





# **MVE HEco<sup>™</sup> 1500 Series Freezers**

The 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 a 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 are available in three unique sizes and provide maximum storage density as well as the longest hold time and highest sample security in the industry.

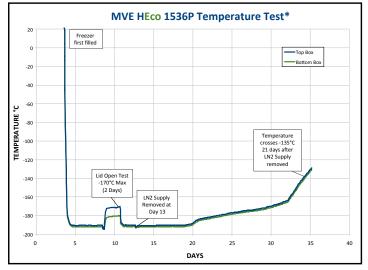
Available now for ease of ordering, HEco Series with Battery Backup has one part number.

### 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—ask about one part number to order HEco with battery backup installed!



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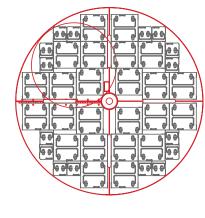
#### **Temperature Test Graph**

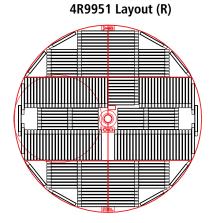
\* Temperature test indicates typical performance of HEco Series freezer with full inventory system and factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.

#### Visit www.chartbiomed.com for more information.

## **Rack Layouts**

#### Square Rack Layout (P)





	MVE HEco 1536P-190			MVE HEco 1539P-190			MVE HEco 1542R-190		
Maximum Storage Capacity									
1.2 & 2 ml Vials (Internally Threaded)	36,400			39,200			42,000		
Quantity of Large Racks 100 cell boxes	24			24			26		
Quantity of Mini Racks 25 cell boxes	16			16			16		
Number of Shelves per Rack	13			14			14		
Performance									
LN2 Capacity w/o Inventory L est.	730			768			768		
LN2 Capacity at Vapor Platform L est.	115			115			115		
Static Hold Time—Vapor days	20			20			20		
Static Hold Time—Liquid Full days est.	112			118			118		
Unit Dimensions									
Neck Opening in. (mm)	17.4 (442)			17.4 (442)			17.4 (442)		
Usable Internal Height in. (mm)	28.8 (732)			30.2 (767)			30.8 (782)		
Inner Diameter in. (mm)	38.5 (978)			38.5 (978)			38.5 (978)		
Overall Height in. (mm)	54.7 (1389)			56.8 (1442)			56.8 (1442)		
Liftover Height in. (mm)	37.3 (947)			39.4 (999)			39.4 (999)		
Door Width Requirement** in. (mm)	42.0 (1067)			42.0 (1067)			42.0 (1067)		
Door Width Requirement, with handles** in. (mm)	43.3 (1099)			43.3 (1099)			43.3 (1099)		
Weight Empty* lb. (kg)	700 (318)			700 (318)			700 (318)		
Weight Liquid Full* lb. (kg) est.	2000 (907)			2100 (953)			2100 (953)		
Blood Bag Capacities	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames
791 OS/U Medsep (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
<b>4R9953</b> (250 ml)	812	4	203	812	4	203	768	4	192
<b>4R9955</b> (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 Parts 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.

† Between usable height and clearance. Please refer to specifications.