

# SPECTRUM SERIES



- Long-Term Storage
- Low Nitrogen Consumption
- Lightweight
- Easy Maintenance

The Spectrum 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. By integrating features users requested with the widest variety of holding times and storage capacities, CHART Aluminum Freezers are the units of choice.



*The SPECTRUM line is similar and updated with the latest Millennium flip-lid design*

## Accessories

- Transfer Hose
- Phase Separator
- Spare Corks
- Caster Base

## Accessories (Cont'd)

- Canister
- Level Alarm
- Liquid Level Measuring Stick

# SPECTRUM SERIES



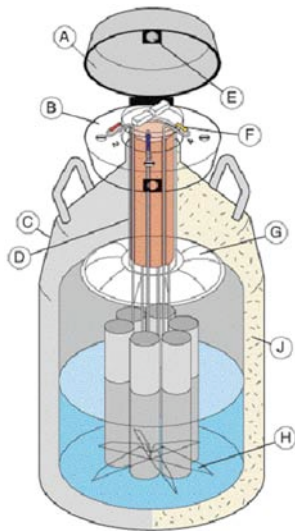
## SPECIFICATIONS

Model	SPECTRUM 2	SPECTRUM 3	SPECTRUM 8	SPECTRUM 12	SPECTRUM 16	SPECTRUM 20	SPECTRUM 35
Max. Storage Capacity							
Number of canisters	3	6	6	6	9	6	6
No. of 1/2 cc straws (10/cane)	-	-	-	660	-	660	660
No. of 1/2 cc straws (1 Level Bulk)	180	780	780	780	1098	780	780
No. of 1,2 & 2,0 ml vials (5/cane)	-	-	-	150	-	150	150
<b>Performance</b>							
Liquid nitrogen capacity (liters)	2,2	3,6	8,4	11,0	16,4	20,5	36,5
Static evaporation rate (liters/day)*	0,140	0,13	0,15	0,15	0,17	0,10	0,102
Static Holding Time (days)	16	28	56	73	97	205	360
Normal Working Duration (days)**	10	17	35	46	61	135	192
<b>Unit Dimensions</b>							
Neck opening (mm)	35, 6	55,4	55,4	55,4	55,4	55,4	55,4
Overall height (mm)	343	406	470	549	444	652	657
Outside diameter (mm)	188	222	260	260	438	368	464
Canister height (mm)	121	127	127	279	127	279	279
Canister diameter (mm)	27	41,9	41,9	41,9	38	41,9	41,9
Weight empty (kg)	2, 0	3,6	5,3	7,7	6,4	10,5	15,9
Weight full (kg)	3, 7	6,5	12,1	16,6	19,6	27	44

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

\*\* Normal Working Duration is an arbitrary reference to establish container performance under normal operating conditions. Actual working time may vary due to current atmospheric conditions, container history, manufacturing tolerances and any individual patterns of use.

\*\*\* Spectrum 2 is also available with a single canister and with or without a handle.



- A Durable, tamper-proof lid design
- B Easy maintenance lid design
- C Superior strength, lightweight aluminum construction
- D High strength neck tube reduces liquid nitrogen loss
- E Locking tab
- F Color-coded canister/lid numbering system
- G Advanced Chemical Vacuum Retention System - designed for superior vacuum performance over the life of the product
- H Spider design - for easy retrieval and insertion of product canisters
- J Insulation - MVE's advanced insulation system provides maximum thermal performance

### Three Year Vacuum Warranty

## MVE EUROPE DIVISION



MVE division of Chart BioMedical Division  
 Unit 2, Maxdata Centre  
 Downmill Road, Bracknell  
 Berks RG12 1QS, United Kingdom  
 telephone: 44-(0) 1344 403100  
 fax: 44-(0) 1344 429224

email: brian.bevan@chart-ind.com  
 paul.lydolph@chart-ind.com