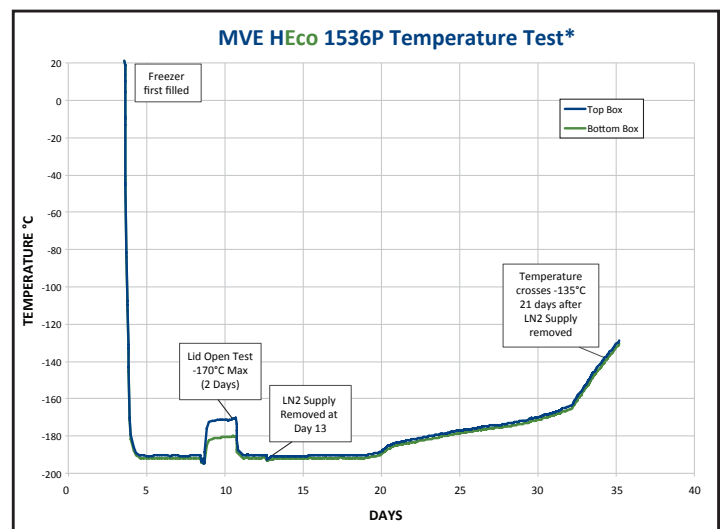
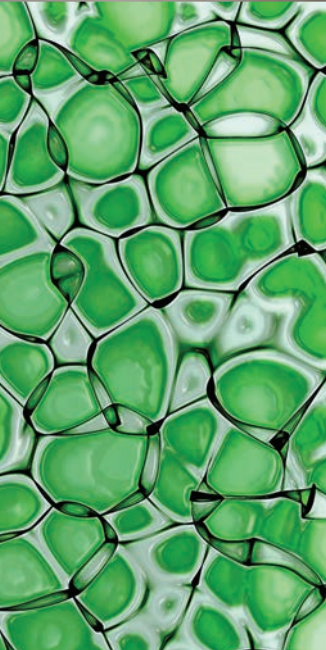


## MVE HEco 1500 Series Freezers

The new MVE HEco 1500 Series freezers provide a 20% reduction in LN2 usage, making them the most efficient vapor freezers available. These next generation high efficiency freezers incorporate new hinged work surfaces that fully enclose all electronics and plumbing to enhance overall safety and usability. The technical and visual improvements combine to create a more aesthetically pleasing freezer that offers greater functionality. As with all of MVE's cryogenic freezers, the MVE HEco 1500 Series freezers provide maximum storage density as well as the longest hold time and highest sample security in the industry.

### Features include:

- 20% reduction in LN2 usage
- Fully enclosed wiring and plumbing
- Vacuum jacketed transfer hose
- Dry sample storage
- -190°C top box temperature
- Lowest liftover height
- Two tier folding step
- Optional battery backup



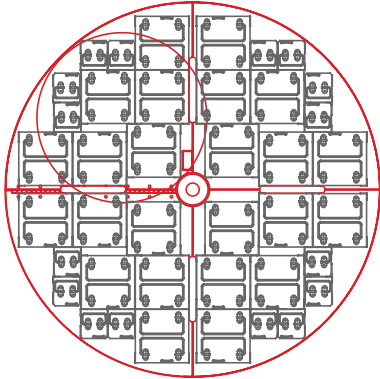
Temperature Test Graph

\* Temperature test indicates typical performance of HEco Series freezer with full inventory system and factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.

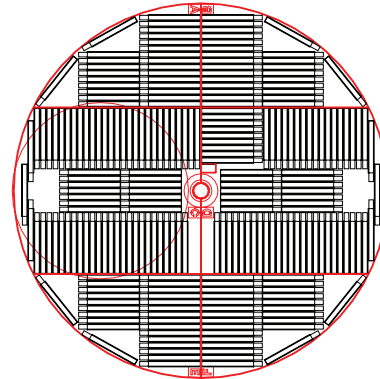
Visit [www.chartbiomed.com](http://www.chartbiomed.com) for more information.

## Rack Layouts

Square Rack Layout (P)



4R9951 Layout (R)



	MVE HEco 1536P-190	MVE HEco 1539P-190	MVE HEco 1542R-190						
<b>Maximum Storage Capacity</b>									
1.2 & 2 ml Vials (Internally Threaded)	36,400	39,200	42,000						
Number of Racks <i>100 cell boxes</i>	24	24	26						
Number of Racks <i>25 cell boxes</i>	16	16	16						
Number of Stages per Rack	13	14	14						
<b>Performance</b>									
LN2 Capacity <i>L</i>	730	797	797						
LN2 Capacity Under Tray <i>L</i>	115	133	133						
Static Hold Time—Vapor <i>days</i>	21	20	20						
Static Hold Time—Liquid Full <i>days</i>	112	118	118						
<b>Unit Dimensions</b>									
Neck Opening <i>in. (mm)</i>	17.4 (442)	17.5 (445)	17.5 (445)						
Usable Internal Height <i>in. (mm)</i>	28.8 (732)	30.8 (782)	30.8 (782)						
Inner Diameter <i>in. (mm)</i>	38.5 (978)	38.5 (978)	38.5 (978)						
Overall Height <i>in. (mm)</i>	54.7 (1389)	63.3 (1607)	63.3 (1607)						
Liftover Height <i>in. (mm)</i>	37.3 (947)	39.2 (995)	39.2 (995)						
Door Width Requirement** <i>in. (mm)</i>	42.0 (1067)	42.0 (1067)	42.0 (1067)						
Weight Empty <i>lb. (kg)</i>	700 (318)	720 (327)	720 (327)						
Weight Liquid Full* <i>lb. (kg)</i>	2000 (907)	2140 (971)	2140 (971)						
<b>Blood Bag Capacities</b>									
	Total Bags	Bags/Frame	No. Frames	Total Bags	Bags/Frame	No. Frames	Total Bags	Bags/Frame	No. Frames
791 OS/U (25 ml)	2,905	7	415	3,320	8	415	3,184	8	398
4R9951 (50 ml)	1,488	6	248	1,736	7	248	1,687	7	241
4R9953 (250 ml)	812	4	203	812	4	203	768	4	192
4R9955 (500 ml)	608	4	152	608	4	152	576	4	144
DF200 (200 ml)	496	4	124	496	4	124	488	4	122
DF700 (700 ml)	256	4	64	256	4	64	264	4	66

**TWO Year Standard Warranty • FIVE Year Vacuum Warranty**

Conforms to MDD 93/42/EEC, the Medical Device Directive for the EU. Freezer systems UL/C-UL Listed.

\* Without inventory

\*\*Minimum width required for vessel to pass through opening. Footprint may vary. Contact Tech Service for detailed drawings.