

# MVE Series

## Liquid Nitrogen Freezers



MVE Cryo-Preservation Systems are designed for the user who needs either vapor or liquid storage. A large neck opening and stainless steel construction provides the most durable environment for your biological samples. With advanced features and storage from 4,000 vials to 56,000 vials, the MVE series is the perfect choice.

The now standard “One fill, all fill” feature drives every freezer in a network to top up each time any of the network freezers calls for a fill. This helps to minimize transfer losses.

### Optional Features:

- **Battery Back-Up.** This option will provide fill operation for 72 hours in the event of power supply failure.
- **Gas By-Pass.** Monitors the temperature in the fill line at the start of the filling process. Until the line temperature falls below a level determined by the user (usually  $-130^{\circ}\text{C}$ ) the fill line is vented to atmosphere. Once the line is

sufficiently cold, the vent valve closes and the fill to the freezer begins. This reduces losses due to warm gas boiling off liquid already in the tank, and in conjunction with the one fill, all fill feature of the TEC2000 will optimize fill efficiency.

### Accessories:

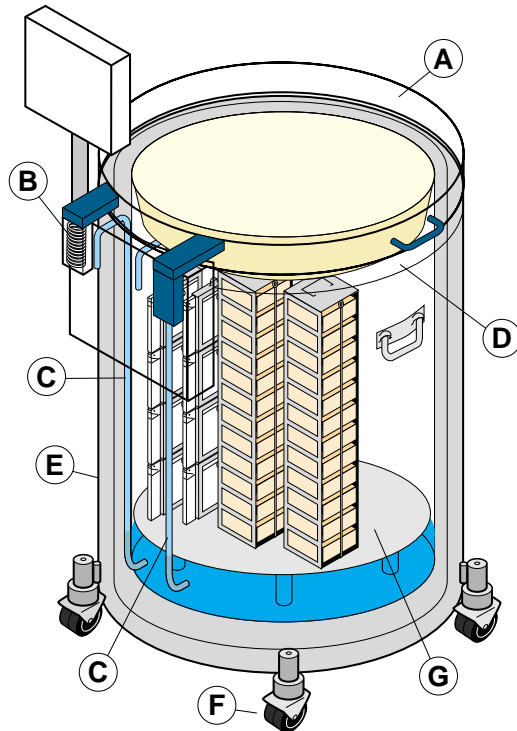
- Square Racks– stainless or aluminum
- Cardboard Boxes (81 cell)
- Plastic Boxes (25 cell and 100 cell)
- SUC Boxes
- Canes and Protectors
- Cryogenic Gloves



# MVE Series

## Specifications

| MODEL                                       | MVE 230II     |      | MVE 511       |      | MVE 611       |      | MVE 1411       |      | MVE 1841       |      |
|---------------------------------------------|---------------|------|---------------|------|---------------|------|----------------|------|----------------|------|
| <i>Maximum Storage Capacity</i>             |               |      |               |      |               |      |                |      |                |      |
| Number of 1.2 & 2.0 ml vials in racks       | 5200          |      | 10,400        |      | 16,900        |      | 26,650         |      | 39,000         |      |
| Number of racks (100 vials)                 | 4 (13/2 rack) |      | 7 (13/2 rack) |      | 12(13/2 rack) |      | 18 (13/2 rack) |      | 28 (13/2 rack) |      |
| Number of racks (25 vials)                  | -             |      | 4 (13/2 rack) |      | 4 (13/2 rack) |      | 10 (13/2 rack) |      | 8 (13/2 rack)  |      |
| Total number of racks                       | 4             |      | 11            |      | 16            |      | 28             |      | 36             |      |
| Number of blood bag stored (Fenwal 4R-5461) | 132           |      | 224           |      |               |      |                |      | 856            |      |
| <i>Performance</i>                          |               |      |               |      |               |      |                |      |                |      |
| Liquid nitrogen capacity (liters)           | 89            |      | 158           |      | 236           |      | 375            |      | 669            |      |
| Power supply                                | 24 VDC        |      | 24 VDC        |      | 24 VDC        |      | 24 VDC         |      | 24 VDC         |      |
| <i>Unit Dimensions</i>                      |               |      |               |      |               |      |                |      |                |      |
| Neck opening (in/mm)                        | 16.0          | 408  | 20.8          | 528  | 25.13         | 638  | 31.75          | 958  | 39.5           | 1003 |
| Usable height (in/mm)                       | 28.9          | 735  | 28.6          | 726  | 29.81         | 731  | 28.7           | 726  | 33.3           | 846  |
| Overall height (in/mm)                      | 45.25         | 1150 | 44.2          | 1123 | 40.69         | 1033 | 40.38          | 1026 | 48             | 1219 |
| Outside diameter (in/mm)                    | 18.0          | 457  | 22.75         | 579  | 27.38         | 695  | 40.06          | 1018 | 42             | 1067 |
| Internal diameter (in/mm)                   | 16.0          | 408  | 20.8          | 528  | 25.13         | 638  | 31.75          | 958  | 39.5           | 1003 |
| Weight empty (lbs/kg)                       | 125           | 57   | 242           | 110  | 283           | 128  | 530            | 240  | 675            | 306  |
| Weight full (lbs/kg)                        | 283           | 129  | 524           | 238  | 704           | 319  | 1198           | 543  | 1867           | 847  |



- A Metal lid construction—designed for longer life
- B Tough, durable hinges
- C Annular filling lines to reduce frost and ice formation
- D Lowest under lid temperature in the industry
- E Low maintenance , all-stainless steel construction
- F Tough, durable casters
- G Optional vapor platform

*Five year vacuum warranty*



MVE Bio-Medical Division, Chart Industries, Inc.  
 3505 County Road 42 West, Burnsville, MN 55306-3803 U.S.A.  
 Phone: 952-882-5000 . 888-683-2796 Local Fax: 952-882-5172 . [www.chart-ind.com](http://www.chart-ind.com)

