



**Protect your investment with  
safe and secure samples...  
tell me more**

# Protect your investment for the future with safe and secure samples

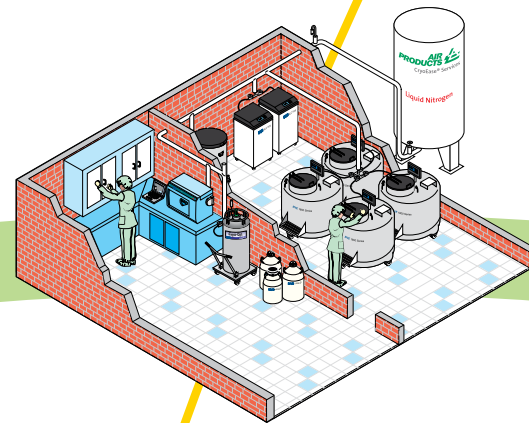
With over 40 years of experience in the life science market, we understand what is important to you when it comes to samples.



Dewars



Inventory



Project management



Air separation



Managed deliveries

Working alongside Chart Biomedical, world leaders in cryogenic storage vessels, we provide the optimum solution for your needs: from the supply of liquid nitrogen to the safest and most economical storage of your samples.



Dry vapour shippers



Cryogenic freezers



Insulated pipelines



Liquid and cylinder gas supply

# An easy-to-use, efficient and safe solution for sample storage

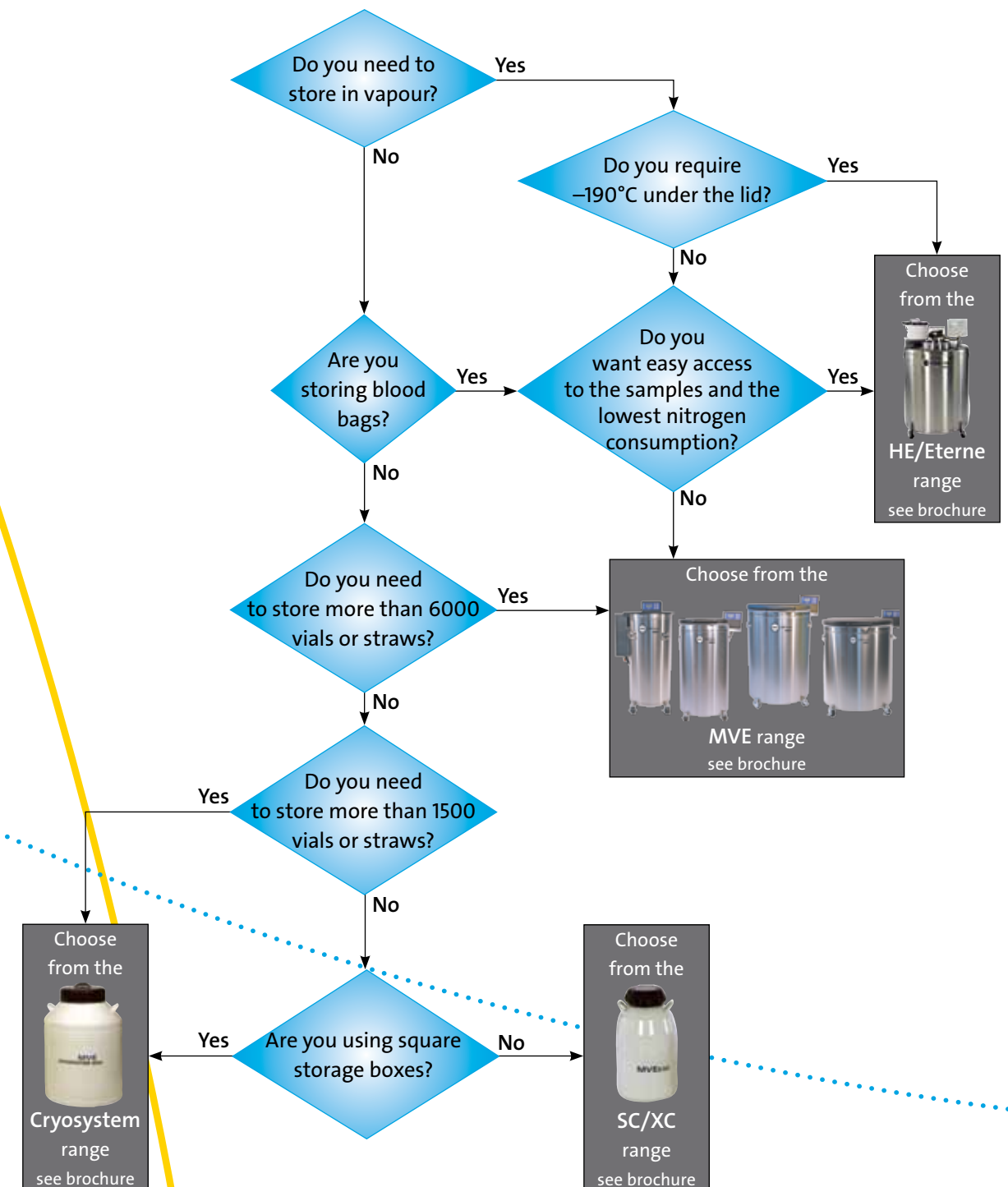
The Chart range of vessels offers a range of benefits to your sample storage needs, including:

- **Efficiency** – Lowest liquid nitrogen consumption in the industry
- **Stability** – Lowest below-the-lid nitrogen vapour temperatures. Chart is the only manufacturer who will certify -190°C below the lid.
- **Sample security** – The units can maintain temperatures for up to 23 days without liquid nitrogen supply.
- **Ease of access** – The offset lid with free-moving internal sample turn tray means the samples are brought to you for ease of removal. The integrated double step (1500 and 1800 series) provides the lowest lift-over height in the industry.
- **Improved Safety** – Nitrogen vapour storage considerably reduces the risk of liquid nitrogen “drag-out” when removing samples from the freezer, hence minimising the splashing hazard for the operator.
- **Reduced Carbon Footprint** – The low power consumption of the freezers means that the energy requirement is less than 1% of that for mechanical -150°C freezers. In addition, you won't require expensive air conditioning, so as to minimise your carbon footprint.

- **Optimised Capacity** – Chart freezers are available with extra height options, allowing you to store a greater quantity of samples for the footprint of your freezer. This is an ideal solution where floor space is very limited.
- **Easy Operation** – The class-leading TEC3000 controller fitted to all our stainless steel freezers employs a variety of advance features that enable the controller to monitor and control the environment inside the freezer with a high level of precision. Features include:
  - Auto-fill system
  - Integrated hot gas by-pass facility
  - Keyless security system
  - Level and temperature controls with both visible and audible alarms
  - Interface to external system via serial communications with RS-485
  - Stores time- and date-stamped information on 30,000 most recent events
  - Optional battery back-up

# The right fit for you and your samples

Chart Biomedical produces the widest range of liquid nitrogen storage vessels in the market, including high-capacity, low-emission -190°C nitrogen vapour freezers, aluminium liquid nitrogen freezers, vapour shippers and storage dewars. Use the selector guide below to help you choose the model that best suits your needs. In addition, our trained sales team is available to give you recommendations to suit your requirements on 0800 389 0202.





# Total product solution

Air Products CryoEase® Services has developed a fully comprehensive project management solution from gas supply, laboratory design, installation, sample storage and training through to ongoing maintenance and support. With our strong knowledge of liquid nitrogen and class-leading range of Chart freezers, we are able to provide the optimum turnkey solution to meet your needs.

## CryoRoom Design and Installation

Air Products CryoEase® Services can provide design and installation service for the set up of a new cryopreservation laboratory or the expansion of an existing laboratory. Managing a cryoroom project is a very complex process with many factors to take into consideration which include:

- Cryoroom location and layout
- Current vs. future requirements
- The right equipment
- Siting of the Freezers
- Storage options
- The right materials for the room
- Pipework considerations
- Filling options
- Extraction systems
- Oxygen level monitoring
- Health and safety
- Security of access
- The right partners

A well managed project can save time, money and effort. Air Products CryoEase® Services can manage this on your behalf, saving you the onerous task of dealing with multiple suppliers.

## Gas Supply

### Nitrogen, CO2 and Argon

Air Products is one of the largest liquid nitrogen suppliers in the UK. We operate a specialised delivery fleet optimised for this application from van-based services for city centre work, to our high-capacity rigid tankers. We supply in liquid and gaseous formations to suit your needs, from cylinders to large tanks.

### Liquid Nitrogen Storage Vessels

Storage vessel options extend from desk flasks to bulk vessels, and we offer lease facilities to match your budgetary requirements.



## Other products and services you may be interested in:

### Gas Pipework

We can help you to design and install a laboratory, including aspects such as high-purity pipework and specialist gas control equipment.



### Carbon dioxide

We offer a unique and scalable solution to the supply of liquid carbon dioxide for incubators, ranging from traditional cylinder options, to the innovative CarboStore

mini-bulk storage technology and full bulk supply.

### Nitrogen

Where multi-gas incubators are used we can supply liquid nitrogen and storage vessels to suit customer specifications.

For smaller capacities we can offer cylinder gas options for both carbon dioxide and nitrogen.



### Pharma Grade gases

Where gas quality and full traceability are critical, the Pharma Grade gases meet all legal requirements that provide protection to final users.



### Analytical and Specialty Gases

Custom- and standard-precision gas mixtures and pure gases are available in a full range of refillable and non-refillable cylinders

## Model range

Product Range	Description	Capacity
Vario Series	Stainless Steel Variable rate freezer -50°C to -150°C	Up to 1,046 blood bags <sup>(2)</sup> Up to 94,500 vials <sup>(1)</sup>
HE Series	Stainless Steel Vapour Freezer	Up to 94,500 vials <sup>(1)</sup> Up to 11,506 blood bags <sup>(2)</sup>
MVE Series	Stainless Steel Liquid of Vapour Freezer	Up to 39,000 vials <sup>(1)</sup> Up to 3,968 Blood Bags <sup>(2)</sup>
Cryocart	Portable Vapour Workbench	N/A
Cryosystem	Aluminium Rack Liquid Freezer	Up to 6,000 vials <sup>(1)</sup>
SC/XC Series	Aluminium Canister Liquid Freezer	Up to 1,320 vials <sup>(1)</sup> Up to 4,500 straws
Shippers	Dry Vapour Shipper for Samples	Up to 1,134 vials <sup>(1)</sup> Up to 7,410 straws Up to 10 Blood Bags <sup>(2)</sup>
Doble Series	Liquid storage Vapour shipment	Up to 1,320 vials <sup>(1)</sup> Up to 6,216 straws
Lab Series	Liquid Nitrogen Dewar	N/A

(1) Vial capacity based on 1.2-2.0ml vials (dependent upon inventory design)

(2) Blood bag capacity based on Compact (25ml) blood bags (dependent upon inventory design)

For capacities with other media, please refer to our literature.

## Dedicated service line

Our dedicated technical service department is available 7 days a week and will deal with any enquiries you may have. Our extensive experience means that we can solve most issues over the phone. However, should a service engineer be required, this can also be arranged.

## Servicing

Air Products CryoEase® Services is able to offer a full-service package on your liquid nitrogen cryogenic freezers and your bulk storage tanks. Our sales team will be happy to discuss the best package to meet your needs.



## After-sale service

We can provide guidance and advice on the day-to-day running of your equipment. We can also arrange on-site visits for product familiarisation on request.

## Liquid nitrogen safety courses

Air Products CryoEase® Services runs a range of courses covering the health and safety issues related to working with liquid nitrogen. The courses range from instructor-led and e-Learning modules to specialised courses in collaboration with your industry body that also cover cryopreservation techniques and are accredited by the appropriate association or society.

# tell me more

For more information,  
please contact us at:

**Air Products PLC**  
2 Millennium Gate  
Westmere Drive  
Crewe. CW1 6AP  
T+0800 389 0202 1  
E: apukinfo@airproducts.com



[airproducts.co.uk/  
cryoeaseservices](https://airproducts.co.uk/cryoeaseservices)