

# MVE Variō™ Series



The MVE Variō™ Series is the new innovative and energy efficient alternative for ultra low temperature to cryogenic storage. The completely dry sample storage area will maintain a user-defined temperature anywhere between -50°C and -150°C. The MVE Variō Series significantly reduces the possibility of sample contamination via contact with LN<sub>2</sub> while providing the safety margin and consistent temperature profile, even with the lid open, that is associated with LN<sub>2</sub> based cryogenic storage. The MVE Variō Series is able to provide all of this with less than 1% of the power consumption and approximately 70% overall operating cost savings when compared to the leading mechanical freezers.

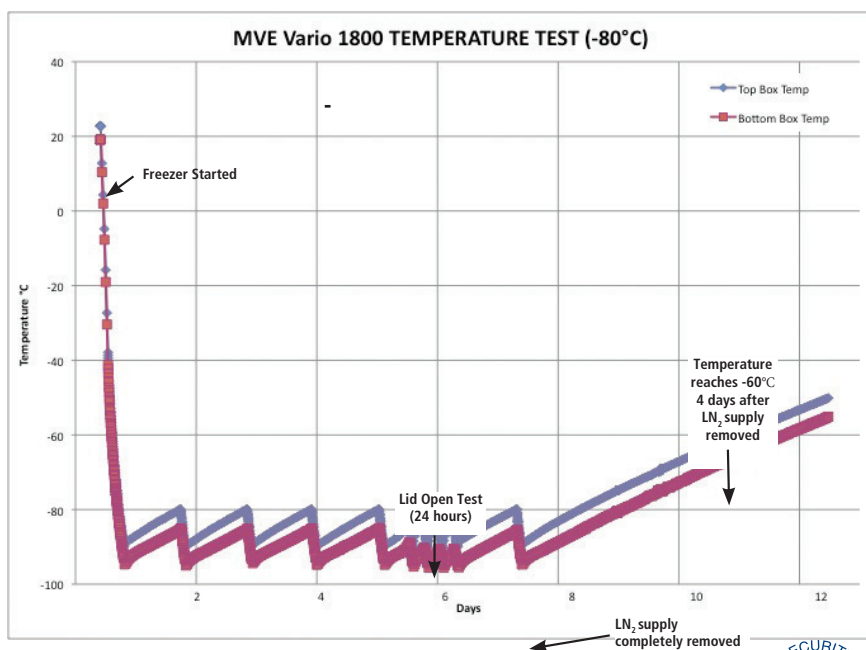
### Features include:

- Approximately 70% operating cost savings compared to leading mechanical freezers (-80 °C)
- Less than 1% of the electricity consumption compared to leading mechanical freezers (-80 °C)
- Completely dry storage area
- Consistent temperature profile, even with lid open
- Improved processing time, minimal increase in temperature when warm samples introduced
- No thermal load; no heat introduced into room and no additional HVAC required
- No more expensive compressors to replace
- Convertible asset: Can be field retrofitted to be a traditional LN<sub>2</sub> freezer



### Temperature Test Graph

\* Temp Test indicates typical performance of MVE Variō Series freezer with full inventory system and factory recommended level settings. Actual performance may vary with atmospheric conditions and usage.



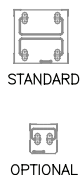
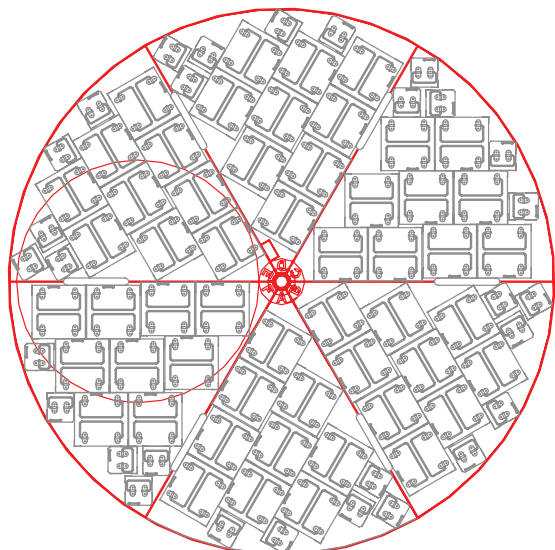
Go to [www.chartbiomed.com](http://www.chartbiomed.com) for more information.

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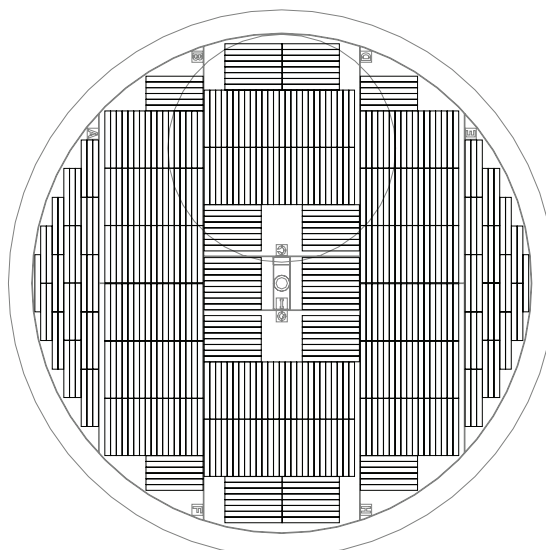


## Rack Layouts

Square Rack Layout



4R9951 Layout



MVE Variō 1536P

MVE Variō 1539R

MVE Variō 1879P

MVE Variō 1881R

### Maximum Storage Capacity

1.2 & 2 ml Vials (Internally Threaded)	36.400	39.000	79.950	81.900
Number of Racks 100 cell boxes	24	26	54	60
Number of Racks 25 cell boxes	16	16	30	12
Number of Stages per Rack	13	13	13	13

### Performance

Temperature Range	-50°C, -150°C	-50°C, -150°C	-50°C, -150°C	-50°C, -150°C
LN <sub>2</sub> Usage at -80°C L/day	9	9	12	12
Power consumption (cont.) W	8	8	8	8

### Unit Dimensions

Neck Opening in. (mm)	17,5 (445)	17,5 (445)	25,0 (635)	25,0 (635)
Usable Internal Height in. (mm)	28,8 (732)	28,8 (732)	29,5 (749)	29,2 (741)
Inner Diameter in. (mm)	38,5 (978)	38,5 (978)	56,0 (1.422)	54,8 (1.391)
Overall Height in. (mm)	61,3 (1.556)	61,3 (1.556)	62,1 (1.577)	61,3 (1.556)
Door Width Requirement* in. (mm)	42,0 (1.067)	42,0 (1.067)	60,0 (1.524)	60,0 (1.524)
Weight Empty lb. (kg)	690 (313)	690 (313)	1.606 (728)	1.721 (781)

### Blood Bag Capacities

	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames
791 OS/U (25 ml)	3.080	7	440	2.786	7	398	5.866	7	838	5.628	7	804
Compact (25 ml)	4.338	9	482	3.924	9	436	8.622	9	958	9.414	9	1.046
4R9951 (50 ml)	1.488	6	248	1.446	6	241	2.952	6	492	2.940	6	490
4R9953 (250 ml)	812	4	203	768	4	192	1.584	4	396	1.608	4	402
4R9955 (500 ml)	608	4	152	576	4	144	1.104	4	276	1.240	4	310
DF200 (200 ml)	496	4	154	488	4	122	960	4	240	984	4	246
DF700 (700 ml)	256	4	64	204	4	66	504	4	126	544	4	136

TWO Year Standard Warranty • FIVE Year Vacuum Warranty

Conforms to MDD 93/42/EEC, the Medical Device Directive for the EU.

\*Minimum width required for vessel to pass through opening. Footprint may vary. Contact Tech Service for detailed drawings.

