







The MVE HEco Series is the next generation High Efficiency freezer from Chart BioMedical. With their unique shroud design, streamlined LN2 plumbing, and vacuum jacketed transfer hose, the MVE HEco 800 Series freezers provide a reduction in LN2 usage, making them the most efficient vapor freezers available. These next generation high efficiency freezers incorporate 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 800 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:

- LN2 usage reduction
- Fully enclosed wiring and plumbing
- Vacuum jacketed transfer hose
- Dry sample storage
- -190°C top box temperature
- Lowest liftover height
- Single step standard
- Optional double-tier step
- Optional battery backup—ask about one part number to order HEco with battery backup installed!

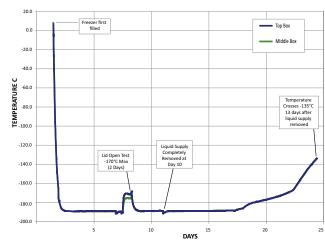




- Standard One-Tier Step
- Optional Two-Tier Steps



MVE HEco 800 Temperature Test*



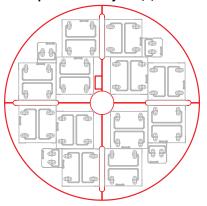
Temperature Test Graph

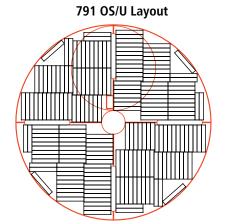
* Temperature test indicates typical performance of HEco Series freezer with full inventory system and factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.



Rack Layouts

Square Rack Layout (P)





	MVE HEco 815P-190			MVE HEco 818P-190			MVE HEco 819P-190		
Maximum Storage Capacity									
1.2 & 2 ml Vials (Internally Threaded)	15,600			18,200			19,500		
Quantity of Large Racks 100 cell boxes	12			12			12		
Quantity of Mini Racks 25 cell boxes	4			4			4		
Number of Shelves per Rack	12			14			15		
Performance									
LN2 Capacity w/o Inventory L est.	370			420			463		
LN2 Capacity at Vapor Platform L est.	52			55			55		
Static Hold Time—Vapor days	10			11			11		
Static Hold Time—Liquid Full days est.	74			84			92		
Unit Dimensions									
Neck Opening in. (mm)	12.5 (317)			12.5 (317)			12.5 (317)		
Usable Internal Height in. (mm)	26.5 (673)			30.7 (781)			34.5 (877)		
Inner Diameter in. (mm)	28.8 (731)			28.8 (731)			28.8 (731)		
Overall Height in. (mm)	49.5 (1257)			53.9 (1370)			57.70 (1465)		
Liftover Height in. (mm)	40 (1016)			43.8 (1115)			47.63 (1209)		
Door Width Requirement** in. (mm)	32.0 (813)			32.0 (813)			32.0 (813)		
Door Width Requirement, with handles** in. (mm)	33.2 (843)			33.2 (843)			33.2 (843)		
Weight Empty* lb. (kg)	475 (215)			495 (225)			515 (234)		
Weight Liquid Full* lb. (kg) est.	1134 (514)			1168 (530)			1340 (608)		
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)	1,224	6	204	1428	7	204	1,836	9	204
4R9951 (50 ml)	768	6	128	896	7	128	1024	8	128
4R9953 (250 ml)	416	4	104	416	4	104	520	5	104
4R9955 (500 ml)	304	4	76	304	4	76	380	5	76
DF200 (200 ml)	236	4	59	236	4	59	295	5	59
DF700 (700 ml)	132	3	44	176	4	44	220	5	44

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.