Specifications



<b>Unit Dimensions</b>	<b>MVE 810HE</b>	<b>MVE 1520HE</b>	<b>MVE 1830HE</b>
Liquid Nitrogen Capacity (Liters)	290	620	1612
Liquid Nitrogen Capacity Under Platform (Liters)	47	100	260
Neck Opening (Inches)	12.13	17.5	25
Useable Internal Height (Inches)	26.75	28.6	28.6
Inner Diameter (Inches)	28.5	38.5	56.3
Overall Height (Inches)	53.9	53.9	58.4
Outer Diameter (Inches)	31	42	60
Weight Empty (Lbs.)	425	620	1220

## **Unit Capacities - Vials**

### **1.2 and 2ml Vials (Internally Threaded)**

Number of Racks (100 cell boxes)	12	24	54
Number of Racks (25 cell boxes)	4	16	30
Number of Stages per Rack	12	13	13
<i>Total Vial Capacity</i>	<i>15,600</i>	<i>36,400</i>	<i>79,950</i>

### **5ml Vials (Internally Threaded)**

Number of Racks (100 cell boxes)	12	24	54
Number of Racks (25 cell boxes)	4	16	30
Number of Stages per Rack	7	8	8
<i>Total Vial Capacity</i>	<i>9,100</i>	<i>22,400</i>	<i>49,200</i>

## **Unit Capacities - MVE 810HE - Blood Bags**

	<b>Frame Ht"</b>	<b>Bags/Frame</b>	<b>No. Frames</b>	<b>Total Bags</b>
4R9951	25.5	6	104	624
4R9953	26	4	88	352
4R9955	26	4	68	272
DF200	26	4	52	208
DF700	N/A	N/A	N/A	N/A
C7005	23.5	3	68	204
C7400	28.5	3	68	204

## **Unit Capacities - MVE1520HE - Blood Bags**

4R9951	25.5	6	192	1,152
4R9953	26	4	176	704
4R9955	26	4	140	560
DF200	26	4	108	432
DF700	26	4	56	224
C7005	23.5	3	144	432
C7400	28.5	3	144	432

## **Unit Capacities - MVE1830HE - Blood Bags**

4R9951	25.5	6	456	2,736
4R9953	26	4	390	1,560
4R9955	26	4	276	1,104
DF200	26	4	210	840
DF700	26	4	126	504
C7005	23.5	3	276	828
C7400	23.5	3	276	828