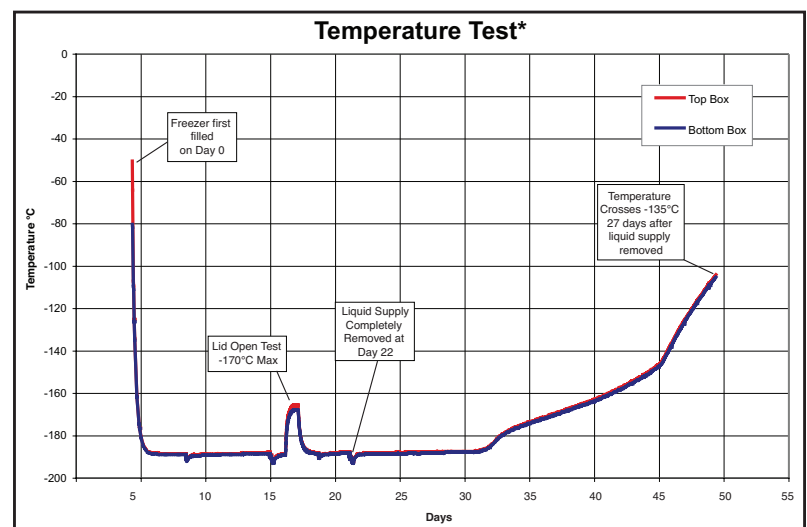


MVE HEco 1800 Series Freezers

The new MVE HEco 1800 Series freezers provide a reduction in LN2 usage, making them the most efficient vapor freezers available. When an LN2 fill is initiated, the redesigned plumbing system optimizes the LN2 flow and reduces transfer loss, increasing efficiency and LN2 cost savings. The 1800 series provides option for greater storage in one freezer. 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 provide an aesthetically more pleasing freezer while offering greater functionality. As with all of MVE's cryogenic freezers, the MVE HEco 1800 Series freezers provide maximum storage density as well as the longest hold time and highest sample security in the industry.

Features include:

- LN2 usage reduction
- 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



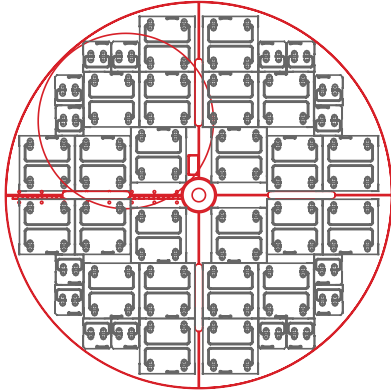
Temperature Test Graph

* 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.

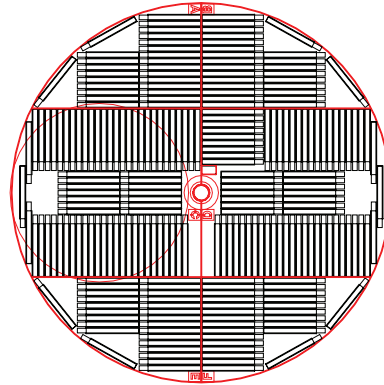
Visit www.chartbiomed.com for more information.

Rack Layouts

Square Rack Layout (P)



4R9951 Layout (R)



	MVE HEco								
	1879P-190	1892P-190	1894R-190						
Maximum Storage Capacity									
1.2 & 2 ml Vials (Internally Threaded)	79,950	92,250	94,500						
Number of Racks <i>100 cell boxes</i>	54	54	60						
Number of Racks <i>25 cell boxes</i>	30	30	12						
Number of Stages per Rack	13	15	15						
Performance									
LN2 Capacity <i>L</i>	1745	1770	1770						
LN2 Capacity Under Tray <i>L</i>	318	295	295						
Static Hold Time—Vapor <i>days</i>	35	30	30						
Static Hold Time—Liquid Full <i>days</i>	174	177	177						
Unit Dimensions									
Neck Opening <i>in. (mm)</i>	24.7 (627)	24.7 (627)	24.7 (627)						
Usable Internal Height <i>in. (mm)</i>	29.5 (749)	34.5 (876)	34.2 (868)						
Inner Diameter <i>in. (mm)</i>	56.0 (1422)	56.0 (1422)	54.7 (1389)						
Overall Height <i>in. (mm)</i>	63.7 (1618)	68.6 (1742)	68.6 (1742)						
Liftover Height <i>in. (mm)</i>	38.8 (985)	44.0 (1118)	44.0 (1118)						
Door Width Requirement** <i>in. (mm)</i>	60.0 (1524)	60.0 (1524)	60.0 (1524)						
Weight Empty <i>lb. (kg)</i>	1712 (781)	1721 (781)	1721 (781)						
Weight Liquid Full* <i>lb. (kg)</i>	4830 (2191)	4875 (2211)	4875 (2211)						
Blood Bag Capacities									
	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames
791 OS/U (25 ml)	5,866	7	838	6,704	8	838	6,432	8	804
4R9951 (50 ml)	2,952	6	492	3,936	8	492	3,920	8	490
4R9953 (250 ml)	1,584	4	396	1,980	5	396	2,010	5	402
4R9955 (500 ml)	1,104	4	276	1,380	5	276	1,550	5	310
DF200 (200 ml)	960	4	240	1,200	5	240	1,230	5	246
DF700 (700 ml)	504	4	126	630	5	126	680	5	136

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.