



Innovation. Experience. Performance.™

# MVE TECH TIPS



*MVE Tech Tips November 2005*

## PROTECTIVE SHIPPING CARTONS

Chart/MVE has introduced two larger plastic shipping containers. They are basically the same size with different foam configurations.

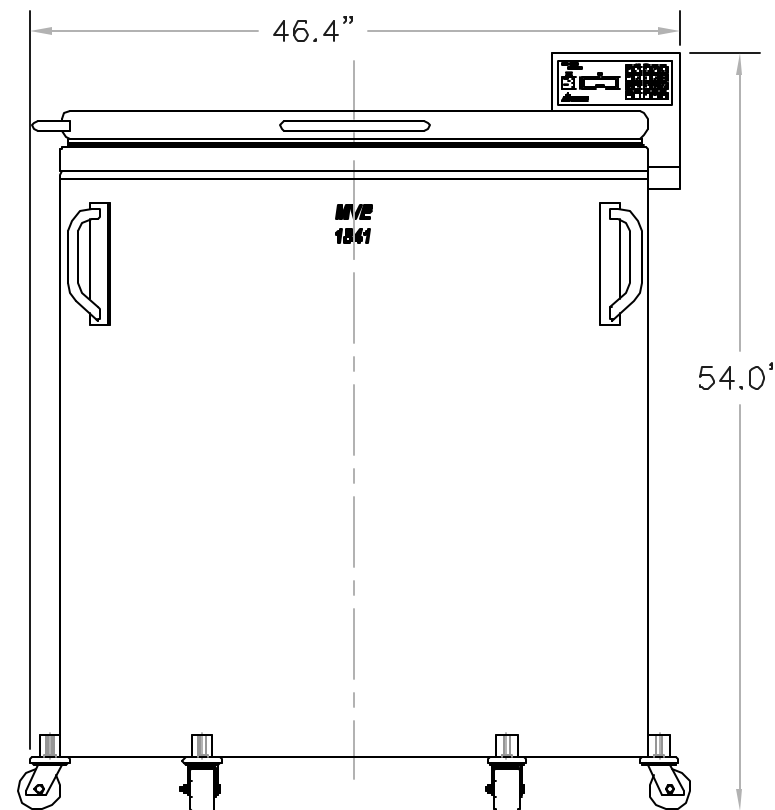
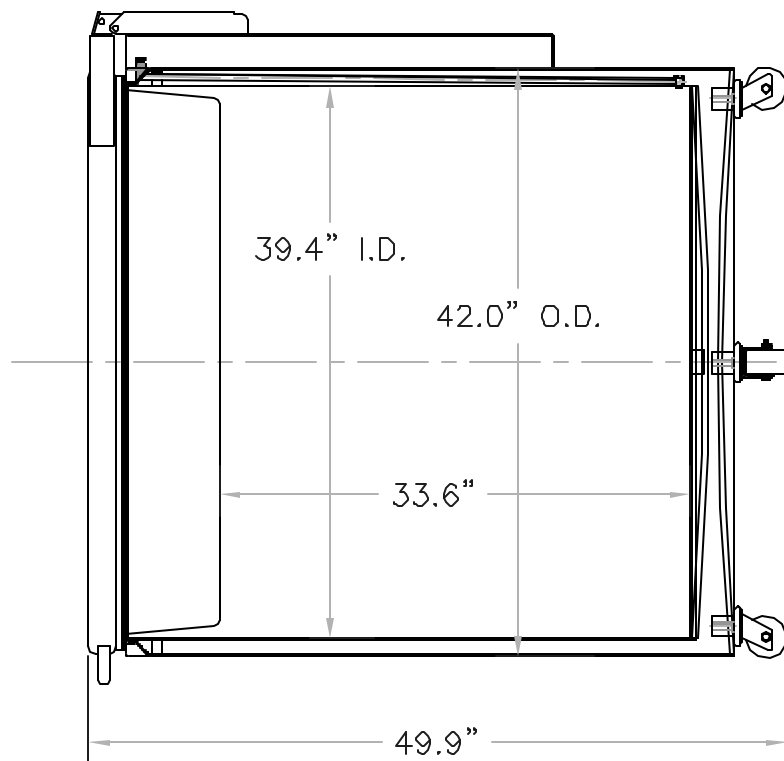
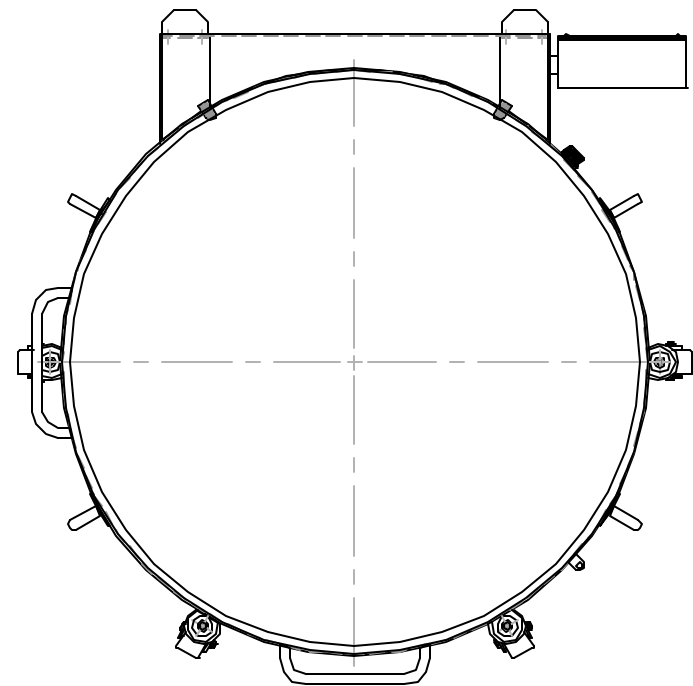
PART NUMBER 13027544 is the carton assembly X-large with thin foam. This is used for the CryoSystem 2000 with flat bottom.

PART NUMBER 13027552 is the carton assembly X-large with thick foam to be used with the XC 47/11 and DOBLE 47. Each of these lists at \$430.00.

CARTON TO FIT MODELS	PART NUMBER	LIST
SC4/2V, SC4/3V, SC2/1V, Mini-moover	9719449	\$270.00
SC22/5	9722149	\$271.00
SC11/7, DOBLE 11	11925105	\$271.00
CryoShipper, XC20/3V, Cryo-moover, up to 27"H X 19" diameter	10537506	\$316.00
DOBLE 20	11912460	\$370.00
Cryosystem 2000 with flat inner bottom	13027544	\$430.00
XC 47/11 & DOBLE 47 up to 26" OD	13027552	\$430.00
DOBLE 28	11930861	\$430.00

## MODELS OBSOLETE

In other news, the MVE 1841 and XLC-1200's are now obsolete and can no longer be ordered. The replacement for the MVE 1841 is the MVE 1841 GEN2. There is no replacement available for the XLC 1200, however the MVE 1211 offers the same specifications without a cabinet.



**SPECIFICATIONS**

LN2 CAPACITY \_\_\_\_\_ 612 LITERS  
 STATIC HOLDING TIME \_\_\_\_\_ 54.6 DAYS  
 STATIC EVAPORATION RATE \_\_\_\_\_ 11 LITERS/DAY

**CONTAINER DIMENSIONS**

NECK OPENING \_\_\_\_\_ 39.4 in./1001 mm  
 OVERALL HEIGHT \_\_\_\_\_ 49.9 in./1267 mm  
 OUTSIDE DIAMETER \_\_\_\_\_ 42 in./1067 mm  
 USABLE/WORKING HEIGHT \_\_\_\_\_ 33.6 in./853 mm  
 INTERNAL DIAMETER \_\_\_\_\_ 39.4 in./1001 mm  
 WEIGHT EMPTY \_\_\_\_\_ 750 lbs./341 kg  
 WEIGHT FULL \_\_\_\_\_ 1841 lbs./837 kg

**STORAGE WORKING CAPACITY**

1/2 cc STRAWS (10/CANE) \_\_\_\_\_ 49,600  
 1/2 cc STRAWS (1 LEVEL BULK.) \_\_\_\_\_ 19,200  
 1.2 AND 2.0 ml PLASTIC VIALS ON CANES \_\_\_\_\_ 26,880  
 SUC-1 CANISTER (2.5" X 2.5" X 11") \_\_\_\_\_ 160  
 INVENTORY RACKS \_\_\_\_\_ 28  
 1.2 & 2.0 ml AMPULES IN RACKS \_\_\_\_\_ 39,000

APP'VD	DATE				
DRAWN BY JSB	6/29/05	MVE 1841 GEN2			
CHECKED BY		USED ON	205,875		
PROJ.ENGR.		APPLICATION	ORIGINAL ECR/ER		
A		JRH	206,617	ADDED TEC2000	JSB 7/15/05
REV	APPV	ECR	REVISION	DESCRIPTION	BY DATE
THE MATERIALS AND INFORMATION, INCLUDING THE PRINCIPLES OF DESIGN PRESENTED BY THIS PRINT, IS THE EXCLUSIVE PROPERTY OF MINNESOTA VALLEY ENGINEERING, AND IS CONFIDENTIAL INFORMATION. ACCORDINGLY, THIS INFORMATION IS SUBMITTED TO YOU WITH THE AGREEMENT THAT IT IS NOT TO BE REPRODUCED, COPIED, OR LOANED, IN PART OR IN WHOLE, NOR IS THE INFORMATION TO BE RELAYED TO ANY COMPANY. ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THE ABOVE.		MAT'L		FINISH P/N 11922351	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS ± 1/16" ANGLES ± 1° 2 PLACE DECIMAL ± .031 3 PLACE DECIMAL ± .015		TITLE: SPEC DWG MVE 1841 GEN2		DRAWING NO. B-11922351 REV: A	
SCALE: 1/13=1		DO NOT SCALE DRAWING		SHEET: 1 of 1	

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SCALE: 1/13=1		DO NOT SCALE DRAWING		SHEET: 1 of 1	

# DESIGNATES A NOTE REFERENCE.

## LIQUID USAGE CALCULATION

A customer was concerned that his 1520 Eterne units were not registering a liquid usage calculation and that his controllers must be faulty.

In reality, his freezers were consuming liquid nitrogen at a rate too low for the TEC2000 to calculate. In house testing has shown that a 1520HE/Eterne with a 2" interval between low and high fill settings would operate for 5 to 6 days between fills. That equates to a usage value between .3"/day and .4"/day. Because the TEC2000 looks for at least a .5" change in level to calculate a liquid usage value, any value below this will result in a displayed usage value of 0.0"

## GASKETS

How are the gaskets attached on MVE vessels?

This is a question that is frequently asked by many of our distributors. The gaskets on the 500 and 1200 freezers (square corner cabinets) are secured by a gray PVC panel. The PVC panel slides under the perimeter flanges of the metal lid. It has a hole in the center that the white liner fits through. The liner has a flange that is larger than the hole in the PVC panel to prevent it from falling through. The gasket fits around the inside circumference of the hole in the PVC panel. It has a base flange that is sandwiched between the PVC panel and the liner flange.

The old 500 and 1200 freezers with rounded corners have a gasket that is secured with adhesive mounting tape.

The 600 and 1400 cabinet freezers have a gasket with a flange that is sandwiched between the liner and the flanges of the metal lid around the perimeter, where the liner meets the metal lid. There are 2 or 3 rivets along the flange at the front edge of the lid to prevent that edge of the gasket from coming out due to gravity when the lid is open. There is sufficient pressure from the fit of the lid cork panels and liner to hold the gasket in place on the other three sides.

The 511/1211/611/1411/1841 gaskets are held in place by the rivets that secure the cork plate or liner to the lid.

The 810 stock series, 230 GEN2, 1830 and 1830HE gaskets come from the vendor as a trim strip with a tubular gasket molded in on one side. The trim strip presses on the OD of the lid cover.

The 810HE/1520HE gasket is an adhesive baked neoprene foam tape applied to the underside of the lid. The 1370 stock series freezer, 230 GEN1 and 140 do not have a gasket

### BIO-MEDICAL CUSTOMER AND TECHNICAL SERVICE

Customer Service	800 482-2473	toll free	
	770 257-1299	Marietta receptionist	
	888 932-2473	toll free fax	
	770 257-1300	fax	

### Technical Service

952 758-8411	direct	<b>NOTE new number</b>
612 382-6678	cell	
952 758-8503	fax	<b>NOTE new number</b>