

STATEBOURNE

cryogenics

Safety, Monitoring and Accessories

Liquid level Control

Temperature Monitoring

Cryogenic Accessories

Protective Equipment

Personal Safety

Alarms

Laboratory Safety

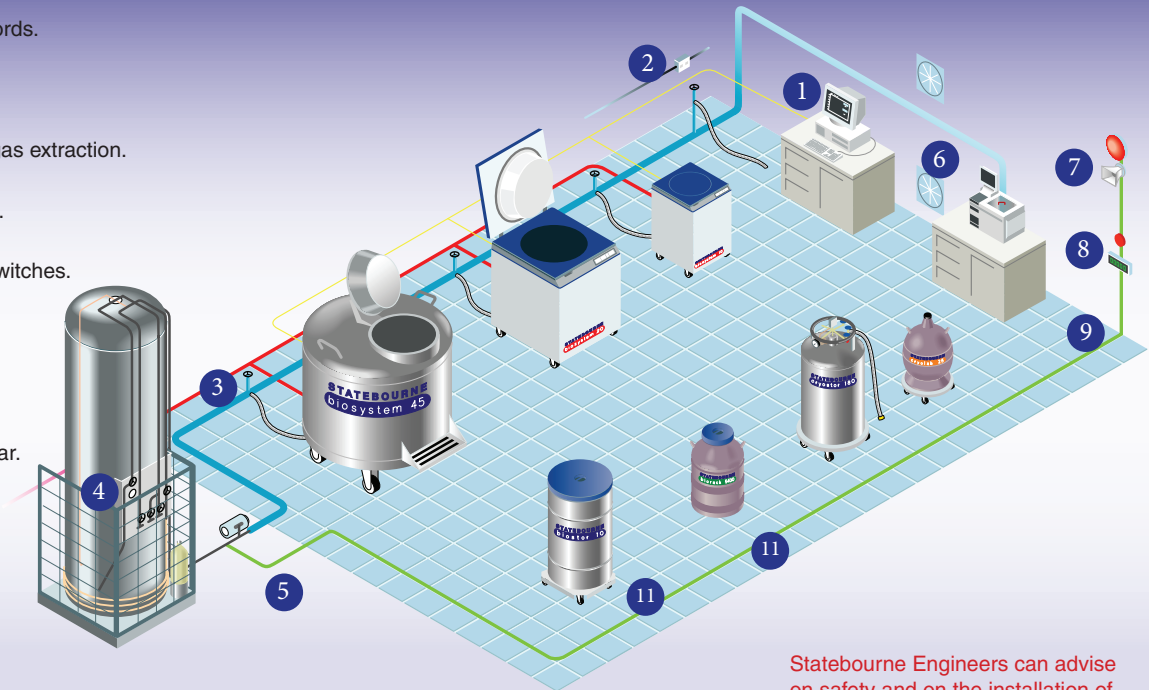
Datalogging



Laboratory safety

Practical LN2 Management Equipment

1. Computerised laboratory system records.
2. Autodialler.
3. Vacuum-insulated piping and waste gas extraction.
4. Auto-telemetry for supply tank status.
5. Fail-safe room isolation valves and switches.
6. Forced ventilation and controls.
7. Remote alarms (audio & visual).
8. Manual isolation switch plus space bar.
9. O2 deficiency monitor.
10. Programmable freezers
11. Independent LN2 level monitoring



Statebourne Engineers can advise on safety and on the installation of any of the above facilities.

Both safety and practical aspects of any laboratory using cryogenic liquids require attention in the planning stages. However, even in an established laboratory, reviews of both safety and improvements may need to be considered on a regular basis. Statebourne Cryogenics has a considerable experience in the design, manufacture and installation of all types of equipment in this field and our engineers are always available to give advice. A typical medium sized well appointed cryogenic laboratory is shown above. Statebourne Cryogenics can supply and install complete systems.

Personal Safety Protective Equipment

Cryogenic Aprons & Gloves



Part No.9701112 - Apron
Part No. 9701115 - Gloves (Medium)

O2 Deficiency monitors



Part No. 9702256 - Oxsafe Series 1 Monitor with Display

Also available, Personal Oxygen Depletion monitor Part No. 9702124

Cryogenic Gloves



Elasticated wrist-type Part No. 8701031

Safety Visor



Part No. 8701032

Cryoguard with Datalogger (Part Number 9701321)

Can be used with **Biostor, Biorack, Biotrek** and **Bio** models.

Battery operated, this unit can be independently mounted on any of the Biostor, Biorack, Biotreck or Bio Series containers to provide a continuous watch on the refrigerator's condition. An alarm will sound if pre-specified temperature limits are transgressed. Additionally, a logged record of temperature at a pre-specified interval is maintained which can be downloaded to a PC.

This unit is battery operated but can also be mains operated with a suitable power source.



Low level Alarms (Part Number 8602622) Battery-operated (Part Number 8602622 & 8602623) Inc Mains Adapter



These units can be used with **Bio, Biorack** and **Biostor**, battery or mains operated models.

Battery or mains operated these units are supplied with control box and adjustable probe fitted in a protective tube specially mounted in the neck plug of the vessel. When the level of liquid nitrogen falls more below the set position of the probe, both visual and audible alarms are activated.

LC 200 Level Controller Kit (Part Number 9701042)

Can be used with **Biostor, Open Dewars** and **other applications** such as cold traps. The kit is supplied complete with control box, sensors, dual solenoid valves, all electrical connections and pipes with flexible delivery hose.

Designed to be used with Biostor 12 and 24 models to convert to automatic operation when used with a Cryostor vessel as a reservoir, the LC 200 is supplied with a power source for mains operation.



Autodialler Unit (SD2+) Mains operated auto charger battery back up. (Part Number 9702193)

Can be used with **Low Level Alarm**, (Mains model), **Cryoguard Datalogger** (when mains powered) and **all Biosystem** models.

The Autodialler unit connects to an output port on any of the above models and receives a signal in the event of an 'Alarm' condition. The Autodialler will then make a telephone connection to three numbers until an answer is received and a pre-recorded message is played.



Hoses

- 1/2" BSP 5ft Long Insulated flex hose (Part Number 3701113)
- 1/2" BSP 2m Long Insulated flex hose (Part Number 3701115)
- 1/2" BSP 1.2m Long (Part Number 3701006)
- 1/2" BSP 1.5m Long (Part Number 3701004)
- 1/2" BSP 2.0m Long (Part Number 3701002)
- 1/2" BSP to CGA295F 2.0m Long (Part Number 3701106)

Flexible stainless steel liquid nitrogen delivery hoses with 150mm reinforcement protection at each end. Supplied in three standard lengths with one end male fitting and other end with 'bull nose' connection fitting with running connector nut, two lengths available insulated.

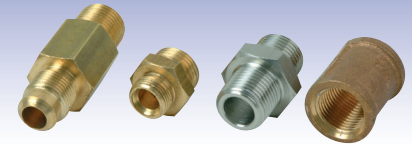
Special lengths and end connections available on request.



Adaptors

- 1/2" BSPTM to CGA295 (Part Number 1201382)
- 3/8" NPTM to 1/2" BSPPM Cone face to suit standard hose. (Part Number 1201382)
- 1/2" BSPTM to 1/2" BSPPM Cone face to suit standard hose. (Part Number 1401092)
- 1/2" BSPP socket. (Part Number 120245)

Basic adaptor fittings to provide solutions to most situations.



Dispensing lance with phase separator and anti-splash shield. (Part Number 9701262)

Connects to the 'female' end of a standard hose and is used for filling dewars and small refrigerators from a low pressure Cryostor unit.



In-Line safety relief valve assembly. (Part Number 9911009)

Connects to the 'female' end of a standard hose and is used for filling dewars and small refrigerators from a low pressure Cryostor unit.

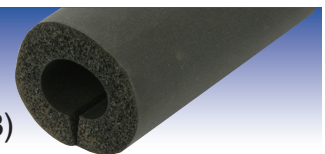
Cryogenic Ball Valve 1/2". (Part Number 1701003)

Brass with chromium plated finish and modified for cryogenic applications.



Pipe insulation.

- In 2 meter lengths in 2 sizes: "small" to suit standard hose (part number 7401028)
"large" for second layer (Part number 7401071) 22mm x 13mm (Part number 7401063)



Stainless steel baskets.

Various sizes available for immersion applications.



Dermatology "dipper".

Small (10ml) stainless steel ladle with long handle (500mm) for liquid nitrogen (Part Number 9701017).



Level Measuring sticks & Cryograbber.

- 2 lengths available 50cms (Part number 9701009) and 100cms (Part Number 9701012)
Cryograbber (Part number 9701180) Flexible pick up tool. (Pictured.)
Cryo claw (Part number 9701104). Heavy duty retrieving device.

