

MVE Tech Tips

A monthly publication for the MVE Biological Products Distributors

March 2005

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 adaptor 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

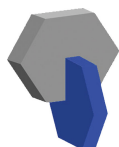
Marietta, GA 30066

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

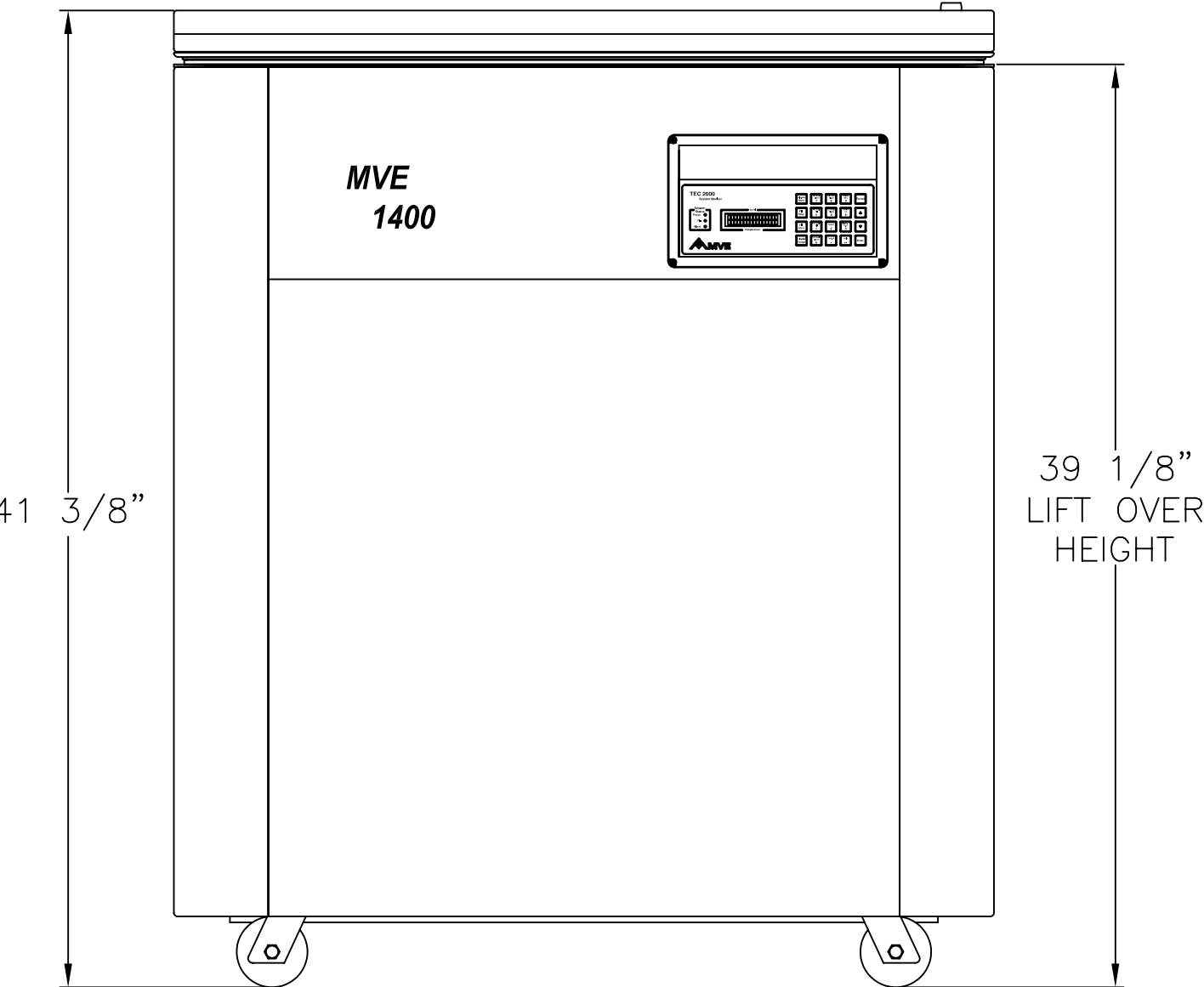
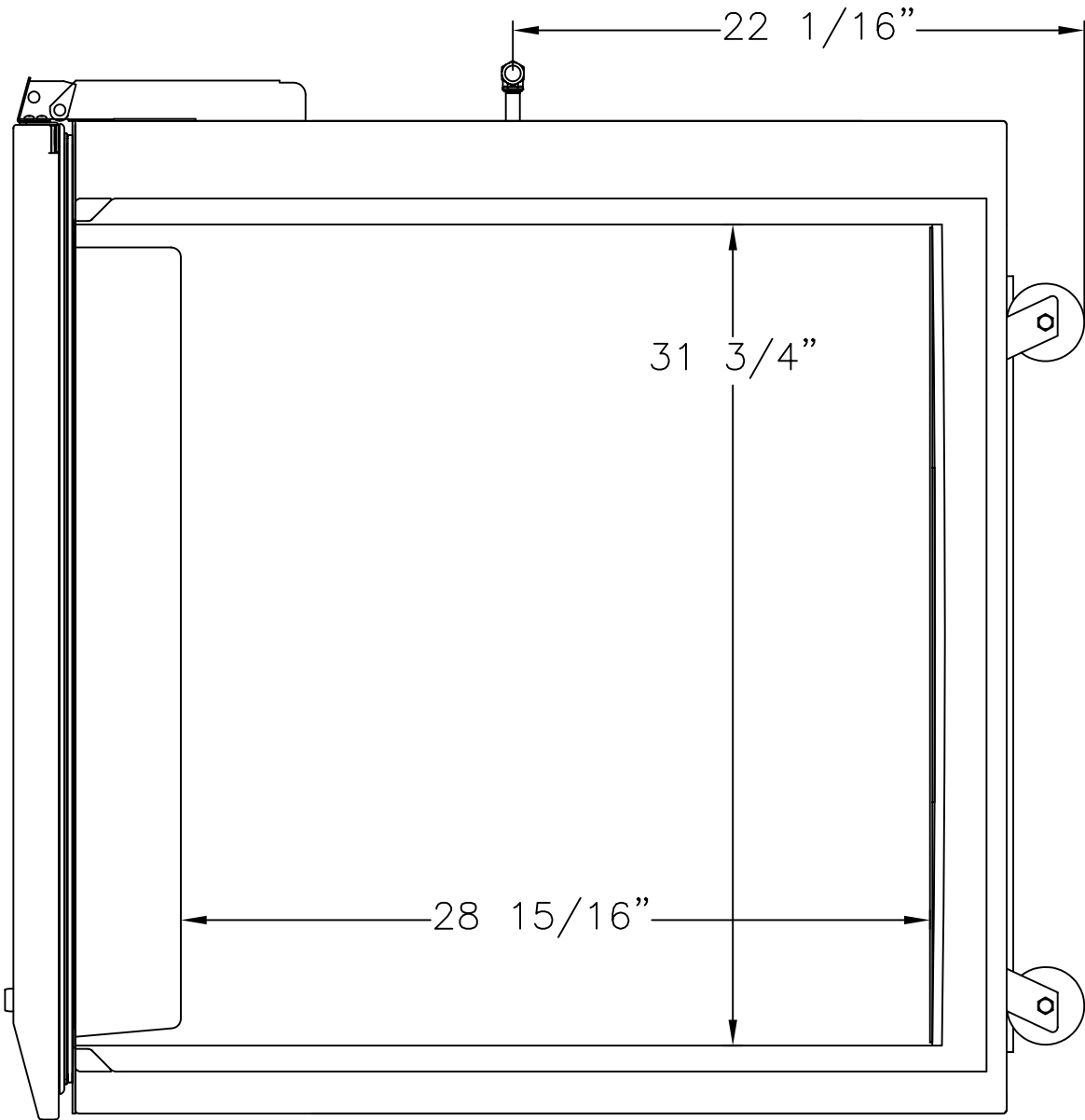
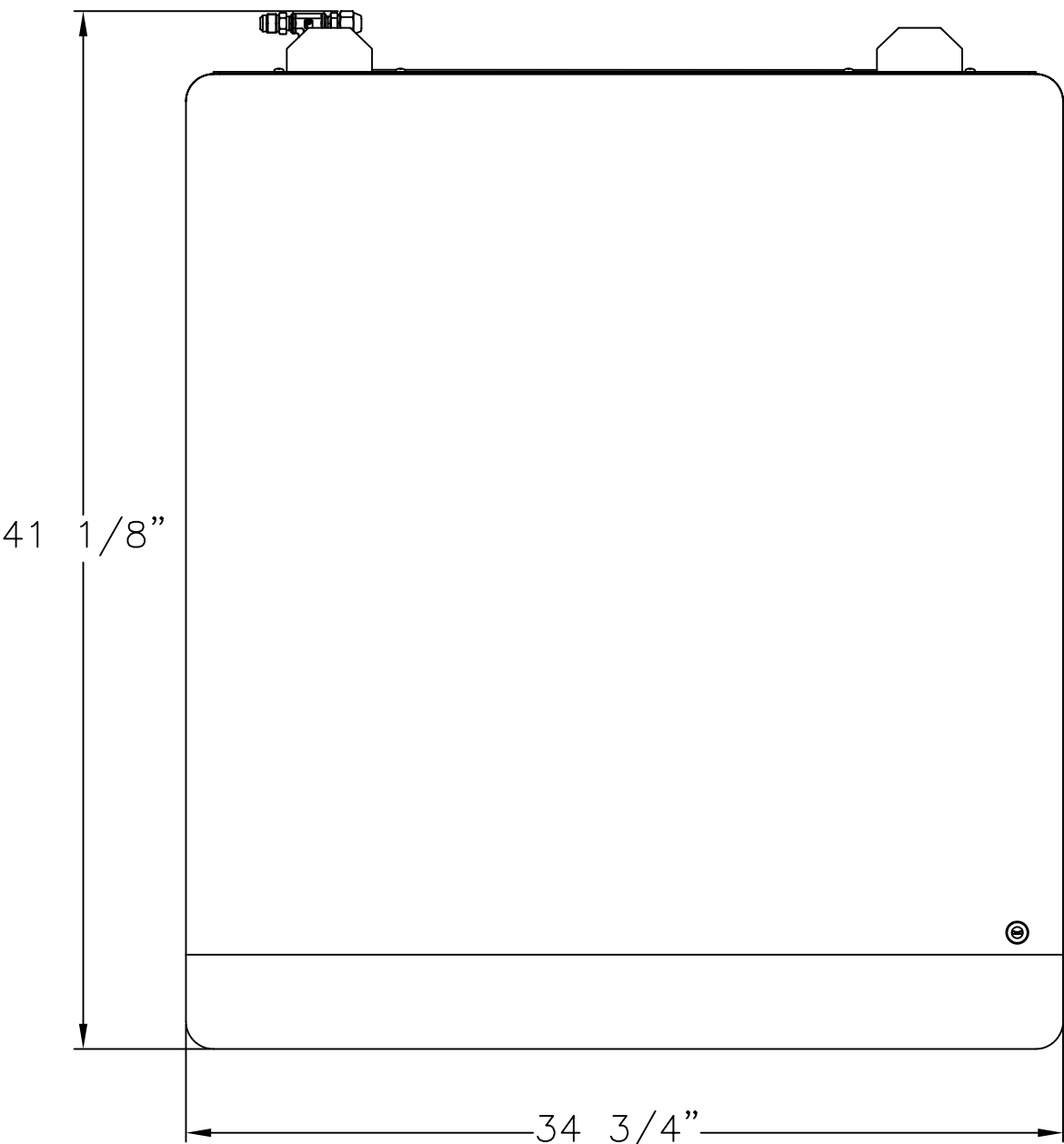


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PrincetonCryo.com

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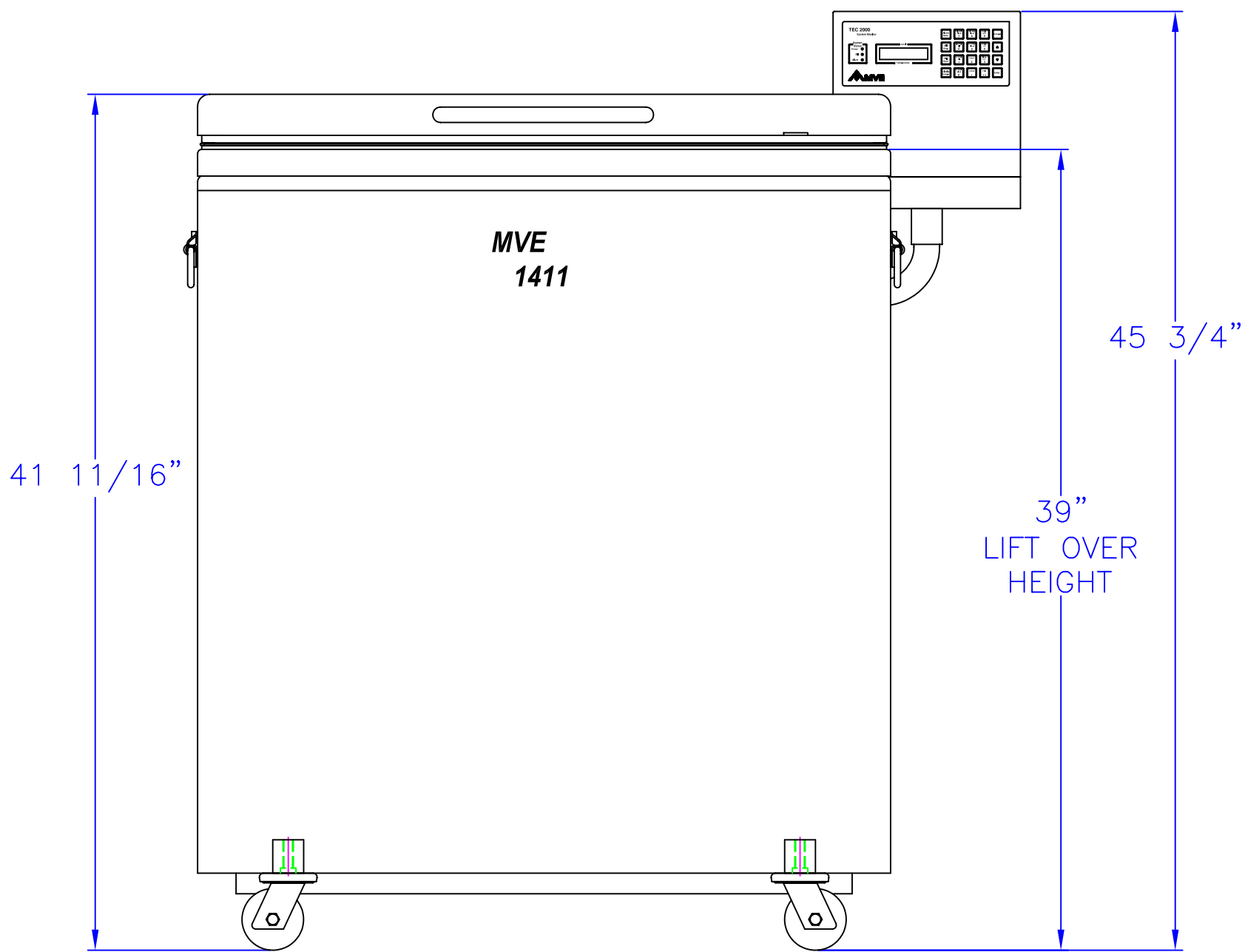
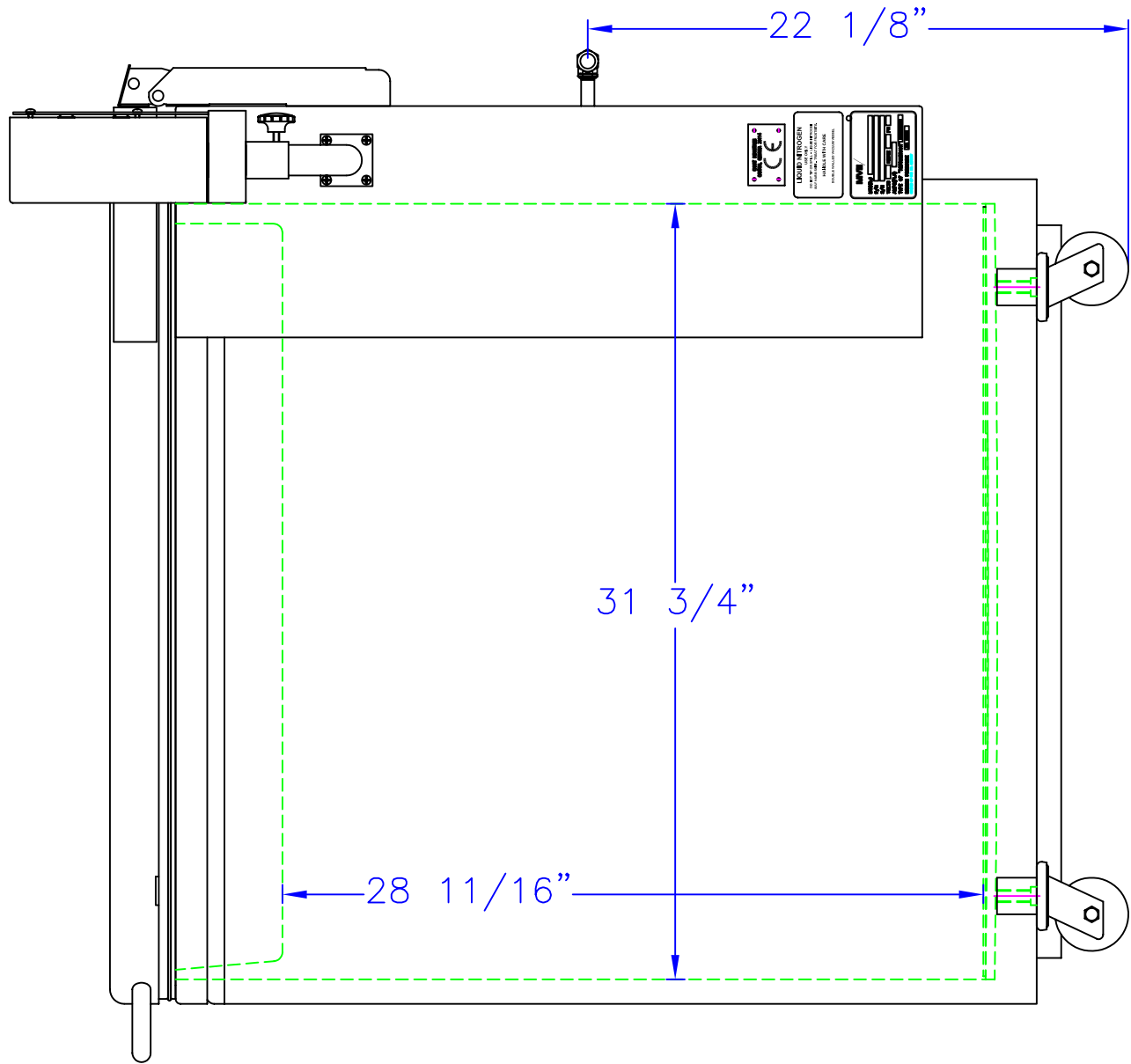
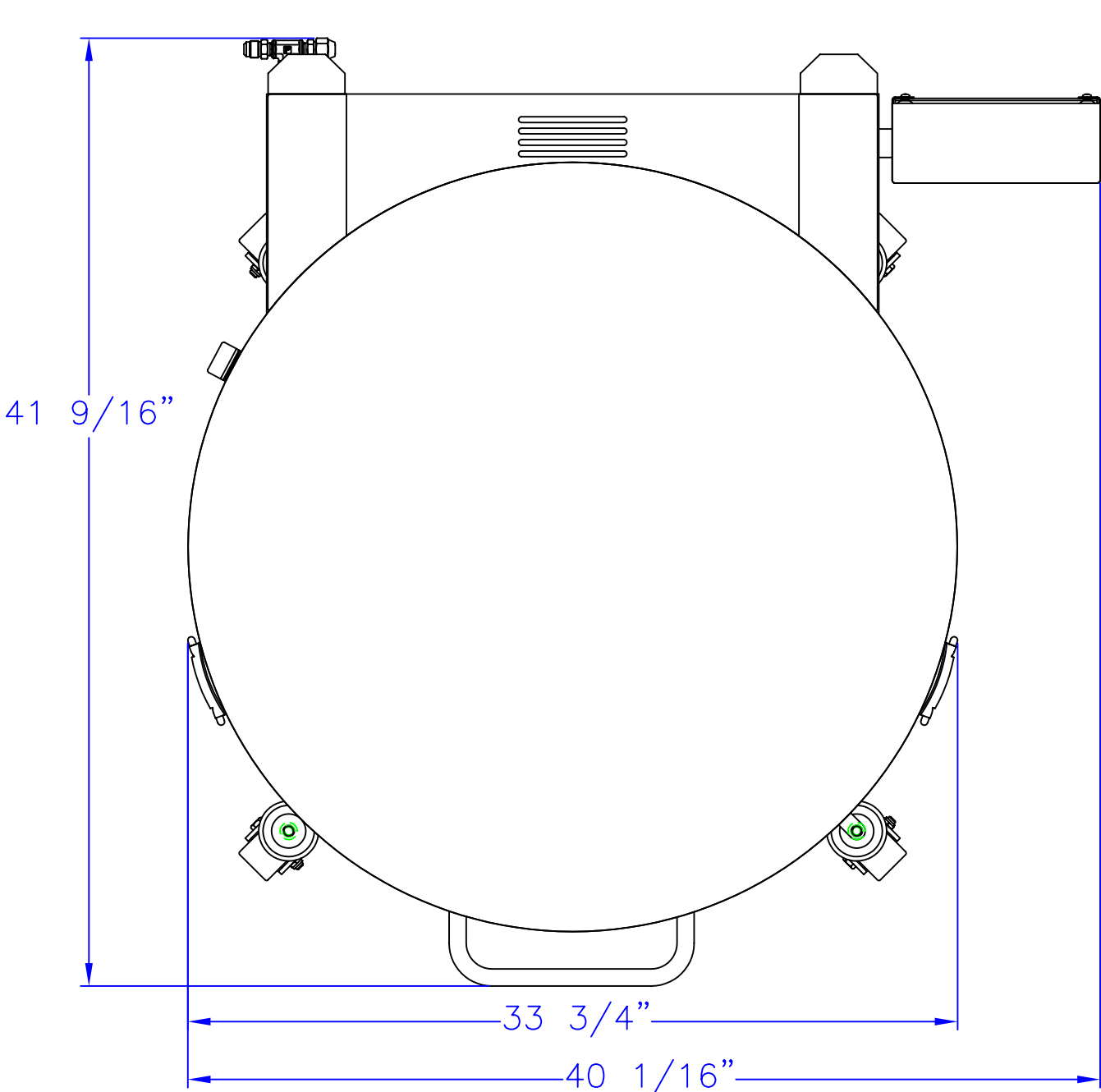
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|---------------------------------------|--------|
| MAXIMUM STORAGE CAPACITY | |
| 1.2 & 2.0 ML VIALS IN RACKS | 26,650 |
| QTY OF 13-2 STANDARD RACKS (100 VIAL) | 18 |
| QTY OF 13-2 MINI RACKS (25 VIAL) | 10 |
| TOTAL QTY OF 13-2 RACKS | 28 |

| | |
|---------------------------------------|---------------|
| 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) |

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



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|-----------------|----------|---|----------------------|---------------|--|
| 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 | | |
| | | 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 | |

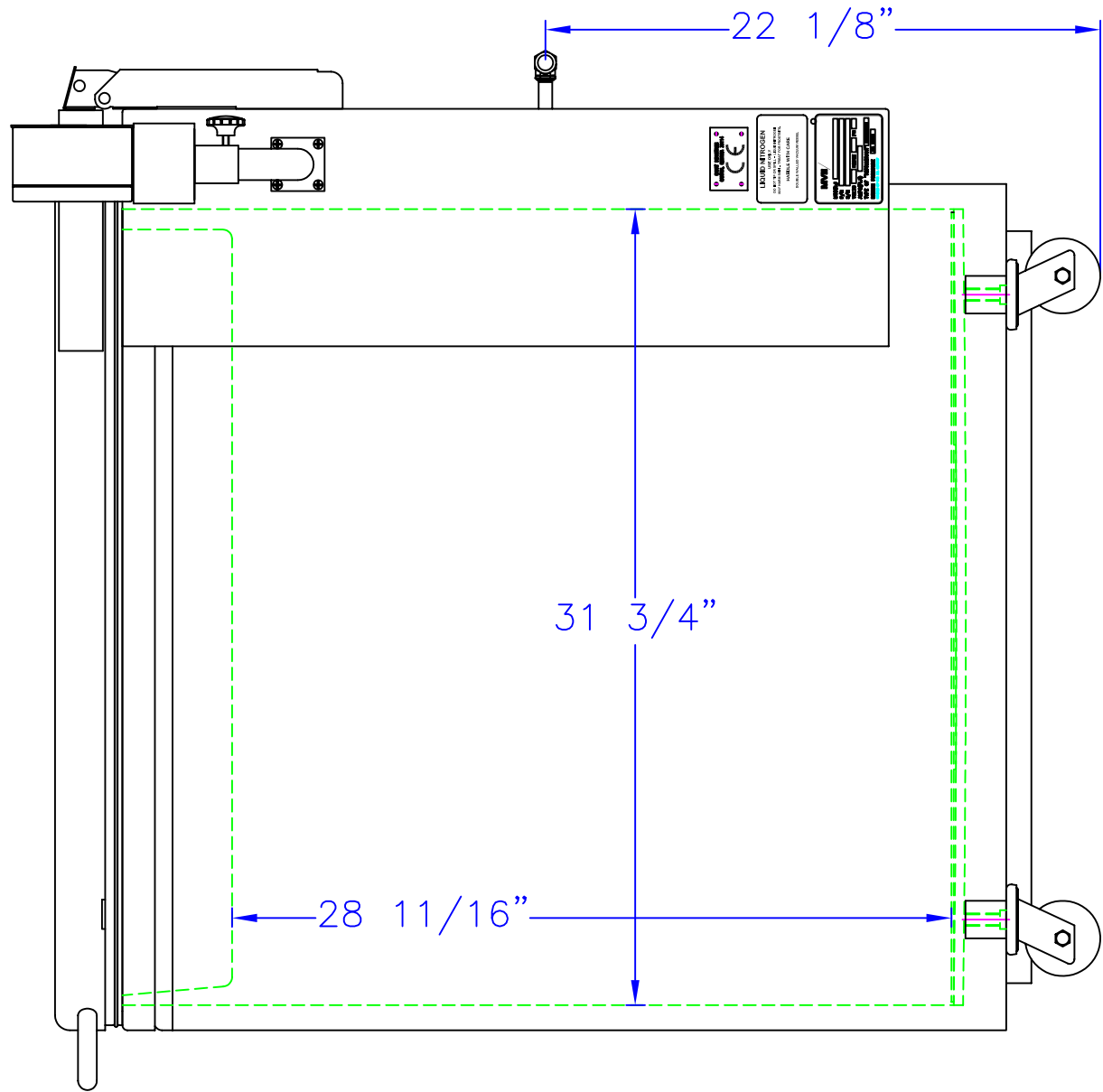
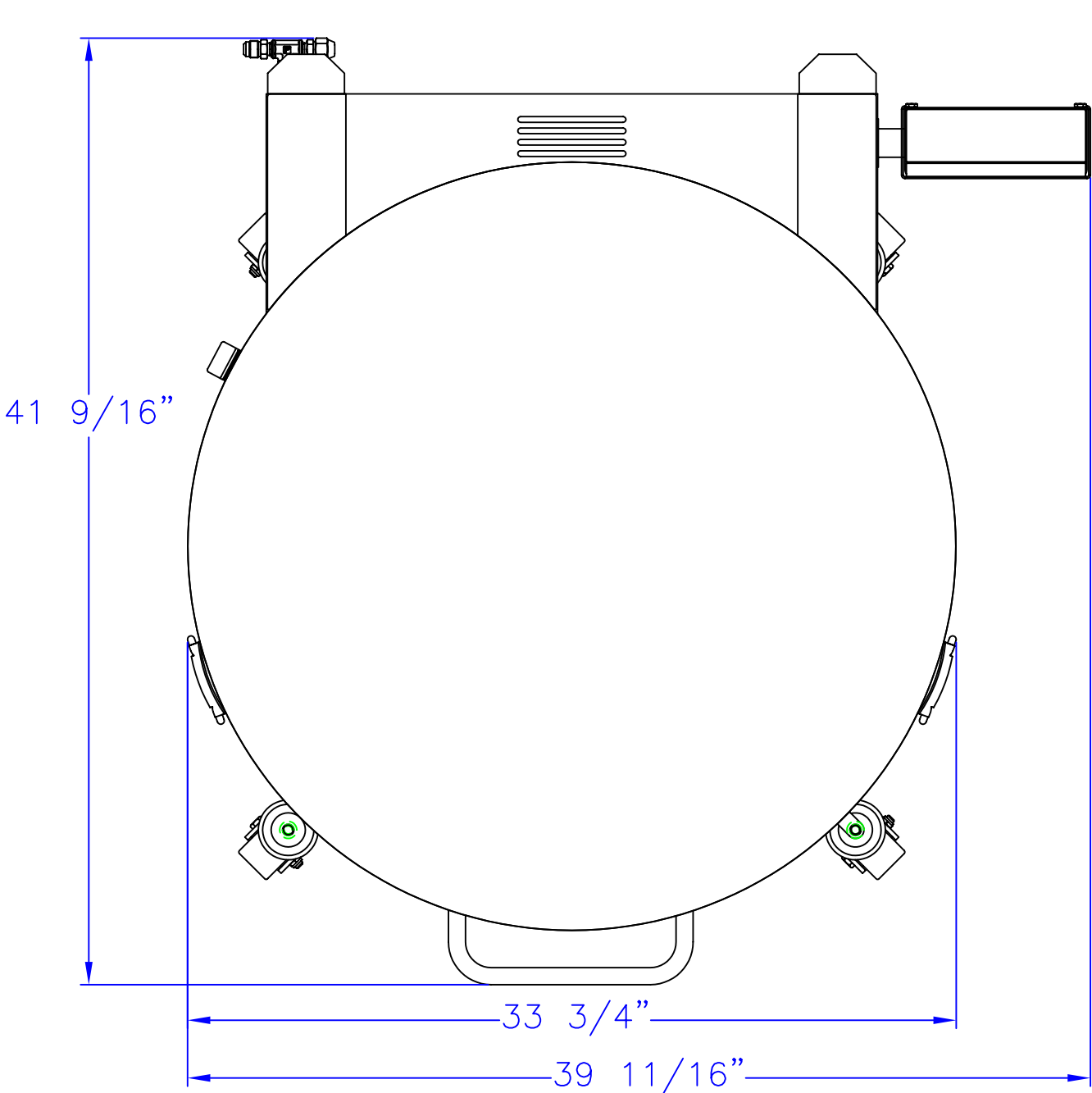


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| | |
|---|----------------------------|
| UNIT DIMENSIONS | |
| NECK OPENING | 31.75in.-958mm |
| INTERNAL DIAMETER | 31.75in.-958mm |
| USABLE HEIGHT | 28.7in.-729mm |
| OVERALL HEIGHT (TOP OF LID) | 41.69in.-1058.9mm |
| OVERALL HEIGHT (TOP OF CONTROLLER) | 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) |

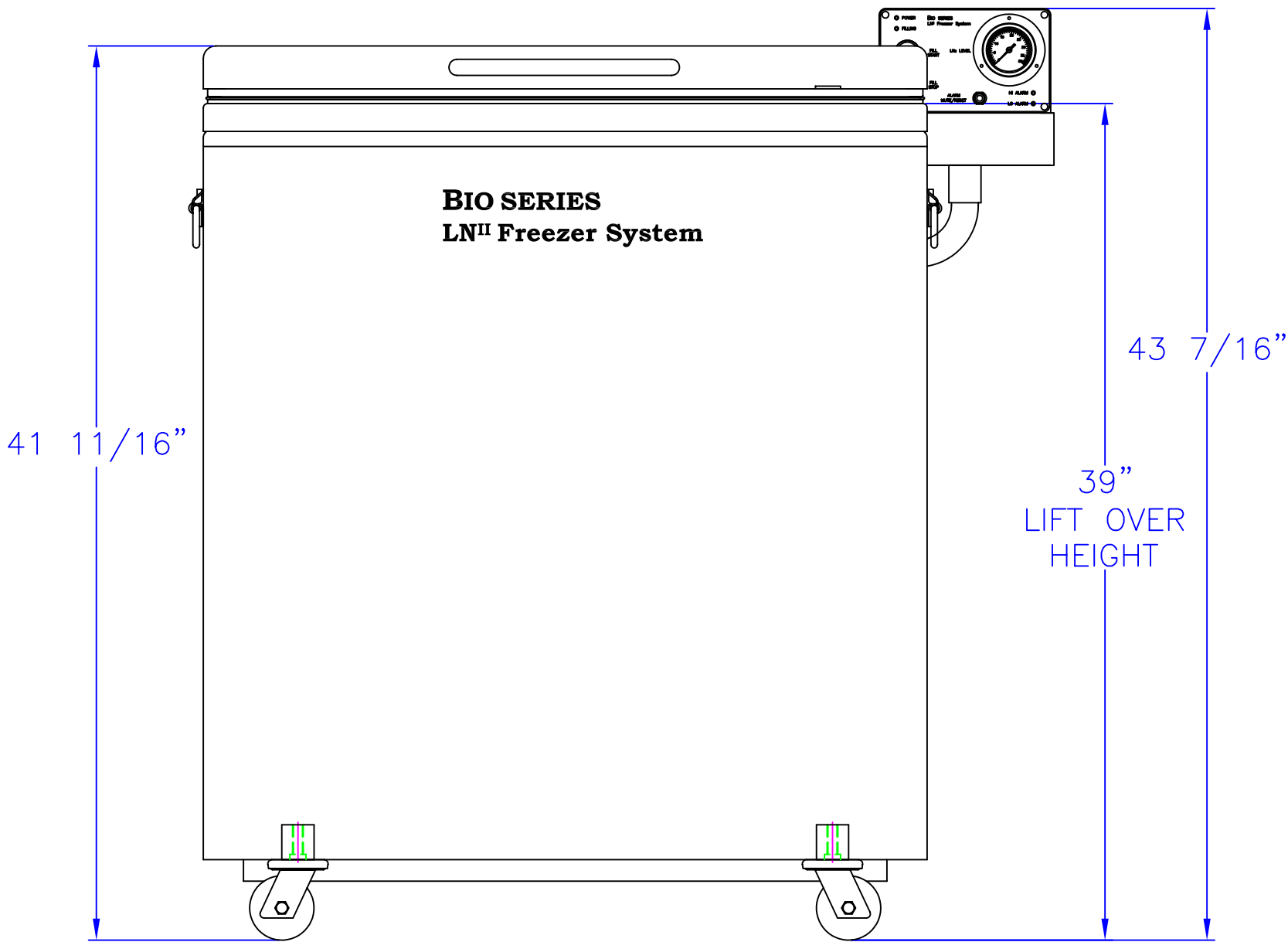
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|--|------|---------|---|------------|------------------------|----------|--|----------|--|-------------|--|
| | | | | APP'VD | | DATE | | | | | |
| | | | | DRAWN BY | | JSB | | 11/12/01 | | MVE 1411 | |
| | | | | CHECKED BY | | | | USED ON | | 203717 | |
| | | | | PROJ ENGR | | JSB | | 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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| <p> DESIGNATES A NOTE REFERENCE.</p> | | | | | FINISH P/N 11655387 | | | | | | |



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| INTERNAL DIAMETER | 31.75in.-958mm |
| USABLE HEIGHT | 28.7in.-729mm |
| OVERALL HEIGHT (TOP OF LID) | 41.69in.-1058.9mm |
| 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) |



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| | | | | FINISH P/N 11778571 | |

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|------------|------|----------|---|----------------------|---------------|
| 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 | |
| | | | 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 |