







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:**

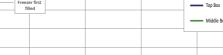
- LN2 usage reduction
- Fully enclosed wiring and plumbing
- Vacuum jacketed transfer hose
- Dry sample storage
- -190°C top box temperature
- Lowest liftover height
- Single step standard
- Optional double-tier step
- Optional battery backup—ask about one part number to order HEco with battery backup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



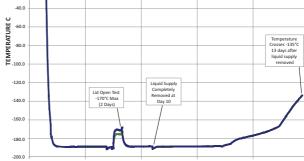


- Standard One-Tier Step
- Optional Two-Tier Steps





**MVE HEco 800 Temperature Test\*** 



-20.0

\* 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.

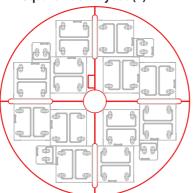


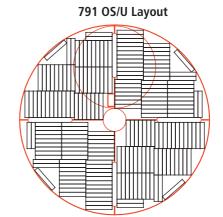


Visit www.chartbiomed.com for more information.

DAYS

Square Rack Layout (P)





	MVE H	Eco 815	P-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			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 (67	'3)		30.7 (78	30.7 (781)			34.5 (877)		
Inner Diameter in. (mm)	28.8 (73	31)		28.8 (73	28.8 (731)			28.8 (731)		
Overall Height in. (mm)	49.5 (12	!57)		53.9 (1370)			57.70 (1465)			
Liftover Height in. (mm)	40 (101)	6)		43.8 (1115)			47.63 (1209)			
Door Width Requirement** in. (mm)	32.0 (81	3)		32.0 (813)			32.0 (813)			
Door Width Requirement, with handles** in. (mm)	33.2 (84	13)		33.2 (843)			33.2 (843)			
Weight Empty* lb. (kg)	475 (21	5)		495 (22	5)		515 (234)			
Weight Liquid Full* lb. (kg) est.	1134 (5	14)		1168 (5	30)		1340 (6	08)		
Blood Bag Capacities	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/Frame	No. Frames	
<b>791 OS/U Medsep</b> (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		104	416	4	104	520	5	104	
4R9955 (500 ml)	304 4 76		76	304	4	76	380	5	76	
DF200 (200 ml)	236	4	59	236	4	59	295	5	59	
<b>DF700</b> (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.







# **MVE HEco™ 1500 Series Freezers**

The MVE HEco 1500 Series freezers provide a 20% reduction in LN2 usage, making them the most efficient vapor freezers available. 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 combine to create a more aesthetically pleasing freezer that offers greater functionality. As with all of MVE's cryogenic freezers, the MVE HEco 1500 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.

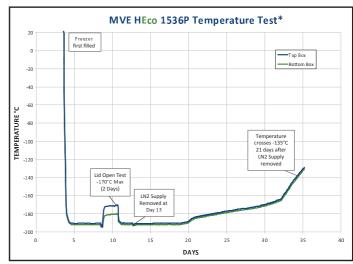
Available now for ease of ordering, HEco Series with Battery Backup has one part number.

### **Features include:**

- 20% reduction in LN2 usage
- 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!



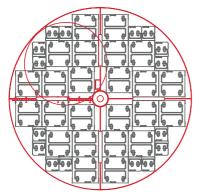


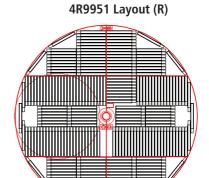


### **Temperature Test Graph**

<sup>\*</sup> 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.

Square Rack Layout (P)





	MVE HE	co 1536F	D_190	MVEH	Eco 1539P	2-190	MVE HEco 1542R-190			
Maximum Storage Capacity	MACUE		-190	IVIVE	LCO 1339F	-190	MACHE	MITTIECO 1342K 130		
	26.400			20.200			42,000			
1.2 & 2 ml Vials (Internally Threaded)	36,400			39,200			42,000			
Quantity of Large Racks 100 cell boxes	24			24			26			
Quantity of Mini Racks 25 cell boxes	16			16			16			
Number of Shelves per Rack	13			14			14			
Performance										
LN2 Capacity w/o Inventory L est.	730			768			768			
LN2 Capacity at Vapor Platform L est.	115			115			115			
Static Hold Time—Vapor days	20			20			20			
Static Hold Time—Liquid Full days est.	112			118			118			
Unit Dimensions										
Neck Opening in. (mm)	17.4 (442	)		17.4 (442	2)		17.4 (442)			
Usable Internal Height in. (mm)	28.8 (732	)		30.2 (767	30.2 (767)			30.8 (782)		
Inner Diameter in. (mm)	38.5 (978	)		38.5 (978	38.5 (978)			)		
Overall Height in. (mm)	54.7 (138	9)		56.8 (1442)			56.8 (144	2)		
Liftover Height in. (mm)	37.3 (947	)		39.4 (999)			39.4 (999)			
Door Width Requirement** in. (mm)	42.0 (106	7)		42.0 (1067)			42.0 (1067)			
Door Width Requirement, with handles** in. (mm)	43.3 (109	9)		43.3 (109	99)		43.3 (1099)			
Weight Empty* lb. (kg)	700 (318)			700 (318	)		700 (318)			
Weight Liquid Full* lb. (kg) est.	2000 (90	7)		2100 (95	3)		2100 (953)			
Blood Bag Capacities	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames	
<b>791 OS/U Medsep</b> (25 ml)	2,905	7	415	3,320	8 <sup>†</sup>	415	3,184	8 <sup>†</sup>	398	
4R9951 (50 ml)	1,488	6	248	1,736	7	248	1,687	7	241	
4R9953 (250 ml)	812 4 203		812	4	203	768	4	192		
4R9955 (500 ml)	608	4	152	608	4	152	576	4	144	
DF200 (200 ml)	496	4	124	496	4	124	488	4	122	
DF700 (700 ml)	256	4	64	256	4	64	264	4	66	

### **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.

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

<sup>†</sup> Between usable height and clearance. Please refer to specifications.







# **MVE HEco™ 1800 Series Freezers**

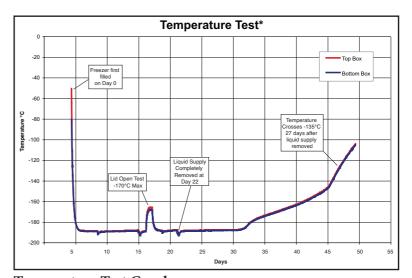
The MVE HEco 1800 Series freezers provide a reduction in LN2 usage, making them the most efficient vapor freezers available. When an LN2 fill is initiated, the redesigned plumbing system optimizes the LN2 flow and reduces transfer loss, increasing efficiency and LN2 cost savings. The 1800 series provides 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!



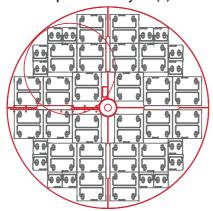


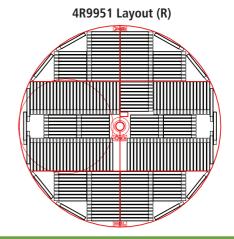
### **Temperature Test Graph**

Visit www.chartbiomed.com for more information.

<sup>\*</sup> 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.

Square Rack Layout (P)





	MVE HEC	o 1879P	-190	MVE HEC	o 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			295			295			
Static Hold Time—Vapor days est.	35			30			30			
Static Hold Time—Liquid Full days est.	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)			34.5 (876)	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)			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	
<b>791 OS/U Medsep</b> (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	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	

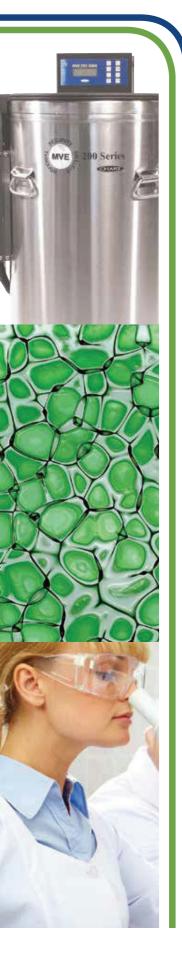
**TWO Year Parts Warranty • FIVE Year Vacuum Warranty**Conforms to MDD 93/42/EEC, the Medical Device Directive for the EU. Freezer systems UL/C-UL Listed.

<sup>\*</sup> Without inventory

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







# **MVE Series**

The MVE Series freezers provide stable cryogenic storage for up to 39,000 1.2 / 2.0 ml vials. These freezers provide maximum storage density and provide the industry's longest hold time. MVE Series are primarily designed for liquid storage.

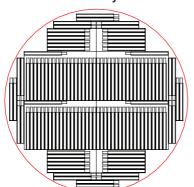
- Liquid sample storage
- Wide neck opening
- Lowest liftover height
- Largest LN2 capacity
- Optional Battery Backup



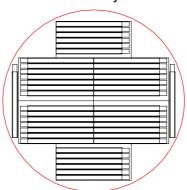




4R9953 Layout







	N	IVE 2	04 <sup>†</sup>		MVE 2	205		MVE 5	10	I	/IVE 6	16	M	<b>VE 1</b> 4	26	IV	IVE 18	39
<b>Maximum St</b>	torag	je Ca	pacity															
1.2 & 2 ml Vials (Internally Threaded)	3,200			5,200			10,40	10,400		16,900		26,650		39,000				
Number of Large Racks 100 cell boxes	4			4	4		7	7		12		18			28			
Number of Mini Racks 25 cell boxes	-			-	-		4	4		4		10			8			
Number of Shelves per Rack	8			13			13			13			13			13		
High Security Straw Capacity (0.5 ml)	11,59	2		19,32	0		32,76	0		50,400			79,800			151,20	0	
Number of Canisters (73 mm)	23			23			39			60			95			150		
Goblets/Canister : Straws/Goblet	3:168			5:168			5:168			5:168			5:168			6:168		
Performance																	_	
LN2 Capacity w/o Inventory L	65			95			166	166 240			388			673				
<b>Unit Dimens</b>	ions																	
Neck Opening in. (mm)	16.00	(406)		16.00	(406)		20.70 (527)		25.10 (638)			31.75 (806)			39.40 (	1002)		
Usable Internal Height in. (mm)	19.7 (	502)		28.9 (	735)		30.0 (762)		29.5 (7	'49)		29.3 (745)			33.6 (8	354)		
Inner Diameter in. (mm)	16.00	(406)		16.00	(406)		20.70 (527)		25.1 (6	38)		31.75 (806)			39.40 (1002)			
Overall Height w/ AutoFill in. (mm)	30.8 (	784)†		46.3 (	1176)		46.7 (1185)		45.8 (1161)		46.8 (1188)		54.0 (1372)					
Door W x D Requirement** in. (mm)	18.0 (			23.6x	22.7 (601	1x577)	30.6x29.7 (778x754)		33.5x34.6 (852x878)		40x41.	6 (1017x	(1056)	46.8x48.9 (1187x1242)				
Weight Empty* lb. (kg)	79 (36			195 (8	,		281 (1			320 (14	-,		490 (22			750 (3		
Weight Liquid Full* lb. (kg) est.	195 (8	38)		365 (	166)		577 (2	262)		748 (33	39)		1181 (5	536)		1950	(885)	
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	Total Bags	Bags/ Frame	No. Frames	Total Bags	Bags/ Frame	No. Frames
791 OS/U Medsep (25 ml)	-	-	-	539	7	77	882	7	126	1,372	7	196	2,226	7	318	3,968	8	496
4R9951 (50 ml)	-	-	-	228	6	38	420	6	70	612	6	102	924	6	154	1,856	8	232
4R9953 (250 ml)	-	-	-	128	4	32	224	4	56	336	4	84	512	4	128	1,010	5	202
4R9955 (500 ml)	-	-	-	96	4	24	160	4	40	248	4	62	424	4	106	770	5	154
DF200 (200 ml)	-	-	-	80	4	20	128	4	32	200	4	50	336	4	84	610	5	122
DF700 (700 ml)	-	-	-	40	4	10	68	4	17	116	4	29	168	4	42	380	5	76

### **TWO Year Parts Warranty • FIVE Year Vacuum Warranty**

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<sup>\*</sup> Without inventory

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

<sup>†</sup> Not available with Auto Fill.







# **MVE CryoSystem 6000 Full Auto**

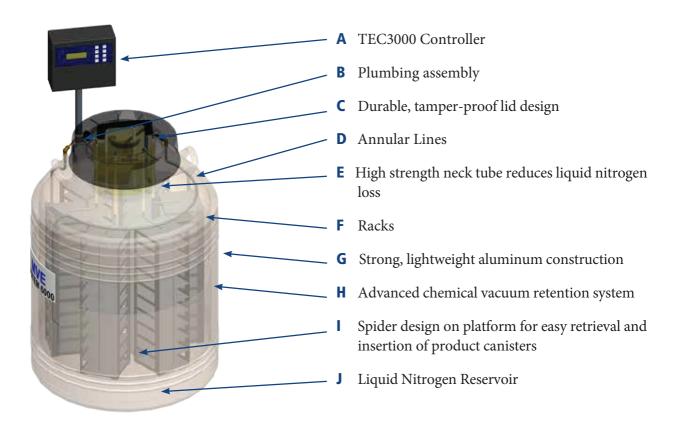
The MVE CryoSystem 6000 Full Auto combines the compact efficiency of aluminum dewars with the monitoring and auto fill features of the TEC3000 control system. The differential pressure-based level control allows this unit to easily be used for liquid or vapor storage with a -190°C top box temperature. The TEC3000 continually monitors and records temperature and LN2 levels, auto filling when needed, and providing audio/visual alarms with remote connectivity when necessary. The enhanced safety factor of not having to manually fill this unit also helps maintain a consistent temperature profile for vapor storage.

The CryoSystem 6000 Full Auto provides the convenience and security of high capacity stainless steel freezers for your average sized sample collection at a fraction of the price.

- Fully automatic LN2 level control and temperature monitoring
- Single temperature monitoring
- Can be used for liquid or vapor storage
- Tracks and displays LN2 consumption
- 17 user-defined audio / visual alarms including High Temperature, Low Level, Liquid Usage, Fill Time out, and more
- Remote monitoring and communication capabilities
- Electronically stores up to 10 years of unalterable, time-stamped data events for traceability and troubleshooting
- Transportable in emergencies or in the event of natural disasters
- Transfer hose included
- Optional Battery Backup







	CryoSystem 6000 FA	1					
Performance							
LN2 Capacity w/o Inventory L est.	175.0		,				
Static Evaporation Rate* L/day	4.0	4.0					
Unit Dimensions							
Neck Opening in. (mm)	8 (203)		,				
Overall Height with Auto Fill in. (mm)	47.1 (1196)		'				
Outer Diameter in. (mm)	26.5 (673)		·				
Weight Empty lb. (kg)	103 (47)		,				
Weight Full lb. (kg) est.	425 (193)		,				
Maximum Storage Capacity							
Box Size in.	2	3	3.75				
Number of Racks	6	6	6				
Number of vials 100/box est.	6,000 1.2 & 2 ml vials	4200 3 ml vials	3000 4 ml vials				
Boxes per Rack	10	7	5				

<sup>\*</sup> Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and

TWO Year Parts Warranty • THREE Year Vacuum Warranty

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





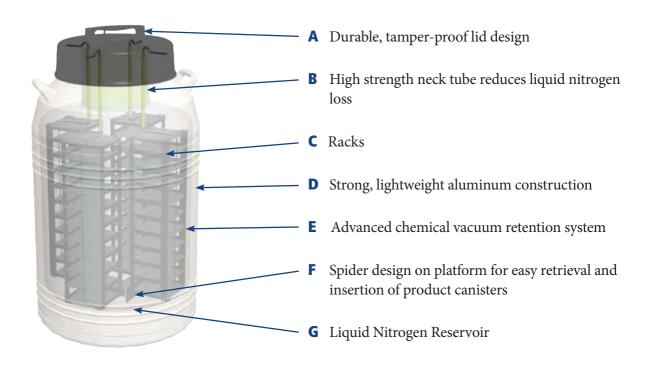


# **MVE CryoSystem Series**

The MVE CryoSystem Series combines the benefits of low nitrogen consumption with mid-range vial capacity to meet the diverse needs of today's professionals worldwide. The lightweight and low-space demands of these containers make them the most economical units in their class.

- Designed for large capacity storage
- Low liquid nitrogen consumption
- Convenient lightweight package





	CryoSystem 750	CryoSystem 2000	CryoSystem 4000	CryoSystem 6000	
<b>Maximum Storage Capacity</b>					
Number of Canisters	6	4	4	6	
Number of 1.2 & 2.0 ml vials 100/box	-	2,000	4,000	6,000	
Number of 1.2 & 2.0 ml vials 25/box	750	-	-	-	
Boxes per Rack	5	5	10	10	
Performance					
LN2 Capacity w/o Inventory L est.	47.4	61.0	121.0	175.0	
LN2 Capacity w/Inv. L est.	45	51	111	150	
Static Evaporation Rate* L/day	0.39	0.85	0.99	0.99	
Working Duration** Full Days	76	38	70	104	
Unit Dimensions					
Neck Opening in. (mm)	5.0 (127)	8.5 (216)	8.5 (216)	8.5 (216)	
Overall Height in. (mm)	26.50 (673)	27.25 (692)	38.00 (965)	37.75 (959)	
Outer Diameter in. (mm)	20 (508)	22 (559)	22 (559)	26 (665)	
Weight Empty lb. (kg)	42 (19.0)	58 (26.3)	81 (36.7)	103 (46.7)	
Weight Full lb. (kg)	126 (57)	182 (82.5)	300 (136)	425 (193)	

<sup>\*</sup> Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

#### **TWO Year Parts Warranty • THREE Year Vacuum Warranty**

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

<sup>\*\*</sup> Working Duration is an arbitrary reference, to estimate container performance under normal operating conditions in liquid storage. Actual working time may vary due to  $current\ atmospheric\ conditions,\ container\ history,\ manufacturing\ tolerances\ and\ patterns\ of\ use.$ 





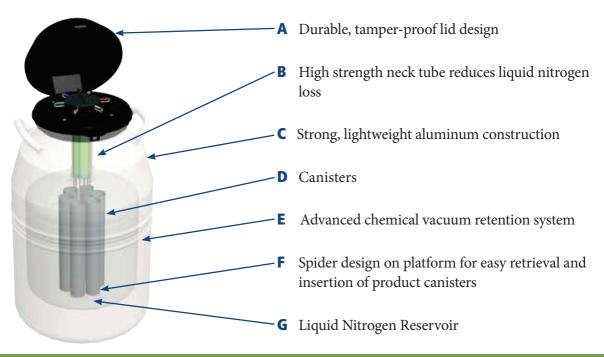


# **MVE SC Series**

MVE offers the widest range of compact aluminum storage tanks available on the market today. Over the past 50 years, our product designs have improved through end-user input and evolved into a unique selection of units. The SC Series is designed for the user who has small capacity needs, but requires long-term storage and low liquid nitrogen consumption in a convenient lightweight package.

- Designed for large capacity storage
- Low liquid nitrogen consumption
- Convenient lightweight package





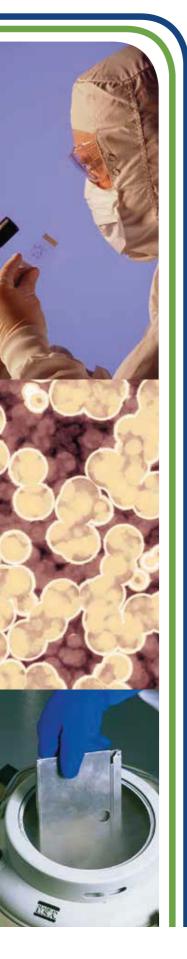
	SC 3/3	SC 8/5	SC 11/7	SC 20/20 Signature	SC 33/26	SC 36/32	Super 2
Maximum Storage Capa	city						
Number of Canisters	6	6	6	6	6	6	6
Number of 1/2 cc Straws 10/ cane	-	-	660	540	540	540	660
Number of 1/2 cc Straws 1 Level Bulk	1122	1122	879	780	780	780	1122
Number of 1.2 & 2.0 ml vials 5/cane	-	-	150	-	150	150	210
Performance							
LN2 Capacity w/o Inventory L est.	3.6	8.4	11.0	20.5	33.0	36.5	24.5
Static Evaporation Rate* L/ day	0.13	0.15	0.16	0.09	0.13	0.10	0.085
Working Duration** Full Days	17	35	43	142	182	224	180
Unit Dimensions							
Neck Opening in. (mm)	2.18 (55)	2.18 (55)	2.18 (55)	2.16 (55)	2.18 (55)	2.18 (55)	2.18 (55.4)
Overall Height in. (mm)	16.0 (406)	18.5 (470)	21.6 (549)	26.0 (660)	25.9 (657)	27.2 (690)	28.2 (716)
Outer Diameter in. (mm)	8.7 (222)	10.2 (260)	10.2 (260)	14.5 (368)	18.2 (464)	18.2 (464)	14.5 (368)
Canister Height in. (mm)	5.0 (127)	5.0 (127)	11.0 (279)	11.0 (279)	11.0 (279)	11.0 (279)	11.0 (279)
Canister Diameter in. (mm)	1.65 (41.9)	1.65 (41.9)	1.65 (41.9)	1.65 (41.9)	1.50 (38)	1.50 (38)	1.65 (41.9)
Weight Empty lb. (kg)	8 (3.6)	12 (5.3)	17 (7.7)	26 (11.8)	34 (15.4)	34 (15.4)	26.5 (12)
Weight Full lb. (kg)	14.4 (65)	27.0 (12.1)	36.6 (16.6)	62.4 (28.3)	93.4 (42.4)	100.0 (44.8)	68.4 (31)

<sup>\*</sup> Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

<sup>\*\*</sup> Working Duration is an arbitrary reference, to estimate container performance under normal operating conditions in liquid storage. Actual working time may vary due to current atmospheric conditions, container history, manufacturing tolerances and patterns of use.







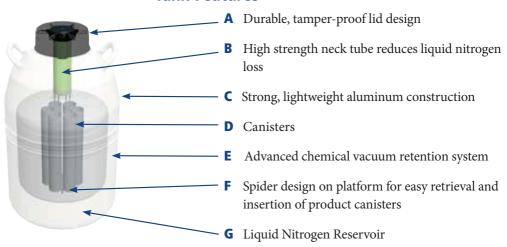
# **MVE XC Series**

MVE XC Series tanks have capacities ranging from 700–5000 straws, and 210 to over 1000 vials. Manufactured to a world class level of excellence and backed by an industry-leading 5-year vacuum warranty, these durable, lightweight units can be relied on to perform in the most demanding of environments.

- Designed for large capacity storage
- Low liquid nitrogen consumption
- Convenient lightweight package







	XC 20 Millennium	XC 21/6	XC 22/5	XC 32/8	XC 33/22	XC 34/18	XC 34/18 Plus***	XC 43/28	XC 47/11- 6SQ	XC 47/11-6	XC 47/11- 10
Maximum Storage	Capacity										
Number of Canisters	6	9	6	9	6	6	6	6	6 sq.	6	10
Number of 1/2 cc Straws 10/cane	660	N/A	2,400	2,520	1,260	2,100	2,100	1,260	-	3,900+	3200
Number of 1/2 cc Straws 1 Level Bulk	879	3,870	3,666	3,960	1,764	3,300	3,300	1,764	-	6,200	5,000
Number of 1.2 & 2.0 ml vials 5/cane	210	N/A	810	855	360	630	630	360	-	1,320	1,050
Number of Racks 25 Vials	-	-	-	-	-	-	-	-	750	-	-
Performance											
LN2 Capacity w/o Inventory L est.	20.5	21.0	22.4	32.0	33.4	34.8	67.5	42.2	47.4	47.4	47.4
LN2 Capacity w/o Inventory Below Spider L est.						-	32.7	-	-	-	
Static Evaporation Rate* L/day	.095	0.35	0.35	0.35	0.14	0.18	0.31	0.14	0.39	0.39	0.39
Working Duration** Full Days	135	38	40	57	154	123	136	193	76	76	76
<b>Unit Dimensions</b>											
Neck Opening in. (mm)	2.18 (55)	3.50 (89)	3.81 (97)	3.81 (97)	2.75 (70)	3.50 (89)	3.50 (89)	2.75 (70)	5.00 (127)	5.00 (127)	5.00 (127)
Overall Height in. (mm)	25.7 (652)	17.2 (438)	22.0 (559)	21.5 (546)	26.0 (660)	26.6 (675)	37.5 (952)	26.4 (670)	26.5 (673)	26.5 (673)	26.5 (673)
Overall Inner Height in. (mm)	-	-	-	-	-	-	33.5 (850)	-	-	-	-
Outer Diameter in. (mm)	14.5 (368)	18.2 (464)	14.5 (368)	18.2 (464)	18.2 (464)	18.2 (464)	18.2 (464)	20.0 (508)	20.0 (508)	20.0 (508)	20.0 (508)
Canister Height in. (mm)	11 (279)	5 (127)	11 (279)	11 (279)	11 (279)	11 (279)	11 (279)	11 (279)	-	11 (279)	11 (279)
Canister Diameter in. (mm)	1.65 (41)	2.59 (68)	3.09 (79)	2.62 (67)	2.22 (56)	2.8 (71)	2.81 (71)	2.22 (56)	-	4.00 (102)	2.81 (71)
Distance: Platform to Top of Neck in. (mm)	-	-	-	-	-	-	21 (533)	-	-	-	-
Weight Empty lb. (kg)	23 (10.5)	24 (10.9)	26 (11.8)	30 (13.6)	34 (15.4)	34 (15.4)	45.9 (20.8)	36 (16.4)	42 (19.0)	42 (19.0)	42 (19.0)
Weight with Canisters lb. (kg)	-	-	-	-	-	-	45.9 (20.8)	-	-	-	-
Weight Full lb. (kg)	59.5 (27.0)	61.4 (27.9)	66.0 (30)	87.0 (39.5)	94.0 (42.5)	96.0 (43.5)	104.4 (47.3)	111.0 (50.5)	120.4 (54.6)	120.4 (54.6)	120.4 (54.6)

<sup>\*</sup> Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances.

<sup>\*\*</sup> Working Duration is an arbitrary reference, to estimate container performance under normal operating conditions in liquid storage. Actual working time may vary due to current atmospheric conditions, container history, manufacturing tolerances and patterns of use.

<sup>\*\*\*</sup>Optional center absorbent added to center canister (3 week holding time).







# **MVE CryoCart**

MVE CryoCarts are designed for the loading of biological samples into canes, boxes, racks or frames. When used as a portable workbench, the unit will provide a safe and controlled environment for your samples for up to eight hours with the lid open. MVE CryoCart is ideal for transporting large quantities of samples from one tank to another within the same facility.

### **Features Include:**

- Approximate hold time of 18 hours with lid closed
- Temperature monitor with type T Thermocouple
- Optional Temperature monitor and LN2 transfer hose connection with plumbing system (manual lever)





	MVE CryoCart
Performance	
LN2 Capacity w/o Inventory To Top of Platform L est.	53
Unit Dimensions	
Overall Length in. (mm)	51.7 (1313)
Overall Width in. (mm)	17.6 (447)
Overall Height in. (mm)	38.9 (988)
Lift Overall Height in. (mm)	36.3 (922)
Inside Length in. (mm)	41.0 (1041)
Inside Width in. (mm)	13.2 (335)
Inside Depth in. (mm)	15.4 (391)
Platform Height in. (mm)	6.0 (152)
Footprint in. (mm)	17.6x51.7 (447x1313)
Weight Empty lb. (kg)	241 (109)
Weight w/LN2 Filled to Top of Platform lb. (kg) est.	356 (161)
Approximate Hold Time with Lid on hrs	18
Number of Racks (15-2)	2

90 Days Parts Warranty • One Year Vacuum Warranty