



New Bio Medical Customer Service

Chart Industries Bio Medical division has three new domestic customer service people. They would not stay still long enough to get a photo shoot of them so you will just have to go to Marietta and introduce yourself to them.

Jennifer Brewer, Wendy Cooke, and Nicole Curtis are responsible for the entire U.S. and Canada. The toll free number for customer service is 800 482-2473 or 770 257- 1299. Jennifer, Wendy, or Nicole will be happy to answer any questions you might have.

In addition to the three domestic customer service representatives we have added two international customer service representatives. Heidi Parker will handle Central and South America. Rachelle Pierce will cover all of Asia and Australia.

Changes to the 1400 and 1411

The 1400/1411 has been revised to use 4 of the 3" casters instead of 8 of the 2" casters. This will make the freezer easier to move. The change increases the overall height of the freezers by 1". This applies to all vertical dimensions relative to the floor, including lift over height.

Attachment

C-11561479-A

C-11655387-B

C-11778571-A

Other design changes to the 1400 and 600 models will include "vapor packs". These are temperature reduction sleeves that are suspended from the top or hanging sleeves. The vapor pack includes the suspended temperature reduction sleeve and the vapor platform. The part number for the 1400/1411 is 11913243. The part number for the 600/611 pack is 11913235. These are optional and must be ordered separately from the freezer.

Power supply change

As published at the beginning of the year the power supply normally supplied by MDC has been changed over to the Jerome transformer. As the MDC supply gradually gets replaced, the change out to Jerome is relatively painless. You will need to remember this part number to complete the switch out. The upgrade kit is part number 11943012 for non-cabinet, 110 Volt freezers, and part number 11929886 for 230 Volt models. This consists of the power supply, the bracket for the smaller power supply, the bracket for mounting the power supply to existing screw hole footprint, and the power supply cord. Please use this number when ordering a replacement power supply. 110 Volt cabinet models will continue to use the current power supply, part number 10805363.

Shipping containers

Dimensions of plastic shipping containers

Description	Model	Useable Ht.	ID.	OAH.	Base OD.
Used with SC2/1,SC4/3V, SC4/2V, mini-moover	9719449	Up to 20"	12.3"	22.75"	15"
Used with SC11/7, SC22/5, Doble 11	9922149	Up to 22.5"	15.1"	23.67"	18.08"
Used with Cryoshipper	10537506	Up to 23.5"	15.1"	24.67"	18.08"
Used with Cryoshipper XC, SC 22/5, XC20/3V	10741726	Up to 24.5"	19.25"	26.5"	22"
Used with Cryoshipper mini	11358817	Up to 23.5"	15.1"	24.67"	18.08"
Used with Doble 20	11912460	Up to 24.5"	19.25"	26.5"	22"

Although some have the same dimensions there is different variety and number of foam pads in each.

Questions and Answer

Q: *Is the Cryosystem 6000 F available in 240Volt?*

A: The power supply used on the controller for the FA 6000 is a switching power supply that will accept input voltages from 90-264 VAC. It has the cord inlet that will accept the IEC 320 cord configuration. The distributor in Asia or Europe can simply purchase a cord at a computer store to supply with the unit. If it happens to be going to Japan, the standard domestic US cord that comes with it should plug into the Japanese wall outlet.

Q: *There are 3 terminals on the lid switch but only 2 wires running to it. Which are they to be connected to?*

A: We only use two wires. The switch has three terminals. It is a double throw switch. The technician needs to look on the side of the switch and look for the "COM" and "NO" labels for the terminals. The wires should connect to these two terminals. It does not really matter which wire goes to which one, as long as it is the COM and NO terminals.

Q: *A customer in Germany needs to download the data on the TEC-2000 using a Mac computer. The software we normally use does not work of course, since it is for Windows. Do we have something similar for Mac?*

A: We do not have a software application for the MAC. I am not aware of an emulator to make what we have work with a Mac. My guess is that whoever is using a Mac to communicate with a TEC-2000 wrote their own software to do it with.

Q: *Is it possible to buy a parallel/serial port adapter so that a customer can use a normal printer to print the data from the TEC-2000 or do they need to buy a serial printer?*

A: Physical connection adaptor is available to allow you to plug the serial cable (DB25) into a parallel port on a printer. The ones that I have seen are fairly inexpensive. You could go to a computer supply store and pick up one and try it. If, by "normal" printer, you mean a laser or inkjet printer, keep in mind that these printers would only print one data line per page when connected to the TEC2000. A dot matrix printer is recommended since these can print one line at a time without ejecting the page, allowing more efficient use of paper.

New Address

The new Burnsville office address is:
1401 W. Southcross Drive
Suite 300
Burnsville, Mn. 55337
Main phone # 952 882-5000

AI Customer Service 952-882-5230
Burnsville, MN 800-683-1387
 952-882-5172 Fax

Technical Services 866-819-5897
Burnsville, MN 952-641-6115
 952-882-5172 Fax
 612-382-6678 Cell

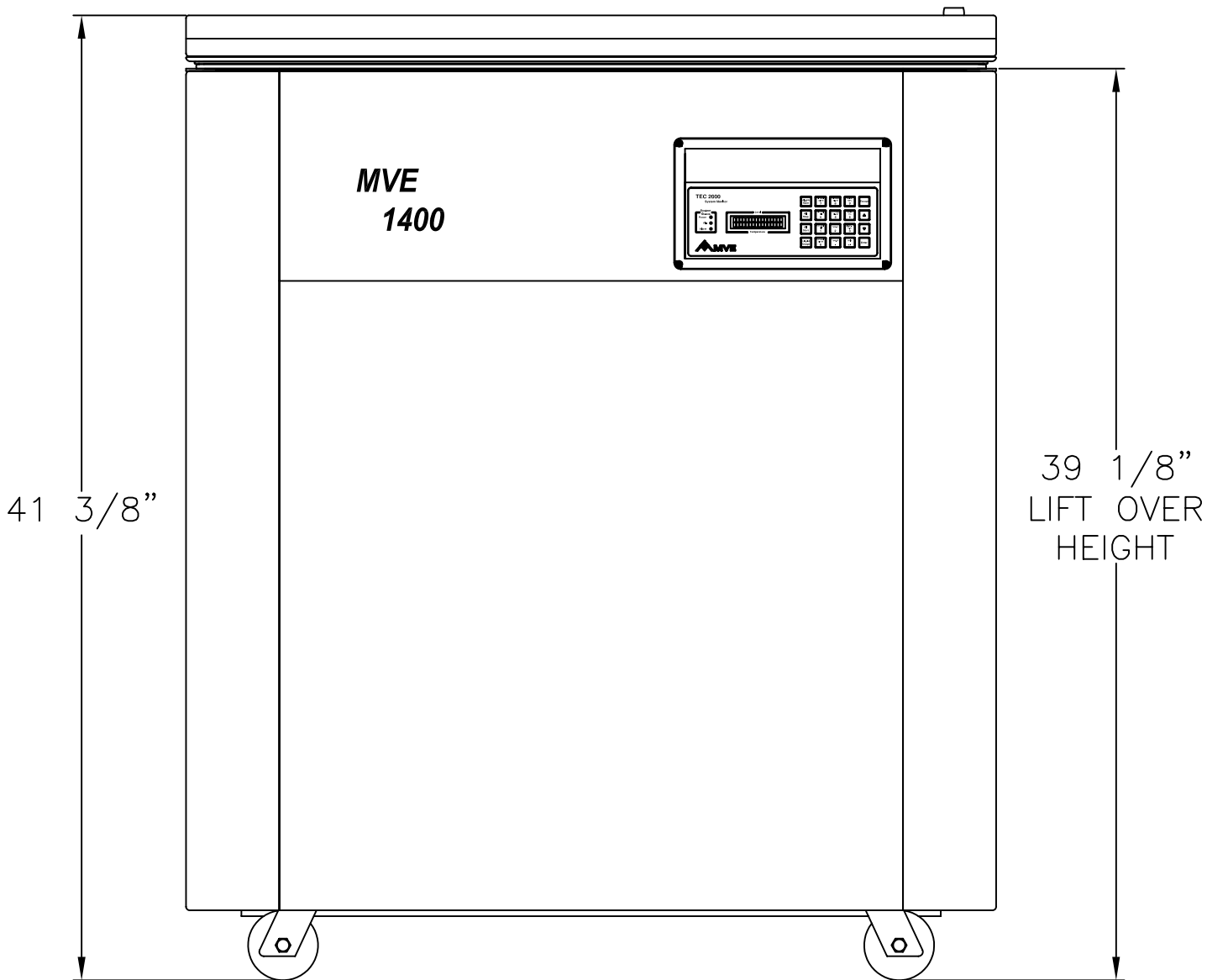
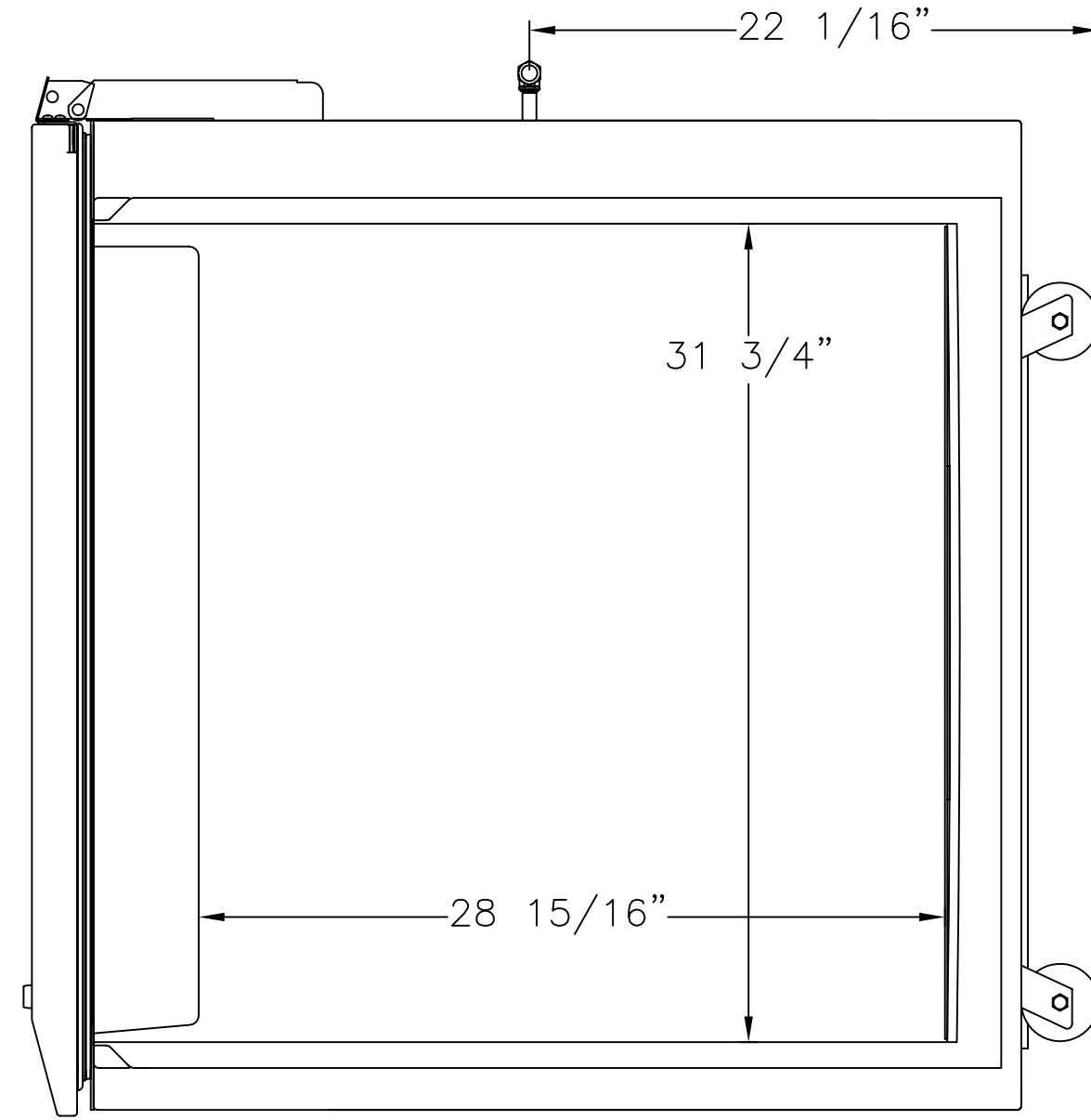
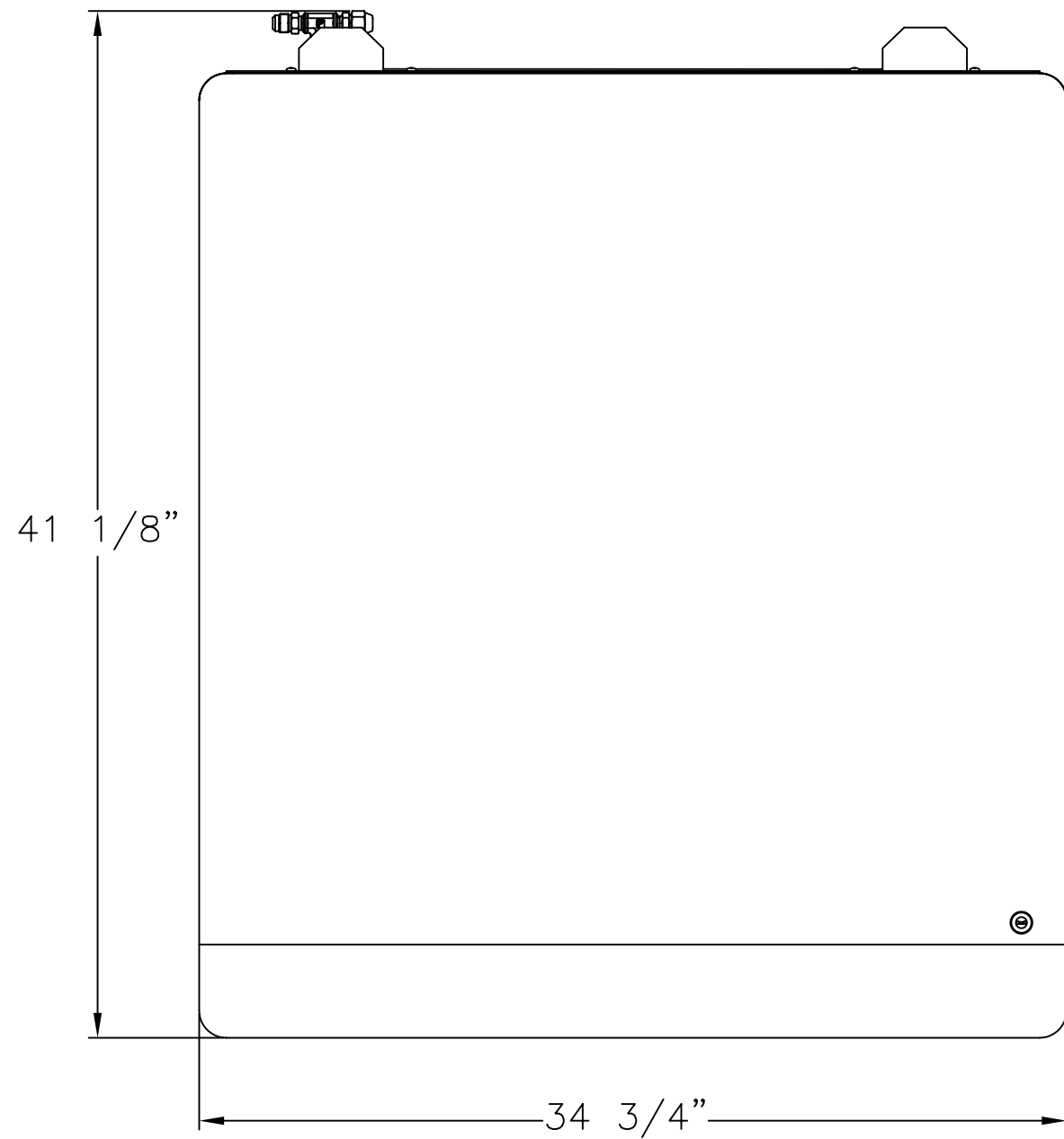
Marietta Office

1800 Sandy Plains Industrial Pkwy
Ste 316
Marietta, GA 30066
Main phone # 770-425-4470

Bio-Medical Customer Service and Technical Service

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

For copies of past Tech Tips or for more information on maintaining your nitrogen storage dewars please contact Jim Bachman at (952) 641-6115



MAXIMUM STORAGE CAPACITY	
1.2 & 2.0 ML VIALS IN RACKS	26,650
QTY OF 13-2 STANDARD RACKS (100 VIAL)	18
QTY OF 13-2 MINI RACKS (25 VIAL)	10
TOTAL QTY OF 13-2 RACKS	28

PERFORMANCE	
LN2 CAPACITY, LIQUID STORAGE	375 LITERS
STATIC EVAPORATION RATE	10 LITERS/DAY
HOLD TIME THEORETICAL, LIQUID STORAGE	37 DAYS
LN2 CAPACITY, VAPOR STORAGE	78 LITERS
HOLD TIME THEORETICAL, VAPOR STORAGE	7 DAYS

UNIT DIMENSIONS	
NECK OPENING	31.75in.-958mm
INTERNAL DIAMETER	31.75in.-958mm
USABLE HEIGHT	28.9in.-735mm
OVERALL HEIGHT	41.38in.-1051mm
LIFTOVER HEIGHT	39.13in.-994mm
OUTSIDE DIMENSIONS	34.75x41.13in.-882x1044mm
WEIGHT, EMPTY	530lb-240kg (ESTIMATED)
WEIGHT, FULL (LN2 ONLY EXCLUDING INVENTORY)	1198lb-543kg (ESTIMATED)

APP'VD	DATE			
DRAWN BY JSB	10/30/01	MVE 1400		
CHECKED BY		USED ON	203717	
PROJ.ENGR JSB	10/30/01	APPLICATION	ORIGINAL ECR/ER	

A	JB	206,154	REVISED CASTERS AND CHANGED LOCATIONS/ UPDATED DIMENSIONS	GMM	2/15/05
REV	APPV	ECR	REVISION DESCRIPTION	BY	DATE

CHART INDUSTRIES, INC. CANTON, GEORGIA 30114	
TITLE: MVE 1400 SPECIFICATION DWG	
DRAWING NO. C-11561479	REV: A
SCALE: NA	DO NOT SCALE DRAWING
SHEET: 1 OF 1	

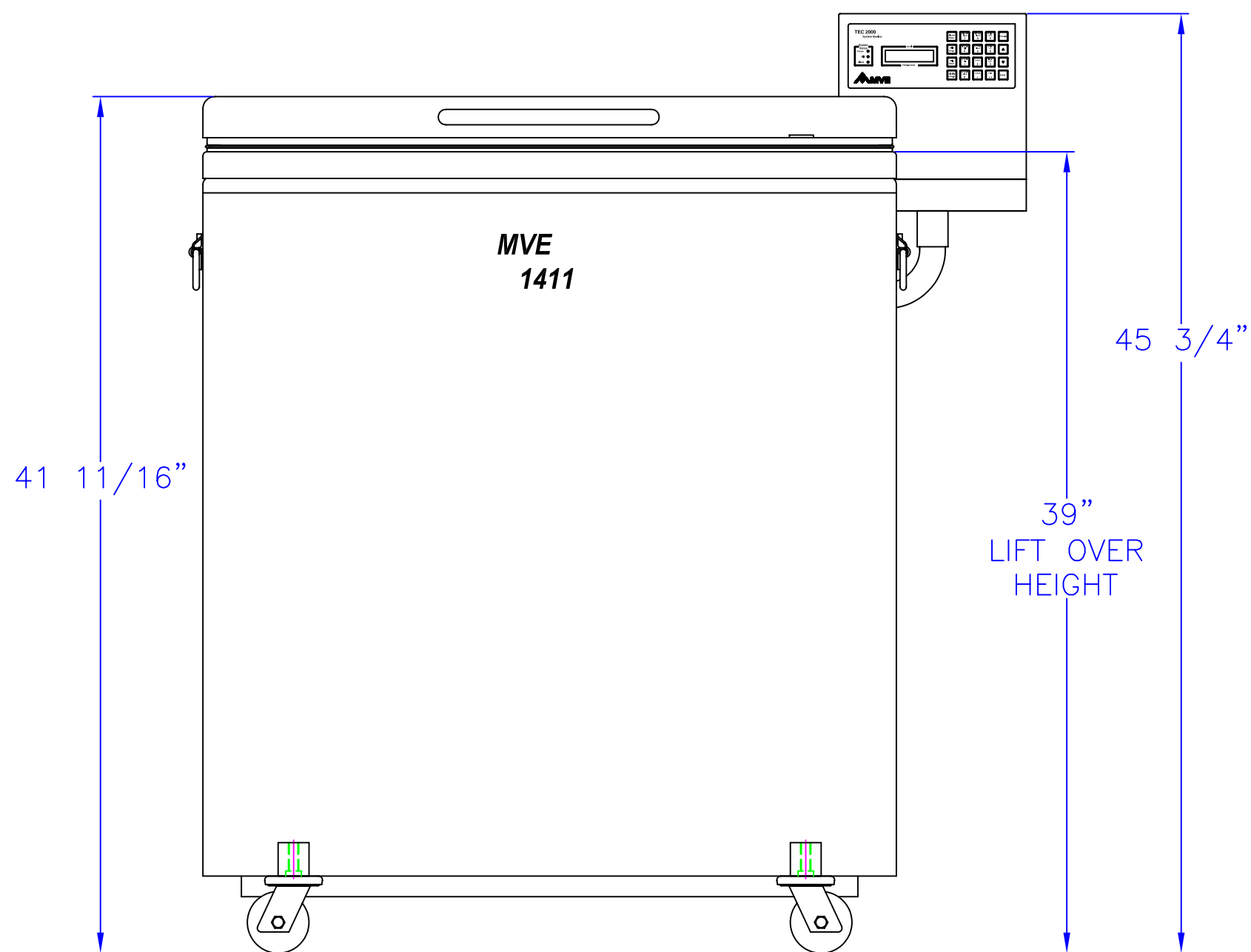
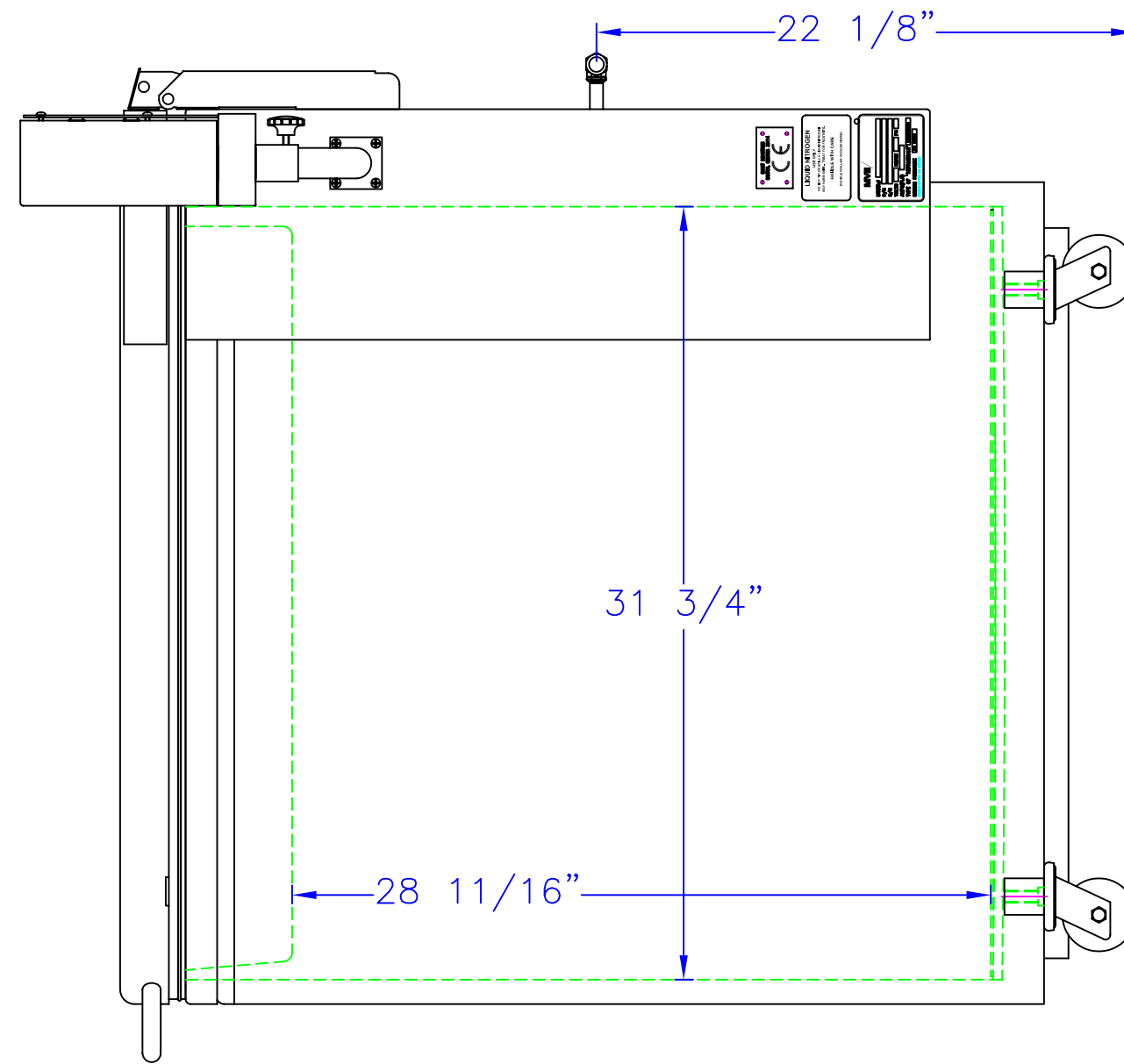
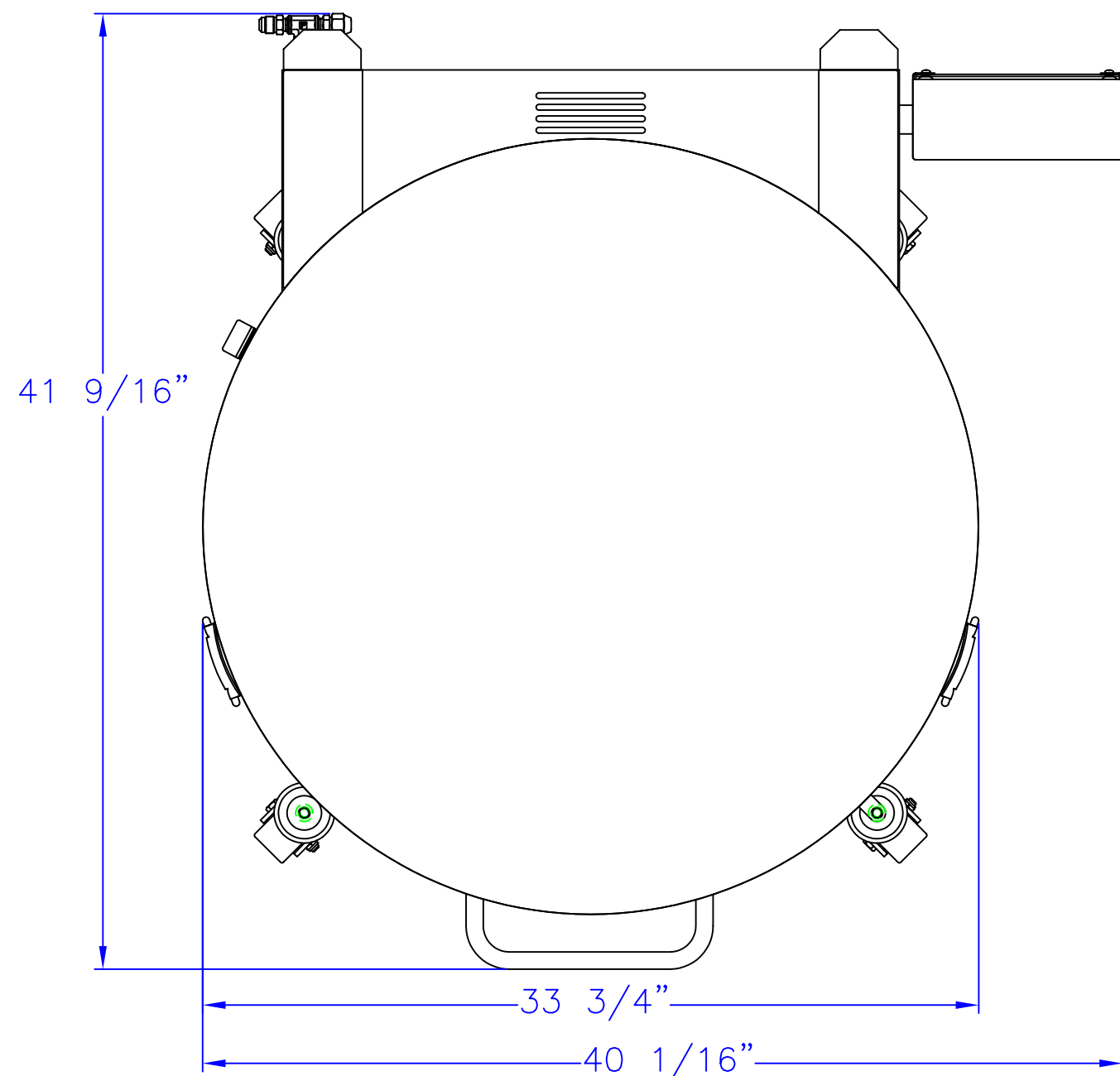
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MAT'L

FINISH P/N
11561479

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
TOLERANCES:
FRACTIONS ± 1/16"
2 PLACE DECIMAL ± .031
3 PLACE DECIMAL ± .015

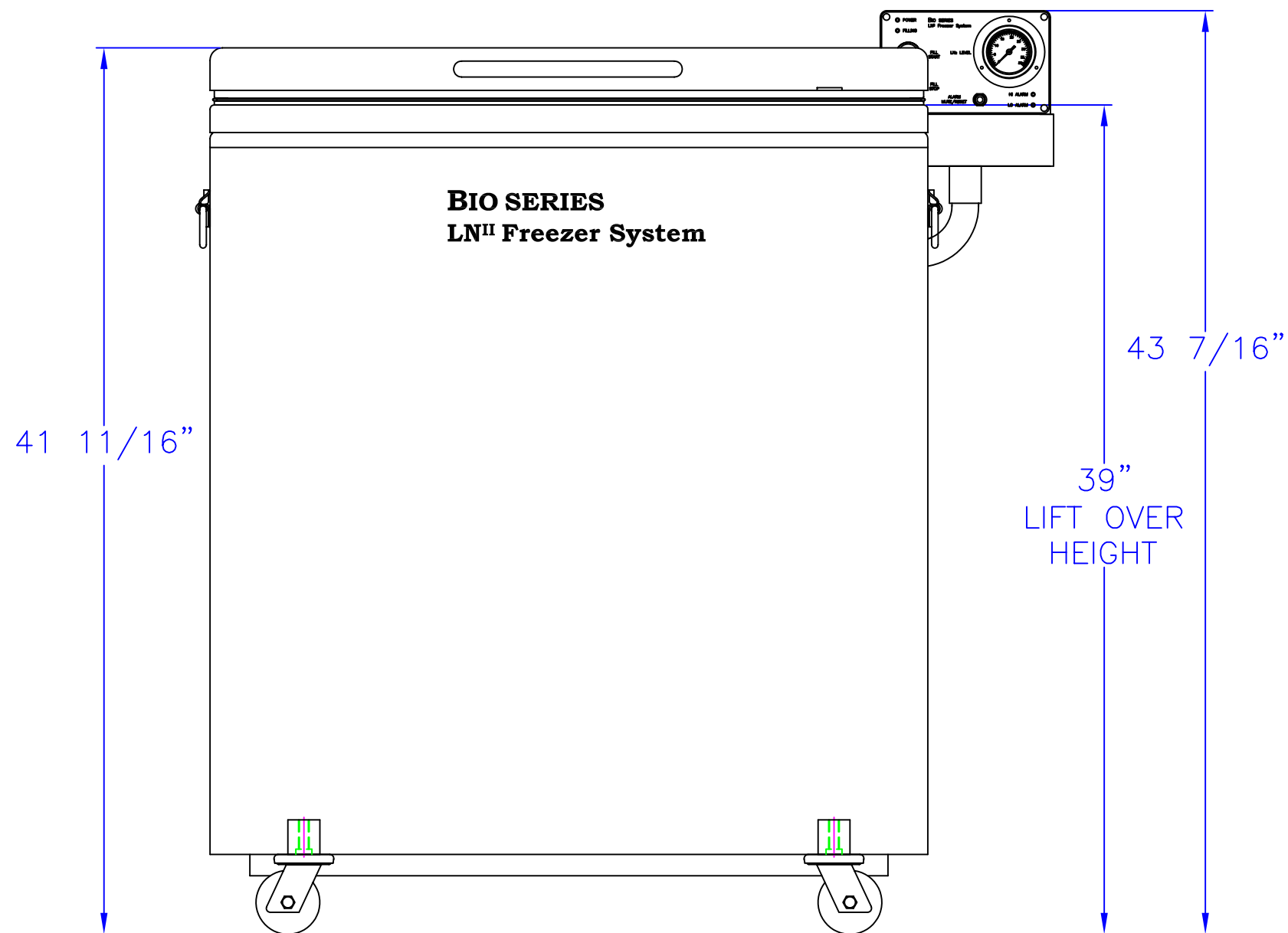
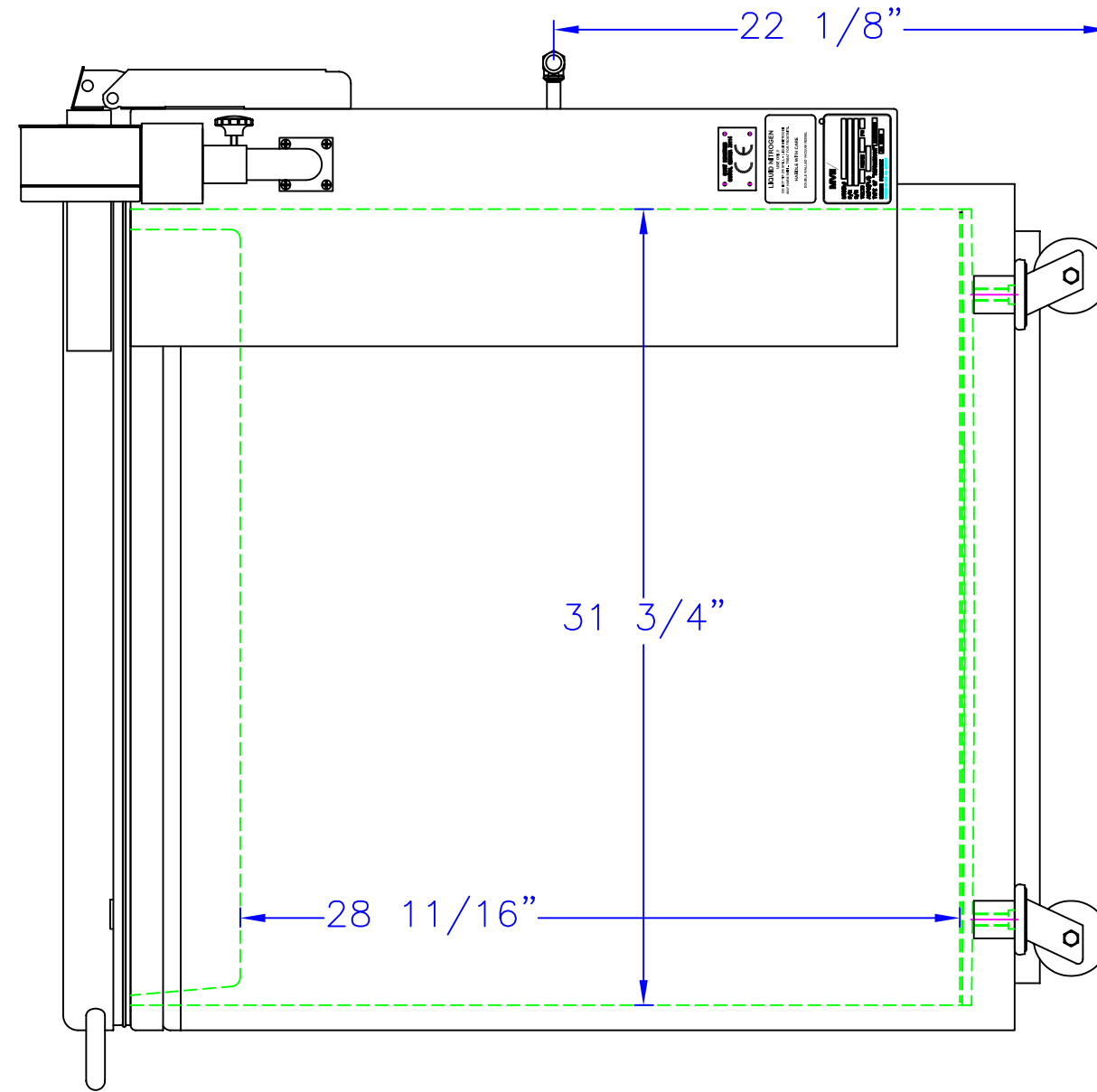
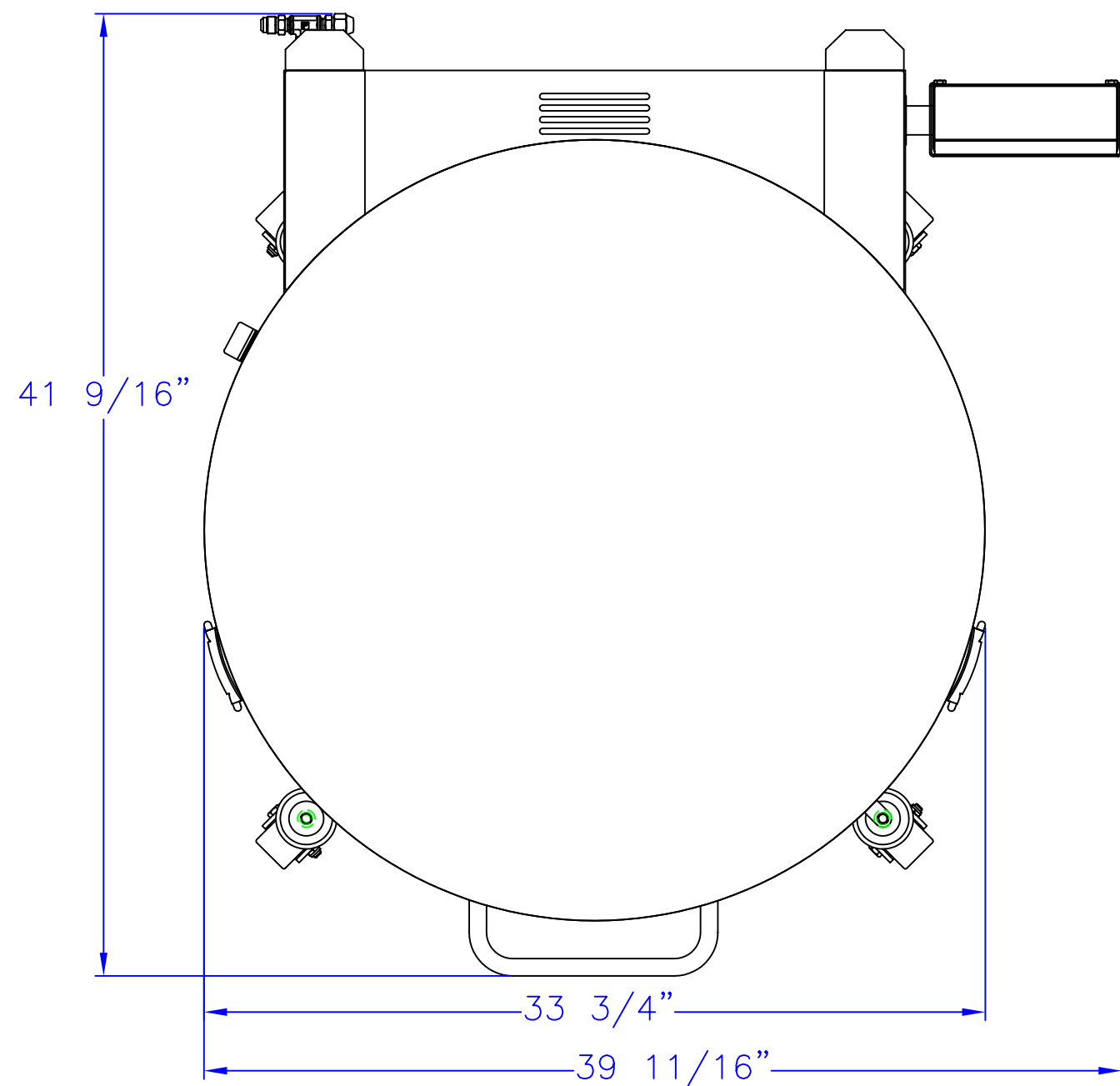


MAXIMUM STORAGE CAPACITY	
1.2 & 2.0 ML VIALS IN RACKS	26,650
QTY OF 13-2 STANDARD RACKS (100 VIAL)	18
QTY OF 13-2 MINI RACKS (25 VIAL)	10
TOTAL QTY OF 13-2 RACKS	28

PERFORMANCE	
LN2 CAPACITY, LIQUID STORAGE	375 LITERS
STATIC EVAPORATION RATE	10 LITERS/DAY
HOLD TIME THEORETICAL, LIQUID STORAGE	37 DAYS
LN2 CAPACITY, VAPOR STORAGE	78 LITERS
HOLD TIME THEORETICAL, VAPOR STORAGE	7 DAYS

UNIT DIMENSIONS	
NECK OPENING	31.75in.-958mm
INTERNAL DIAMETER	31.75in.-958mm
USABLE HEIGHT	28.7in.-729mm
OVERALL HEIGHT (TOP OF LID)	41.69in.-1058.9mm
OVERALL HEIGHT (TOP OF CONTROLLER)	45.75in.-1162.1mm
LIFTOVER HEIGHT	39in.-990.6mm
OUTSIDE DIMENSIONS (BASIC UNIT)	33.75x41.56in.-857x1056mm
OUTSIDE DIMENSIONS (AUTOFILL UNIT)	40.06x41.56in.-1018x1056mm
WEIGHT, EMPTY	530lb-240kg (ESTIMATED)
WEIGHT, FULL (LN2 ONLY EXCLUDING INVENTORY)	1198lb-543kg (ESTIMATED)

APP'VD		DATE		MVE 1411			
DRAWN BY JSB		11/12/01		USED ON		203717	
CHECKED BY		11/12/01		APPLICATION		ORIGINAL ECR/ER	
B	JB	206,154	REVISED CASTERS/ UPDATED DIMENSIONS AND TABLE	GMM	2/15/05		
A	JSB	204893	REVISED/CORRECTED UNIT DIMS	JSB	10/30/02		
REV	APPV	ECR	REVISION DESCRIPTION	BY	DATE		
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				FINISH P/N 11655387		<p>CHART CHART INDUSTRIES, INC. CANTON, GEORGIA 30114</p>	
						<p>TITLE: MVE 1411 SPECIFICATION DWG</p>	
						<p>DRAWING NO. C-1165387 REV: B</p>	
				SCALE: NA		<p>DO NOT SCALE DRAWING SHEET: 1 OF 1</p>	



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OVERALL HEIGHT (TOP OF CONTROLLER)	43.43in.-1103.3mm
LIFTOVER HEIGHT	39in.-990.6mm
OUTSIDE DIMENSIONS (BASIC UNIT)	33.75x41.56in.-857x1056mm
OUTSIDE DIMENSIONS (AUTOFILL UNIT)	39.69x41.56in.-1008x1056mm
WEIGHT, EMPTY	530lb-240kg (ESTIMATED)
WEIGHT, FULL (LN2 ONLY EXCLUDING INVENTORY)	1198lb-543kg (ESTIMATED)

APP'VD	DATE			
DRAWN BY JSB	10/29/02	BIO IV G2		
CHECKED BY		USED ON	204893	
PROJ ENGR JSB	10/30/02	APPLICATION	ORIGINAL ECR/ER	

REV	APPV	ECR	REVISION DESCRIPTION	BY	DATE
A	JB	206,154	REVISED CASTERS/ UPDATED DIMENSIONS/ REVISED TABLE	GMM	2/15/05

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MAT'L
NA

FINISH P/N
11778571

CHART CHART INDUSTRIES, INC.
CANTON, GEORGIA 30114

TITLE: **BIO IV GEN 2 SPECIFICATION DWG**

DRAWING NO. **C-11778571** REV: **A**

SCALE: NA DO NOT SCALE DRAWING SHEET: 1 OF 1