

# CRYOPRESERVATION EQUIPMENT

## MVE STANDARD SERIES - LIQUID OR VAPOUR STORAGE

### KEY PRODUCT FEATURES AND BENEFITS

- Storage capacity from 3,200 to 39,000 vials
  - Also suitable for a wide variety of blood bag systems
- Suitable for liquid or vapour storage
- Cabinet or non-cabinet style
- Annular filling lines to reduce frost and ice formation
- Two supply solenoids to reduce risk of overfilling
- Optional Features – Battery Back-Up and Warm Gas Bypass
- Available with TEC 3000 electronic controller
  - Integrated hot gas by-pass system
  - Keyless security system
  - Level and temperature controls with both visible and audible alarms
  - Interface to external system via serial communications with RS-485
  - Stores time and date stamped information on 30,000 most recent events
  - Optional battery back-up
- Systems available which conform to MMD 93/42/EEC, the Medical Device Directive for the EU



### PRODUCT DESCRIPTION:

**Lower Lifetime Costs** - The MVE range has the lowest liquid usage compared to other equivalent liquid nitrogen freezers on the market today and the lowest running cost/sample. LN2 cost savings of up to 33% can be achieved when compared to standard storage units of equivalent capacity.

The quality and reliability of MVE products lead to a longer lifetime with virtually no requirements for major repairs. The expected lifetime is in excess of 15 years.

**Efficient Use of Space** - The compact design of the MVE range gives you the highest number of vials stored per square foot of laboratory space compared to other equivalent freezers on the market.

**Cabinet or Non-Cabinet Style** - The MVE range is available in either a cabinet or non-cabinet style to suit your laboratory layout.

**State-Of-The Art Electronic Controller Unit** - The MVE TEC 3000 system is supplied with all versions in the MVE range with the exception of the basic model. It offers integrated gas by-pass system, password protection, twin platinum RTD temperature probes with 2-point altitude adjusted calibration, seamless level measurement and LN2 usage statistics. In addition, the system offers self-diagnosis on start up and a serial interface, which allows access to all stored parameters (the system memory retains the time and date stamped information on controller events).

**Warranty** - There is a standard 2 year warranty on all equipment (parts and labour) and a **5 year vacuum warranty**. Chart MVE products have a rugged design, high quality welds and advanced vacuum technology.

**CryoService Deliver a Total Solution** - *to meet a wide variety of Cryopreservation requirements. This includes liquid gases and associated storage vessels, super insulated vacuum transfer pipelines, the best liquid nitrogen vapour storage freezers on the market, oxygen depletion systems and business management outputs – a total package from one provider. The Chart MVE range extends from a broad line of liquid and vapour phase freezers for straw, ampoule & blood bag storage to lightweight aluminium shippers and Dewars.*

0379/02

# CRYOPRESERVATION EQUIPMENT

## MVE STANDARD SERIES - LIQUID OR VAPOUR STORAGE

### AT A GLANCE COMPARISON OF RANGE

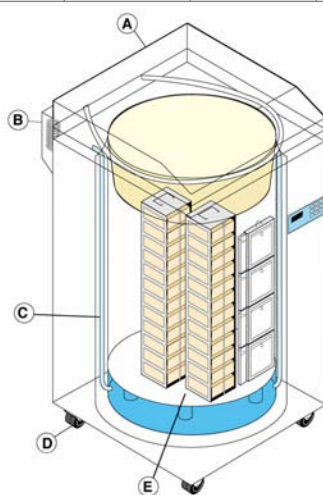
MVE Model Name	204*	205	510	616	616CF (cabinet)	1426	1426CF (cabinet)	1839
Total 1.2 & 2ml Vial Capacity								
In Liquid Phase	3,200	5,200	10,400	16,900	16,900	26,650	26,650	39,000
In Vapour Phase	2,400	4,400	8,800	14,300	14,300	22,550	22,550	33,000
Outer Dimensions (mm)	457	457	579	695	892 x 711	857	858 x 1,056	1067
Overall Height (mm)	784	1,059	1,185	1,161	1,161	1,076	1,076	1,372

### DETAILED SPECIFICATION

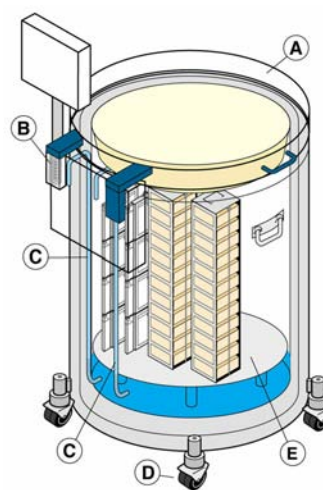
MVE Model Name	204*	205	510	616	616CF (cabinet)	1426	1426CF (cabinet)	1839
<b>UNIT DIMENSIONS</b>								
LN2 Capacity (litres)	65	95	166	240	240	388	388	673
Neck Opening (mm)	406	406	527	638	638	806	806	1,002
Useable Internal Height (mm)	502	735	762	749	749	745	745	854
Inner Diameter (mm)	406	406	527	638	638	806	806	1,002
Overall Height (mm)	784	1,059	1,185	1,161	1,161	1,076	1,076	1,372
Outer Dimensions (mm)	457	457	579	695	892 x 711	857	858 x 1,056	1,067
Weight Empty (kg)	36	88	127	145	145	222	222	341
Weight Full (kg)	88	166	262	339	339	536	536	885
<b>UNIT CAPACITIES - (In Liquid) 1.2 &amp; 2ml Vials (Internally Threaded)</b>								
Number of Racks (100 cell boxes)	4	4	7	12	12	18	18	28
Number of Racks (25 cell boxes)	-	-	4	4	4	10	10	8
Total Number of Racks	4	4	11	16	16	28	28	36
Number of Stages per Rack	-	13	13	13	13	13	13	13
<b>Total Vial Capacity</b>	<b>3,200</b>	<b>5,200</b>	<b>10,400</b>	<b>16,900</b>	<b>16,900</b>	<b>26,650</b>	<b>26,650</b>	<b>39,000</b>
<b>Blood Bag Capacities</b>								
Fenwall 4R9951 (50ml)	-	228	420	612	612	924	924	1,856
Fenwall 4R9953 (250ml)	-	128	224	336	336	512	512	1,010
Fenwall 4R9955 (500ml)	-	96	160	248	248	424	424	770

\*204 is not fitted with wheels

- A Aluminium lid construction - designed for longer life
- B Tough durable hinges
- C Annular filling lines to reduce frost and ice formation near lid
- D Super-tough, durable casters
- E Optional vapour platform
- F Gas By-Pass - vents the incoming filling gas until liquid reaches the valve, minimising the normal filling losses associated with filling from long delivery pipes."



Cabinet



Non-Cabinet

### OPTIONAL FEATURES

**Battery Back-Up** - provides fill operation for 72 hours in the event of power supply failure

Systems available which conform to MMD 93/42/EEC, the Medical Device Directive for the EU