

Tech Tips

(January 2016)

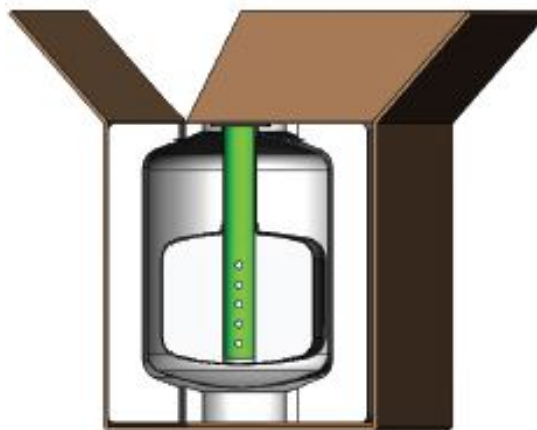
Product Information

MVE CryoCube

Chart is proud to introduce the new CryoCube. The new MVE CryoCube is a secure cryogenic shipping option for your biological samples. In keeping with MVE tradition, the CryoCube incorporates creative engineering and a clean design to allow shipping in any orientation without sacrificing temperature or hold time. Improved welded construction provides the CryoCube with consistent, high quality design with every unit.

Features include:

- Operation as a dry shipper
- -150°C temperature
- 5 day holding time
- Weighs only 10.2 lbs charged
- Can be used for immersion of samples
- Safe shipping in any orientation
- Safe for international shipping; IATA Dangerous Goods Regulations Exempt (Special Provision A152)
- Welded construction
- New Advanced Aerogel QWick Charge
- New foam inserts inside the shipping cardboard carton
- CE Mark





MVE CryoCube™	
Maximum Storage Capacity	
Number of Canisters	1
Number of 1/2 cc Straws in Bulk	88
Number of 1/4 cc Straws in Bulk	182
Number of 1.2 & 2.0 ml vials	6
Performance	
LN2 Capacity (min) L	1.5
Static Holding Time days	5
Unit Dimensions	
Neck Opening in. (mm)	1.4 (35)
Overall Height in. (mm)	12.5 (317.5)
Overall Width in. (mm)	12 (305)
Overall Depth in. (mm)	12 (305)
Inner Canister Height in. (mm)	4.72 (120)
Inner Canister Diameter in. (mm)	1.25 (32)
Weight Empty lb. (kg)	7.5 (3.41)
Weight Charged lb. (kg)	10.2 (4.63)

Fig. 1 - New CryoCube

Obsolete Product: MVE 1223

Chart MVE is the world's leading manufacturer of vacuum insulated products and cryogenic systems. We have a large product line of aluminum Dewars and stainless steel freezers used for the storage and transportation of biological materials at low temperatures. Chart MVE has set the standard for storage of biological materials for more than forty years. During this time, we have strived to continuously improve our products and service. Our continuous improvement efforts have inevitably required us to obsolete products from time to time to make room for products that are more durable, efficient, and user friendly. The MVE 1223 will be obsolete and no longer available. Customers who want to order the MVE 1223 can order the MVE 1426.

Warranty Registration Card


The warranty registration card PN 10468678 will be officially obsolete for all MVE products. Chart no longer needs a warranty registration card as the warranty is registered to the original purchaser when the product is shipped.

New Freezer Checklist

As part of Chart's continuous improvement, we will be replacing our current Freezer Checklist starting January 2016. Most of the items on the new checklist contain previous data from the old checklist. In an attempt to standardize practices, a document was created which is similar to a "Declaration," an official regulatory-controlled document meant for customers and certifications for customs.

In addition, the TEC3000 Manual, will be updated to show the MVE Checklist.

Below is the new checklist for reference.



Date: _____

Chart Inc.
BioMedical Group
2200 Airport Industrial Drive Suite 500
Ball Ground, GA 30107 USA

Telephone 770-721-7700
www.chartindustries.com

CERTIFICATE OF QUALITY

This is to certify that the following Chart MVE BioMedical products:

Order Number	Item Number	Description	Serial Number	Qty

are designed and manufactured in accordance with Chart BioMedical product specifications which include, but are not limited to:

- All basic assembly components aligned properly per assembly drawings
- Plumbing components leak tested
- Liquid level control/monitoring system fully function tested after final assembly (if applicable)
- Labels affixed in proper locations
- Warning/caution tags affixed for your safety
- Surface finish visually inspected for scratches and defects
- Cold shocked to verify the integrity of the welds and materials
- Meets NER testing requirements

Chart BioMedical manufacturing operations are in conformance with ISO 9001:2008 – Quality Management Systems and ISO 13485:2012 - Quality Management System for Medical Devices and with Council Directive 93/42/EEC, Medical Devices including applicable amendments and standards.

Signature _____ Name and Title (Print) _____ Date (DD-MM-YYYY) _____

Fig. 2 - MVE Checklist

Helpful Hints/FAQ's

Q: My TEC Connect is downloading the csv. file instead of the excel file which includes a graph, is there anything I can do you alleviate this?

A: TEC Connect checks to see which version of MS Office is installed on the computer. If you open Excel and click File -> Help, the following information should be displayed on the screen on the right hand side.

About Microsoft Excel

Version: 14.0.7159.5000 (32-bit)

Fig. 3 - Excel Version example

TEC Connect checks to see if version 12, 14 or 15 (number before decimal place) is installed before allowing an Excel download. If any of these versions aren't found, then it will default to a CSV file without the option of an Excel spreadsheet.

Additionally, if the correct version is installed, then run TEC Connect and click Browse to check the file location. Click the drop down next to file type to verify whether the option for an Excel file is there or not.

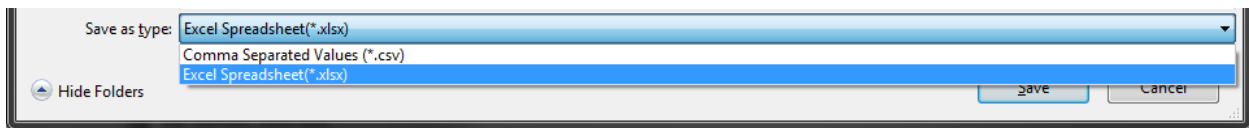


Fig. 4 - TEC Connect example

If issues still persist, it is recommended to update and restart your computer.

Q: We just received a new freezer. How do you install the temperature probes?

A: Locate the temperature sensor tube assembly that will house the two temperature probes. For HE, HEco, and some Stock Series freezers, a three-tube temperature sensor assembly will be installed in the center of the top of the freezer. The two smaller tubes are designed to house the included temperature probes. The third, larger tube is designed to accommodate a third-party temperature probe. A silicone plug will be installed in this third tube. If the third tube is going to be used, simply remove the silicone plug. For the MVE Series (all open top freezers), a dual sensor tube will be installed along the inside wall of the freezer storage space. *The MVE CryoSystem 6000 temperature probes are inserted into the neck area.*

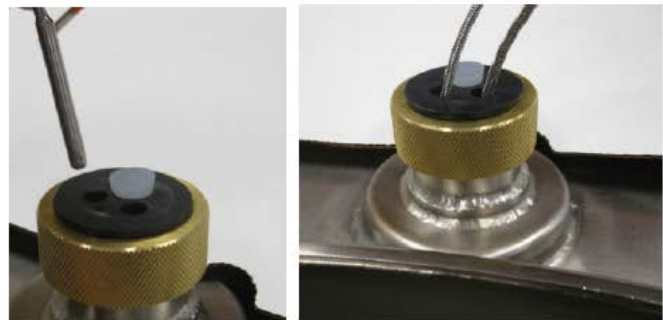
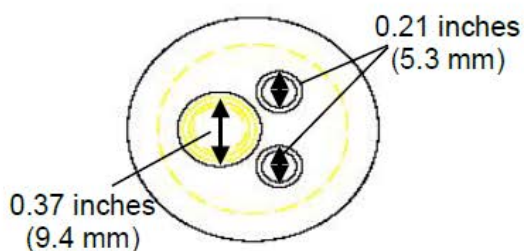


Fig. 5- Temp Probe Installation

Insert the two temperature probes into the sensor tubes and position the sensors at the preferred height in the freezer space. Selecting probe A and B as well as the sensor placement is adjustable and completely up to the user. MVE does recommend placing sensor (Temp A) at the "top box" level. This refers to the level in the freezer space where the highest sample is being stored. If storing vials in boxes, then this would be at the level with the top box. This is recommended as it will be the warmest temperature experience by samples being stored in the freezer space.

Connect the temperature probes to the TEC3000 temperature ports using the twist lock connectors.



Fig. 6 - Temp Probe Installation on TEC3000

Once the temperature probes are in the desired position, apply a small amount of the silicone sealant, included with the freezer, surrounding the temperature probes where they enter the sensor tubes. This will help maintain their position and help keep moisture from entering the freezer storage space.

For further information please review the [TEC3000 Manual](#) located in the Life Sciences Knowledge Center section on www.chartbiomed.com

Accessories

TEC COM Kit

Fig. 7 - TEC Connect Kit

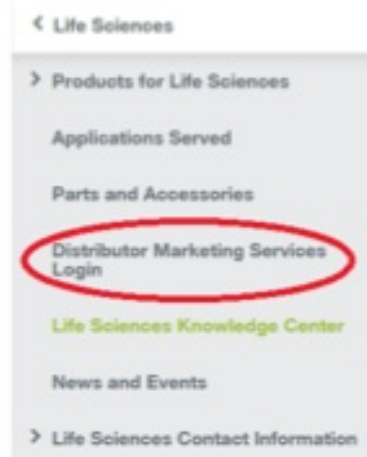
PN: 13376947 USB Converter Kit USB to RS-485 includes:
- Converter
- RJ45 cable



TEC3000 Interface Software

The TEC Connect software is located under the Distributor Marketing Services page. A link to this page is available directly from the Life Sciences Knowledge Center page in the sidebar on the left of the page.

Fig. 8 - Navigation Sidebar



The TEC Connect Software and the drivers for configuring the TEC COM kit are located on this page. The TEC3000 Firmware Updater program can be downloaded after entering a valid username and password.



Fig. 9 - Distributor Access Page

If you require a username and password for this site, please submit a request to MVerequest@chartindustries.com with your name and company information.

A valid username and password will be required to access the Firmware Updater software.