

# Tech Tips

(January 2017)

## Product Information

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### Chart MVE Serial Number Review

Chart MVE freezer and aluminum tank serial numbers are numerically coded. Each serial number provides the vessel code, year, month, and production number of the unit identification manufactured. This format provides the ability to properly identify when a unit is sold and for technical assistance in troubleshooting, as well as identification of the model and part number for service. There are five distinct sections of each serial number. Please reference the example and key below to identify these various sections.

Sample Serial Number: CAB2111010019

Five Distinct Sections: CA - B21 - 11 - 01 - 0019

Key:

CA=The site of manufacture. "CA" represents the Canton, GA facility. "NP" represents the New Prague, MN facility.

B21=Chart MVE code. This code is included for internal manufacturing use only.

11=Year of manufacture. The sample above was manufactured in 2011.

01=Week of manufacture. 01 indicates that the sample above was manufactured the first week of the year.

0019=Production number. The sample above was the 19<sup>th</sup> freezer manufactured during week 01.

### Chart MVE Stock Series

The MVE Stock Series provides the ultimate in security for the breeding industry and are primarily used to store semen and embryos. The freezers are designed for pull and pack shipment, with a wide neck opening for easy access. All MVE Stock units are built with an emphasis on sample security and the ability to provide safe long-term storage for your valuable samples. Although engineered for liquid storage, most MVE Stock Series can be used to store in vapor. The rotating sample tray in the 1842P-150 allows for maximum storage space and easy convenient access. Contact Chart Technical Service for product details and more information.

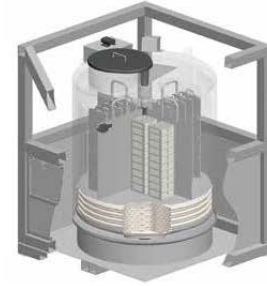


## Chart MVE 1536PD Dry Shipper

The MVE 1536PD Dry Shipper is specifically designed to provide peace of mind when shipping and/or relocating samples.

### Features Include:

- Liquid Nitrogen absorbent can be charged for dry shipment
- Hold time up to 20 days when properly charged
- Rigid steel frame can be moved with pallet jack/forklift
- Sized to fit in a wide-body aircraft
- Inventory tray locks to prevent rotation during transit
- Locking lid
- Includes data logger to monitor and record sample temperature during shipment or relocation
- Inner vessel may be decontaminated after shipping if necessary



<b>MVE 1536PD</b>	
<b>Maximum Storage Capacity</b>	
1.2 & 2 ml Vials (Internally Threaded)	36400
Quantity of Large Racks 100 cell boxes	24
Quantity of Mini Racks 25 cell boxes	16
Number of Shelves per Rack	13
<b>Performance</b>	
Absorbed LN2 Capacity L est.	133
<b>Unit Dimensions</b>	
Neck Opening in. (mm)	17.5 (444)
Usable Internal Height in. (mm)	30 (762)
Inner Diameter in. (mm)	30 (762)
Overall Height including Frame** in. (mm)	64 (1625)
Liftover Height in. (mm)	42.1 (1070)
Step Height in. (mm)	20.5 (521)
Depth of Fold Down Step in. (mm)	10.8 (274)
Footprint in. (mm)	52x52 (1321x1321)
Weight Empty* lb. (kg)	1600 (726)
Weight Liquid Full* lb. (kg) est.	2044 (927)

### **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

\*\*Contact Tech Service for detailed drawings.

# Helpful Hints/FAQ's

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## Checking Chart MVE Freeze Electrical Components

If it is suspected that one of the electrical components is not operating properly, an evaluation may be in order. Below is a list of normal resistance values for select items:

Fill Valves (Dual 24VDC): 30 - 35 ohms  
Fill Valve (Singular 24VDC): 60 - 70 ohms  
Bypass Valve: 60 - 70 ohms  
Humphrey 3 way: 130 - 145 ohms

Temperature Probes:  
Room Temp: 1000 - 1100 ohms  
Cryogenic Temp: 200 - 300 ohms

Bypass Sensor:  
Room Temp: 1000 - 1100 ohms  
Cryogenic Temp: 200 - 300 ohms

## CryoCart Replacement Casters

**Q:** Do you sell replacement casters for the CryoCart?

**A:** Yes, Chart offers replacement casters for the CryoCart. The design of the CryoCart has changed over the years, so it is important to obtain the part number and serial number of the CryoCart in order to select the proper replacement casters. The casters between the models are not interchangeable. Two of each type of caster listed below will outfit one CryoCart.

Part numbers 14448703 and W3170LT are the current model CryoCarts. The replacement casters for these models are:

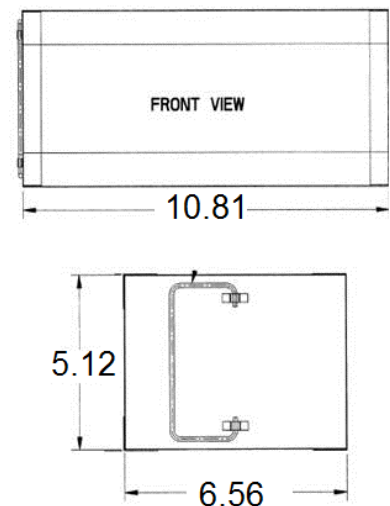
PN 46-912042 -- 4" non-pneumatic, swivel caster with brake  
PN 46-912043 -- 4" non-pneumatic, non-swivel caster

## Accessories

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### Chart MVE Blood Bag Rack (Heart Valve Rack)

Chart manufactures blood bag racks (Heart Valve Rack) for the Cryoshipper. The rack dimensions are 6.56" (16.7cm) L x 5.12" (13cm) W x 10.81" (27.5cm) OAH. The blood bag rack comes standard only with the Cryoshipper. The blood bag rack can be ordered using PN 10524991.





### The New Snap-Fit 5-2 rack (PN 20969812)

Chart manufactures a 5-level rack for 2-inch boxes. The 5-2 rack dimensions are 5.53" (14cm) L x 5.56" (14.1cm) W x 10.83" (27.5cm) OAH. The rack can be used in the Cryoshipper PN 10508967, Cryoshipper XC PN 11015195, MVE1842P-150 Freezer, and the IATA (International Air Transport Association) PN 10777411. However, the 5-2 rack may fit loosely in the Cryoshipper XC and IATA. This rack may be ordered using PN 20969812.

## 2017 Trade Shows

Show	Date	Location
AACR (American Association of Cancer Research)	Apr 1-5	Washington, D.C., USA
ISCT (International Society for Cellular Therapy)	May 3- 6	London, UK
ISBER	May 9- 12	Toronto, ON, Canada

**PLEASE CONSULT THE APPLICABLE PRODUCT INSTRUCTIONS FOR USE FOR PRODUCT INDICATIONS, CONTRAINDICATIONS, WARNINGS, PRECAUTIONS, AND DETAILED SAFETY INFORMATION.**