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October 2013

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MVE Chart Tech Tips

PRODUCT INFORMATION

Chart MVE 1842P-150 Cryogenic Storage Tanks

Chart MVE Stock Series tanks are primarily designed for storage of either vials or straws on canes in liquid nitrogen. The tanks are built for long life, durability in service and ergonomic sample retrieval, all of vital importance for this type of storage environment. The rotating sample tray in the 1842P-150 allows for maximum storage space and easy convenient 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. Contact Chart for product details and information.



MVE Shipping Containers

MVE Shipping Containers

Chart MVE offers shipping containers for its various vapor shippers. Shipping container dimensions are provided below for reference.

PN: 9719449

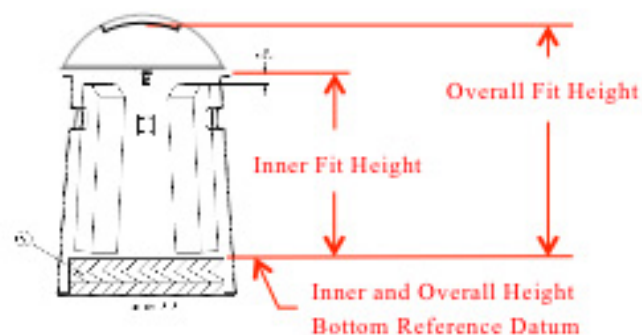
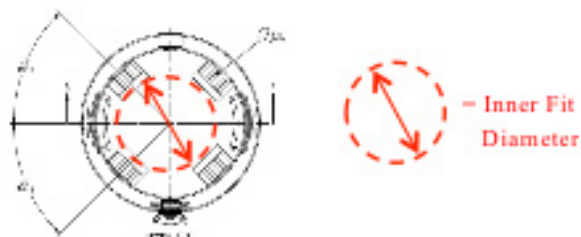
Inner Fit Diameter: 8.2 " / 20.83 cm

Outer Diameter: 15.0 " / 38.1 cm

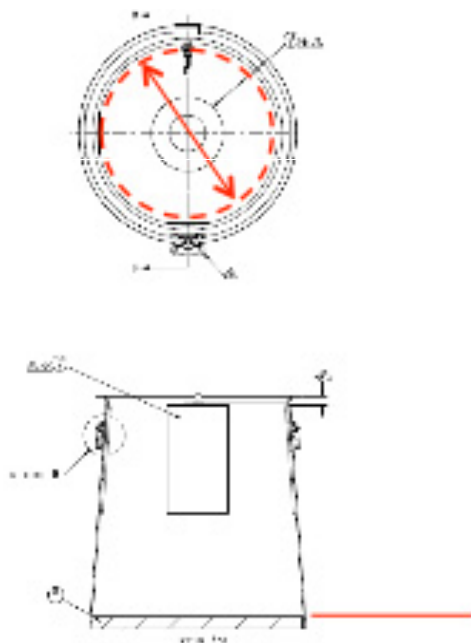
Inner Fit Height: 15.4" / 39.12 cm

Overall Fit Height: 20.6" / 52.32 cm

Approximate Weight: 14 lbs / 6.35 kg



PN: 9719449



PN: 9722149

PN: 9722149

Inner Fit Diameter: 14.5" / 36.83 cm

Outer Diameter: 18.0" / 45.72 cm

Inner Fit Height: 18.3" / 46.48 cm

Overall Fit Height: 23.6" / 59.94 cm

Approximate Weight: 15 lbs / 6.80 kg

PN: 11925105

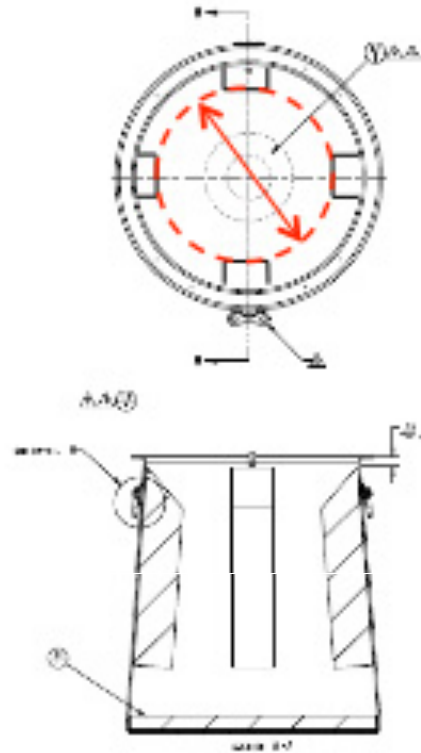
Inner Fit Diameter: 9.53" / 24.21 cm

Outer Diameter: 18.0" / 45.72 cm

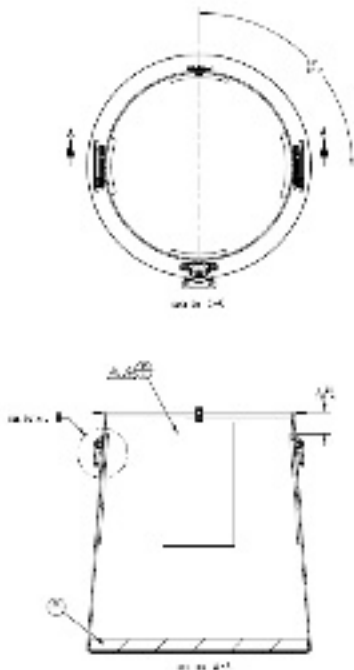
Inner Fit Height: 18.3" / 46.48 cm

Overall Fit Height: 23.6" / 59.94 cm

Approximate Weight: 15 lbs / 6.80 kg



PN: 11925105



PN: 10537506

PN: 10537506

Inner Fit Diameter: 14.5" / 36.83 cm

Outer Diameter: 18.0" / 45.72 cm

Inner Fit Height: 18.3" / 46.48 cm

Overall Fit Height: 23.6" / 59.94 cm

Approximate Weight: 15 lbs / 6.80 kg

PN: 11912460

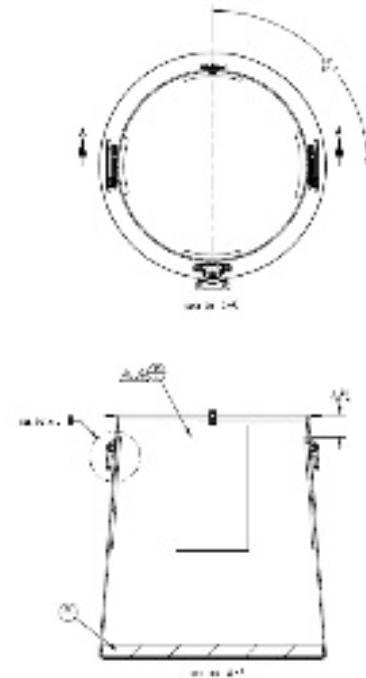
Inner Fit Diameter: 15.2" / 38.61 cm

Outer Diameter; 22.1" / 56.13 cm

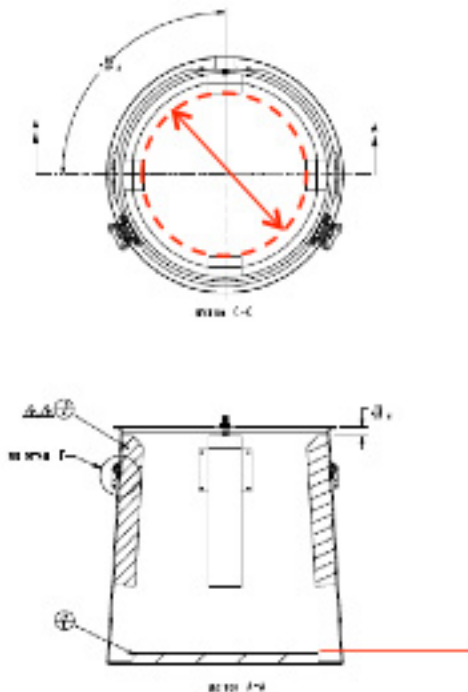
Inner Fit Height: 21.1" / 53.59 cm

Overall Fit Height: 26.5" / 67.31

Approximate Weight: 23 lbs / 10.43 kg



PN: 10537506



PN: 11912460

PN: 10741726

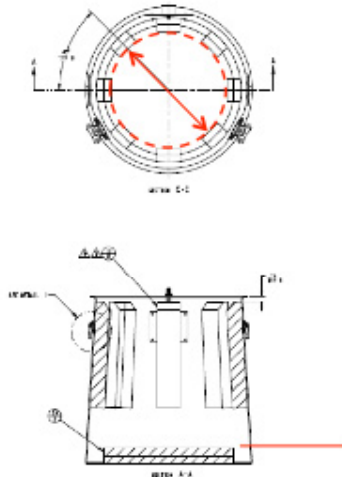
Inner Fit Diameter: 15.2" / 38.61 cm

Outer Diameter: 22.1" / 56.31 cm

Inner Fit Height: 20.1" / 51.05 cm

Overall Fit Height: 25.5" / 64.77 cm

Approximate Weight: 23 lbs / 10.43 kg



PN: 104741726



PN: 14035731

Inner Fit Diameter: 21.0" / 53.34 cm

Outer Diameter: 24.1" / 61.21 cm

Inner Fit Height: 23.3" / 59.18 cm

Overall Fit Height: 27.6" / 70.10 cm

Approximate Weight: 23 lbs / 10.43 kg

PN: 14035731

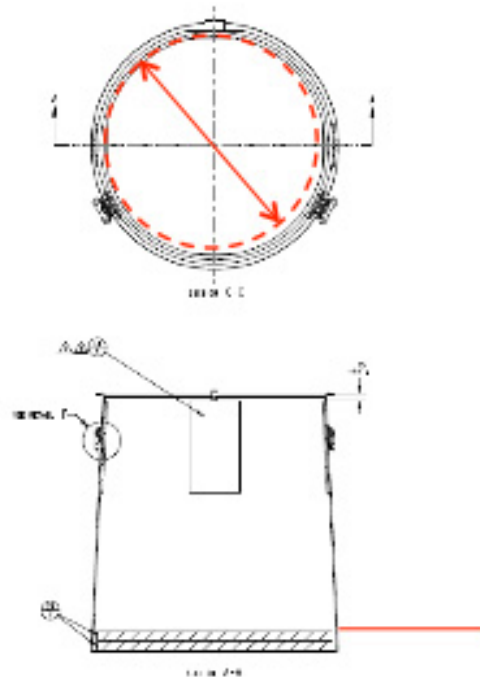
Inner Fit Diameter: 21.0" / 53.34 cm

Outer Diameter: 24.1" / 61.21 cm

Inner Fit Height: 23.3" / 59.18 cm

Overall Fit Height: 27.6" / 70.10 cm

Approximate Weight: 23 lbs / 10.43 kg



PN: 14035731

HELPFUL HINTS / FAQs

Manual Discharge Device Operation

Q: How long does it take for the manual discharge device to build pressure?

A: Depending on atmospheric conditions, the manual discharge device could take anywhere from two to four hours to build to 0.3 bars (5psi). The manual discharge device operates using heat transfer down the dip tube. The nozzle is exposed to the ambient room temperature, which is much warmer than the liquid nitrogen in the lab unit. This heat conducts down to the dip tube which is in contact with the liquid nitrogen. The heat conducted down the dip tube, causes the liquid to boil, which builds pressure inside the unit. When the discharge device is installed correctly (properly seated, vent valve closed), the head pressure pushes down on the surface of the liquid nitrogen in the unit, forcing liquid up the dip tube to be discharged from the nozzle. A warm full dewar will build pressure more quickly.

Installing the Liquid Discharge Device

Q: How does one install the discharge device?

A: To install the discharge device, first fill the Lab unit to its approximate liquid capacity. Next, slowly insert the discharge device allowing it to rest on the neck for about 30 seconds and cool to LN2 temperature. Slowly tighten the wing nut and allow the discharge device to build pressure to 0.3 bars (5psi). The discharge device is now ready for use.

TEC 3000 Upgrade Kits

When ordering a TEC 3000 Upgrade Kit, please be sure to have the serial number of the freezer to be upgraded in-hand. This will ensure that the proper upgrade is provided.

Important Note: When installing TEC 2000 to TEC 3000 upgrades, always use the new Jerome power supply included in the kit. The previous Lakeshore, Jerome, and MDC power supplies will not function properly with the TEC 3000 and must be replaced with the provided Jerome power supply.

If you have any questions or concerns, please contact Technical Service.

ACCESSORIES

Temperature Probe for Chart Freezers

The Chart temperature probe may be ordered using PN 20570663.



Temperature Probe
Being Removed from a
High-Efficiency Freezer

Liquid Level Measuring Tool for Freezers

The Chart Liquid Level Measuring Tool may be ordered using PN20561020



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