







MVE HEco™ 1800 Series Freezers

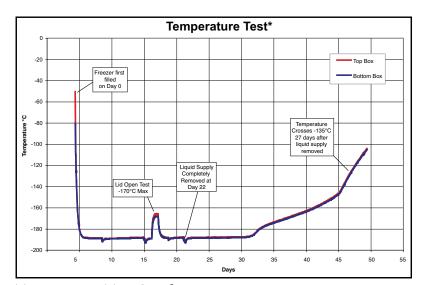
The MVE HEco 1800 Series freezers provide a reduction in LN2 usage, making them the most efficient vapor freezers available. When an LN2 fill is initiated, the redesigned plumbing system optimizes the LN2 flow and reduces transfer loss, increasing efficiency and LN2 cost savings. The 1800 series provides option for greater storage in one freezer. These next generation high efficiency freezers incorporate a 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.

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
- Two tier folding step
- Optional battery backup—ask about one part number to order HEco with battery backup installed!



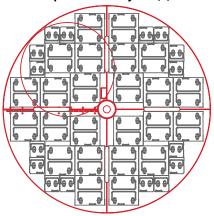


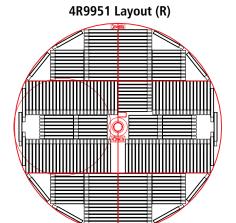
Temperature Test Graph

^{*} 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 HEC | MVE HEco 1879P-190 | | | MVE HEco 1892P-190 | | | MVE HEco 1894R-190 | | |
|--|-------------|--------------------|---------------|-------------|--------------------|---------------|-------------|--------------------|------------|--|
| Maximum Storage Capacity | | | | | | | | | | |
| 1.2 & 2 ml Vials (Internally Threaded) | 79,950 | | | 92,250 | | | 94,500 | | | |
| Quantity of Large Racks 100 cell boxes | 54 | | | 54 | | | 60 | | | |
| Quantity of Mini Racks 25 cell boxes | 30 | | | 30 | | | 12 | | | |
| Number of Shelves per Rack | 13 | | | 15 | | | 15 | | | |
| Performance | | | | | | | | | | |
| LN2 Capacity w/o Inventory L est. | 1745 | | | 1770 | | | 1770 | | | |
| LN2 Capacity at Vapor Platform L est. | 318 | 318 | | | 295 | | | 295 | | |
| Static Hold Time—Vapor days est. | 35 | 35 | | | 30 | | | 30 | | |
| Static Hold Time—Liquid Full days est. | 174 | 174 | | | 177 | | | 177 | | |
| Unit Dimensions | | | | | | | | | | |
| Neck Opening in. (mm) | 24.7 (627) | | | 24.7 (627) | | | 24.7 (627) | | | |
| Usable Internal Height in. (mm) | 29.5 (749) | 29.5 (749) | | | 34.5 (876) | | | 34.2 (868) | | |
| Inner Diameter in. (mm) | 56.0 (1422) | 56.0 (1422) | | | 56.0 (1422) | | | 54.7 (1389) | | |
| Overall Height in. (mm) | 63.7 (1618) | | | 68.6 (1742) | | | 68.6 (1742) | | | |
| Liftover Height in. (mm) | 38.8 (985) | | | 44.0 (1118) | | | 44.0 (1118) | | | |
| Door Width Requirement** in. (mm) | 60.0 (1524) | | | 60.0 (1524) | | | 60.0 (1524 | | | |
| Weight Empty* lb. (kg) | 1712 (781) | 1712 (781) | | | 1721 (781) | | | 1721 (781) | | |
| Weight Liquid Full* lb. (kg) est. | 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 Medsep (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 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.