



AZENTA
LIFE SCIENCES

BioStore™ Cryo

Facility Requirements Document

357115 Rev. F



GENERAL INFORMATION

DOCUMENT PURPOSE

This document is not intended to be a comprehensive design specification, but rather to enable the customer to undertake initial planning and budgeting prior to a formal purchase agreement.

This document is intended to provide a concise overview of the facility requirements necessary for the successful installation and operation of the Azenta BioStore Cryo system (Pico, A45, M42, M60, M60 Variō, or M42/M60 ARD/ARD+).

This document represents Azenta default set of requirements for any new BioStore Cryo installation. We recognize that these may not always be practical, especially when installation in an existing building is being considered. Please contact your Azenta representative to discuss possible options in such circumstances.

TARGET AUDIENCE

The target audience for this document is personnel responsible for planning and implementing facilities to support the successful installation and operation of the Azenta BioStore Cryo, which may include, but is not limited to:

- The offloading, secure storage, and provision of sufficient area to safely unpack the BioStore Cryo and its associated components from the shipping crates.
- Auditing the route from the receiving area to the installation site to ensure it will accommodate the weight, height, and width parameters specified in this document to safely relocate the BioStore Cryo system and components. Be mindful of stairs, hanging fixtures, and elevator limitations.
- Confirming that the installation site has the proper AC power, LN₂ pressure, temperature/humidity parameters, lighting, ventilation, safety equipment, and the minimum required space.
- Setting BioStore Cryo safety and installation timeline expectations.

NOTE: The information within this document is subject to change without notice. Please consult with Azenta Life Sciences before making any final facilities plans to confirm the accuracy and relevance of information.

SHIPPING DIMENSIONS

The tables below outline the dimensions, contents, and weight of the shipping crates by system for moving and storage requirements. Racks ship additionally depending on the freezer site.

CRYO STORE PICO™

Crate	Length inches [cm]	Width inches [cm]	Height inches [cm]	Weight lbs [kg]
Frame Crate (PN: 386323)	98 inches [250 cm]	44 inches [112 cm]	54 inches [137 cm]	752 lbs [341 kgs]
Freezer Crate (PN: 386324)	50 inches [127 cm]	47 inches [120 cm]	65 inches [166 cm]	979 lbs [444 kgs]
Panels Crate (PN: 386325)	57 inches [145 cm]	57 inches [145 cm]	59 inches [150 cm]	503 lbs [228 kgs]

BIOSTORE™ A45

Crate	Length inches [cm]	Width inches [cm]	Height inches [cm]	Weight lbs [kg]
Freezer Crate (PN: 379200)	68 inches [173 cm]	53 inches [135 cm]	77 inches [196 cm]	1325 lbs [601 kgs]
Subassemblies (PN: 239887)	59 inches [148 cm]	51 inches [130 cm]	53 inches [135 cm]	~610 lbs [281 kgs]

BIOSTORE™ M42

Crate	Length inches [cm]	Width inches [cm]	Height inches [cm]	Weight lbs [kg]
Freezer Crate (PN: 239882)	63 inches [161 cm]	52 inches [133 cm]	70 inches [178 cm]	1350 lbs [613 kgs]
Subassemblies (PN: 239887)	59 inches [148 cm]	51 inches [130 cm]	53 inches [135 cm]	~610 lbs [281 kgs]

BIOSTORE™ M60				
Crate	Length inches [cm]	Width inches [cm]	Height inches [cm]	Weight lbs [kg]
Freezer Crate (PN: 289304)	84 inches [214 cm]	71 inches [181 cm]	89 inches [227 cm]	2690 lbs [1221 kgs]
Subassemblies (PN: 325907)	65 inches [166 cm]	54 inches [138 cm]	75 inches [191 cm]	~700 lbs [318 kgs]

BIOSTORE™ M42/M60 ARD/ARD+				
Crate	Height inches [cm]	Width inches [cm]	Depth inches [cm]	Weight lbs [kg]
M60 ARD/ARD+ (1 Crate)	80 inches [203.2 cm]	77 inches [195.6 cm]	72 inches [182.9 cm]	2366 lbs [1073.2 kg]
M42 ARD/ARD+ (1 Crate)	73 inches [185.4 cm]	58 inches [147.3 cm]	56 inches [142.2 cm]	1102 lbs [499.9 kg]

NOTE: The customer is responsible for disposal of the shipping crates and packing material.

INSTALLATION MINIMUM SPACE REQUIREMENTS

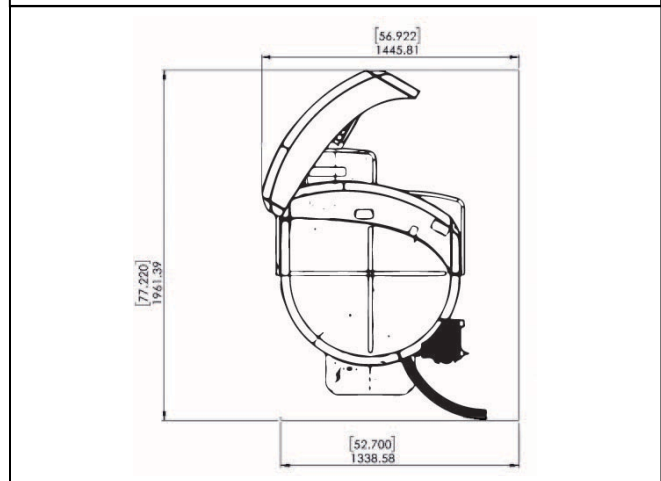
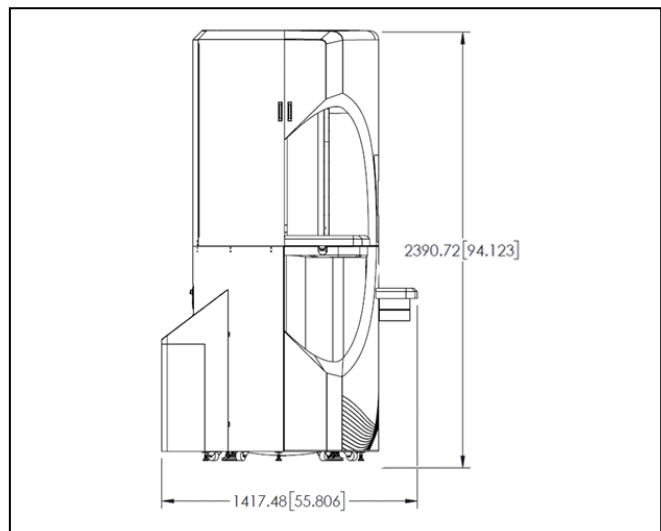
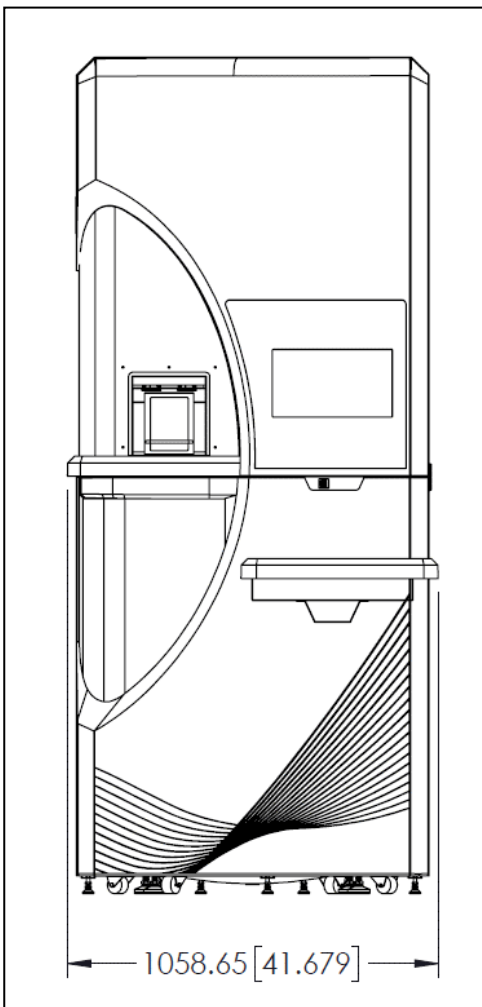
The following dimensions are for the system’s minimum space and weight requirements at full capacity. It does not include space required for LN₂ fill tank(s) or optional CryoPod racks. To accommodate the installation, there should be a minimum of 2 ft at the left and back of the system for serviceability, and 3 ft at the front of the system for user interaction. The required height should be available over the entire footprint of the system. Specify any additional spacing requirements, or failure to meet the requirements, below:

CRYO STORE PICO™

Cryo Store Model	Height inches [cm]	Width inches [cm]	Depth inches [cm]	Est. Weight lbs [kg]	Max Floor Load lbs/ft² [kg/m²]	Max Point Load lbs [kg]
Pico	95.5 inches [242.6 cm]	42.7 inches [108.5 cm]	56.8 inches [144.3 cm]	1,402 lbs [640 kg]	84 lbs/ft² [410 kg/m²]	176 lbs [80 kg]

NOTE: When disassembled, the Cryo Store Pico can fit through a 32 inch pathway.

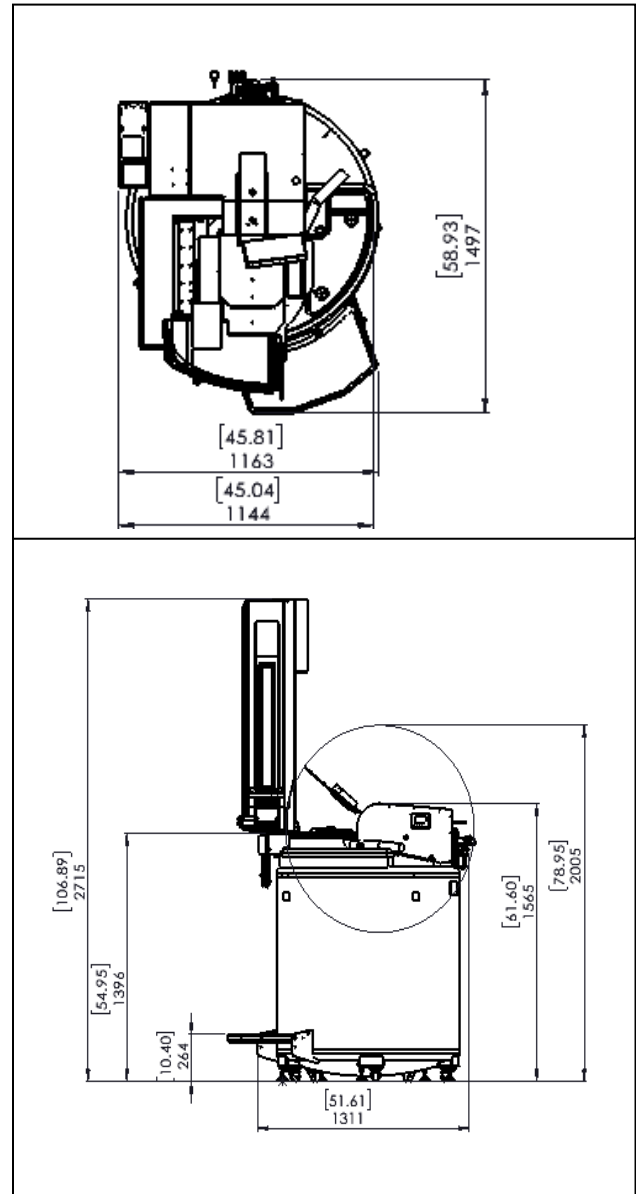
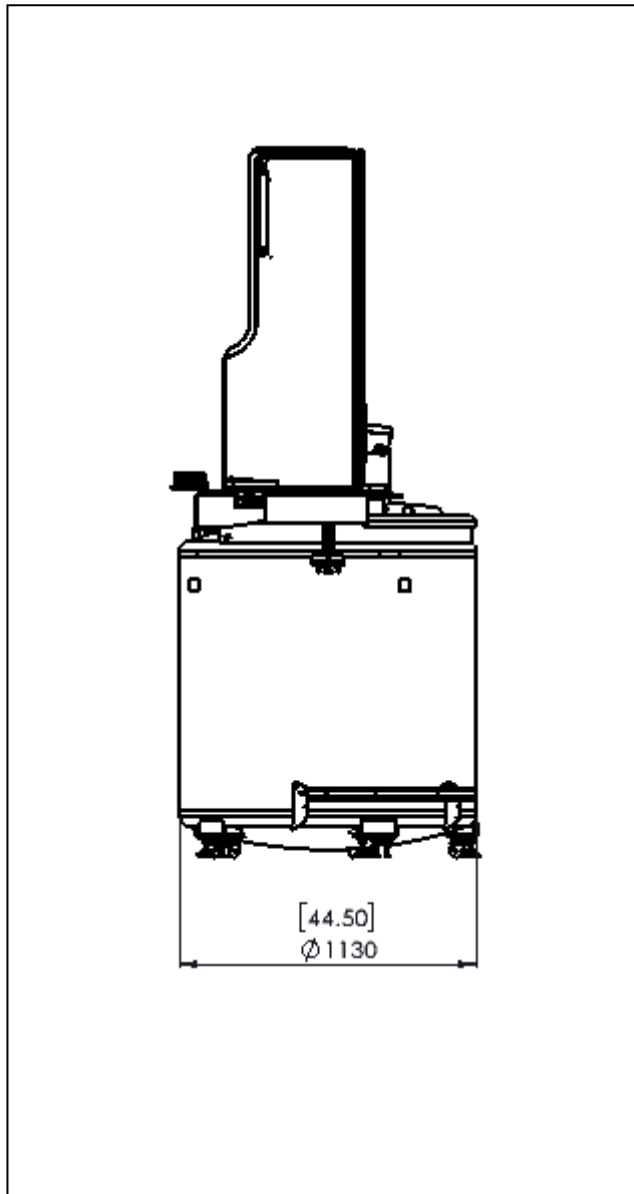
NOTE: 1 inch has been added to the overall height to ensure the Industrial design can be mounted and removed from the freezer.



BIOSTORE™ A45

Cryo Store Model	Height inches [cm]	Width inches [cm]	Depth inches [cm]	Est. Weight lbs [kg]	Max Floor Load lbs/ft² [kg/m²]	Max Point Load lbs [kg]
A45	107.9 inches [274.1 cm]	45.8 inches [116.3 cm]	58.9 inches [1,496 cm]	2,155 lbs [979 kg]	116 lbs/ft² [563 kg/m²]	431 lbs [196 kg]

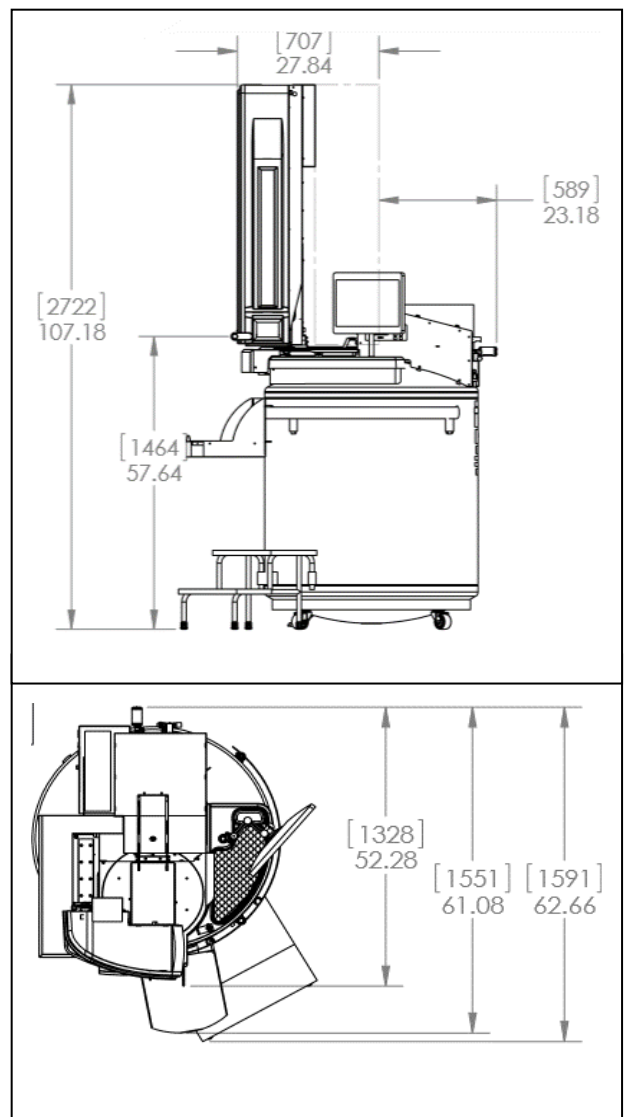
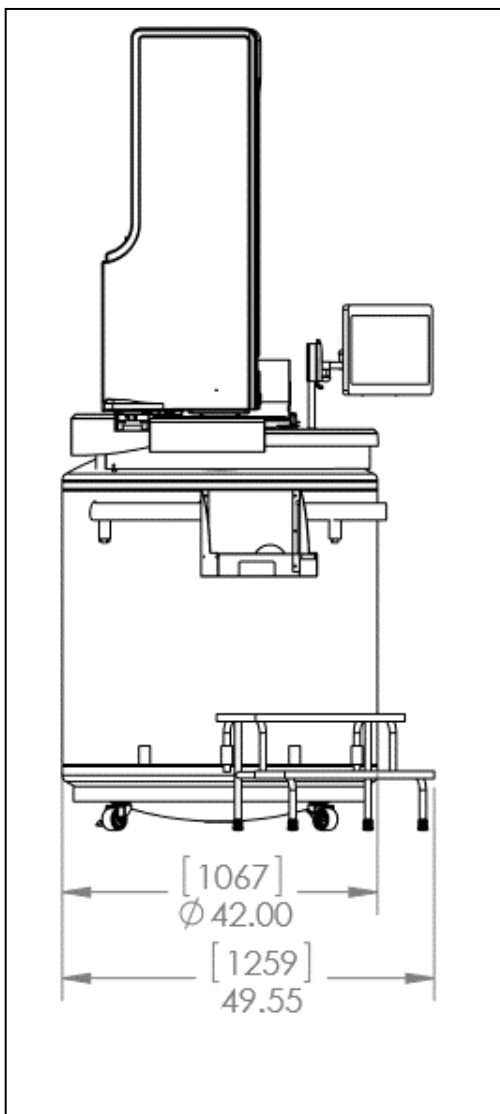
NOTE: 1 inch has been added to the overall height to ensure the Z-axis can be mounted and removed from the Y-axis.



BIOSTORE™ M42

BioStore Cryo Model	Height inches [cm]	Width inches [cm]	Depth inches [cm]	Est. Weight lbs [kg]	Max Floor Load lbs/ft ² [kg/m ²]	Max Point Load lbs [kg]
M42	108.1 inches [274.4 cm]	42 inches [106.7 cm]	62 inches [157.5 cm]	1,705 lbs [775 kg]	95 lbs/ft ² [462 kg/m ²]	427 lbs [194 kg]
M42 ARD/ARD+	70 inches [177.8 cm]	42 inches [106.7 cm]	62 inches [157.5 cm]	1,461 lbs [663 kg]	81 lbs/ft ² [396 kg/m ²]	366 lbs [166 kg]

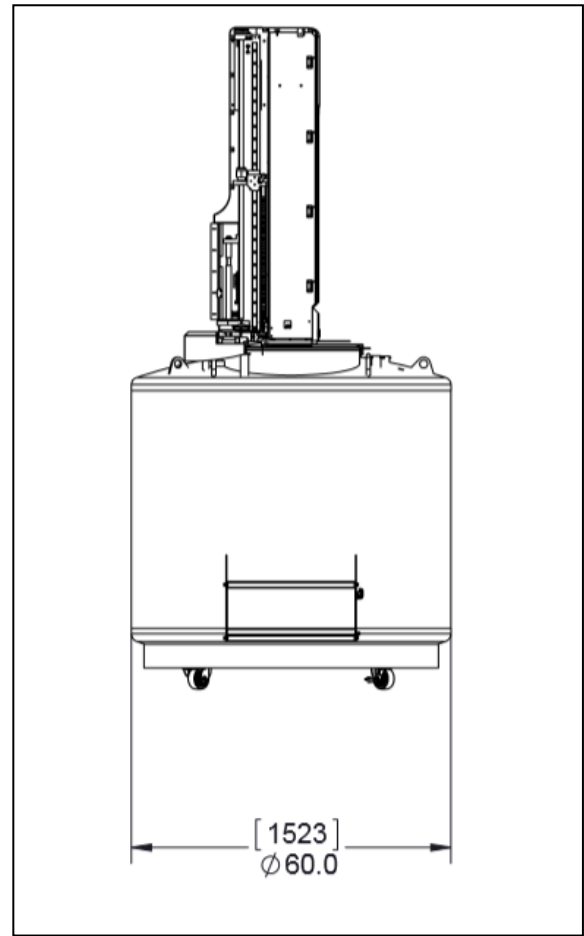
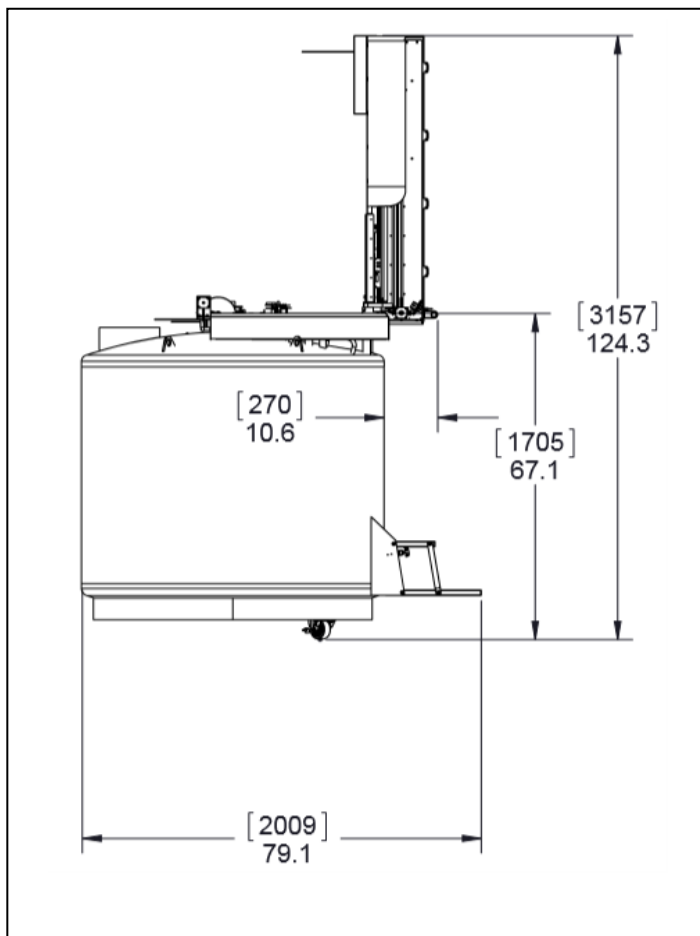
NOTE: 1 inch has been added to the overall height to ensure the Z-axis can be mounted and removed from the Y-axis.



BIOSTORE™ M60

BioStore Cryo Model	Height inches [cm]	Width inches [cm]	Depth inches [cm]	Est. Weight lbs [kg]	Max Floor Load lbs/ft ² [kg/m ²]	Max Point Load lbs [kg]
M60/VARIÖ	125.1 inches [318 cm]	60 inches [152.4 cm]	79 inches [200.7 cm]	3,582 lbs [1,672 kg]	109 lbs/ft ² [553 kg/m ²]	896 lbs [407 kg]
M60 ARD/ARD+	80 inches [203 cm]	60 inches [152.4 cm]	79 inches [200.7 cm]	3,471 lbs [1,575 kg]	106 lbs/ft ² [518 kg/m ²]	868 lbs [394 kg]

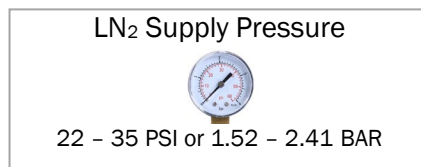
NOTE: 1 inch has been added to the overall height to ensure the Z-axis can be mounted and removed from the Y-axis.



INSTALLATION LOCATION

LN₂ SUPPLY

- Supply pressure must be maintained at 22 to 35 PSI or 1.52 to 2.41 BAR at each BioStore™ Cryo system.
- Service connection: 3/4-16 UNF
- Pico LN₂ Capacity: 93 Liters
- A45 LN₂ Capacity: 196 Liters
- M42/ARD+/ARD LN₂ Capacity: 133 Liters
- M60/ARD+/ARD LN₂ Capacity: 295 Liters
- Approximate Pico usage: 9 Liters daily or 63 Liters weekly
 - Approximately 300-400 Liters needed to support installation.
- Approximate A45 usage: 9.9 Liters daily or 69.3 Liters weekly
 - Approximately 500-700 Liters needed to support installation.
- Approximate M42/ARD+/ARD usage: 9.5 Liters daily or 66.5 Liters weekly
 - Approximately 400-600 Liters needed to support installation.
- Approximate M60/ARD/ARD+ usage: 13.6 Liters or 95.2 Liters weekly
 - Approximately 600-800 Liters needed to support installation



- **LN₂ supply on site test:** LN₂ supply must be capable of filling a 10L dewar from valve open in under 4 minutes using a hose with a phase separator (6.5 minutes without phase separator). Failure to meet this specification can result in reduced performance and damage to the BioStore Cryo.

ELECTRICAL

- 110 VAC, single phase. NEMA 5-15 (IEC Type B). 15A Circuit Breaker (up to 3 BioStore™ Cryo systems per circuit breaker).
- 220 VAC, single phase. BS 1363 (IEC Type G) / CEE 7/4 (IEC Type F). 13A Circuit Breaker (up to 4 BioStore Cryo systems per circuit breaker).

ENVIRONMENTAL

- 64.4°F to 80.6°F or 18°C to 27°C
- Less than 50% relative humidity, non-condensing
- Dew point rating below 10°C
- The installation surface must be flat and level. There should be no more than ½ inch (approximately 13 mm) difference throughout installation surface.

ENVIRONMENTAL

- **Note:** BioStore Cryo should be kept away from air vents. If this is not possible, vents should be baffled to prevent air flow directly over system.
- **Safety:** Customer to provide emergency, contact, alarmed oxygen monitoring that is regularly maintained, and sufficient ventilation and lighting at the installation site. A documented evacuation plan is recommended.
- **Recommendation:** BioStore Cryo Operators attend PPE and LN2 Safety Training

INSTALLATION SITE ASSESSMENT

CUSTOMER INFORMATION

Company Name: _____ Point of Contact: _____

Address: _____ Email: _____

City: _____ State: _____ Zip Code: _____ Phone: _____

Requested BioStore Cryo Model: _____ Requested Installation Date: _____

RECEIVING AND MOVING THE BIOSTORE CRYO SYSTEM

- | | |
|--|----------|
| 1. Confirm site has a loading dock and/or sufficient space to receive the system. | Yes / No |
| 2. Confirm a safe space has been allocated for the shipping crates. | Yes / No |
| 3. Confirm the shipping crates and packing material will be disposed of by the customer. | Yes / No |
| 4. Does equipment need to be un-crated immediately and relocated from dock? | Yes / No |
| 5. Confirm the customer has a pallet jack or other means necessary to move the crates. | Yes / No |
| 6. Is a lift gate needed at the site? | Yes / No |
| 7. Do Azenta personnel need to be available to assist in the receipt of the crates? | Yes / No |
| 8. Will the customer provide floor protection to move the freezer to install location? | Yes / No |
- If yes, describe protection required below:

Describe any other action(s) needed prior to moving the system to the installation site:

CUSTOMER RESPONSIBILITIES AT INSTALLATION SITE

- 1. Attach picture of installation site to this document. **Yes / No**
- 2. Confirm the floor can accommodate the system weight. **Yes / No**
- 3. Confirm the floor is flat (F_F of 38) and level (F_L of 25). **Yes / No**
- 4. Confirm weight/dimensions of components can be moved to install location. **Yes / No**
- 5. Will the customer provide a 6 ft (or 2 Meter) A-Frame ladder to support the installation? **Yes / No**
- 6. Will an elevator be used? does the elevator support components weight / dimensions? **Yes / No**

Indicate any other obstacles (stairs, corridors, etc.) that could interfere with the moving of materials and components:

- 7. Confirm system has sufficient space to safely operate and service requirements (at least 2 ft on the left and back sides of the system, and 3 ft in front of the system). **Yes / No**

Install site dimensions: Length _____ Width _____ Ceiling Height _____

- 8. Confirm the installation site has proper power and LN₂ pressure to support the system. **Yes / No**

Facilities: AC Voltage _____ Current Rating _____ LN₂ Pressure _____

9. Confirm time to fill 10 L dewar with LN₂ _____Min _____Sec Phase Separator **Yes / No**

10. Confirm installation site environment supports the install and operation of the system. **Yes / No**

Environment: Temperature _____ Humidity _____ Nearby Heat Source **Yes / No**

Air vents away from system **Yes / No**

Location of air vents relative to the system: _____

Safety:

O₂ Monitoring **Yes / No** Ventilation **Yes / No** PPE Onsite **Yes / No** Evacuation Plan **Yes / No**

Azenta Life Sciences has received a signed declaration from the customer that affirms that the installation site adheres to all health and safety regulation standards set forth by the local and regional authorities. **Yes / No**

Please indicate special conditions such as: subcontractor/vendor involvement, hazardous material close by, needed certificates, training, labor, or any issue that would affect standard BioStore Cryo/Cryo Store system installation:

Detail the customer emergency contact information below:

MISCELLANEOUS

- What are the customer's delivery hours? _____ to _____
- Is cell phone use (including the taking photos) permitted at the facility? **Yes / No**
- What are the customer's security, parking, and lab safety protocols?

- List any additional comments below:

SIGNATURE

The undersigned hereby certifies that they have read, understood, and agreed to fulfill the required facility requirements for the Azena Life Sciences BioStore Cryo or Cryo Store installation. Should issues arise during the installation as a result of these requirements not being met, an extended or return installation trip may be necessary and a revised PO may be requested.

Customer
Printed Name: _____

Customer
Signature: _____

Customer Title: _____

Company: _____

Date Completed: _____