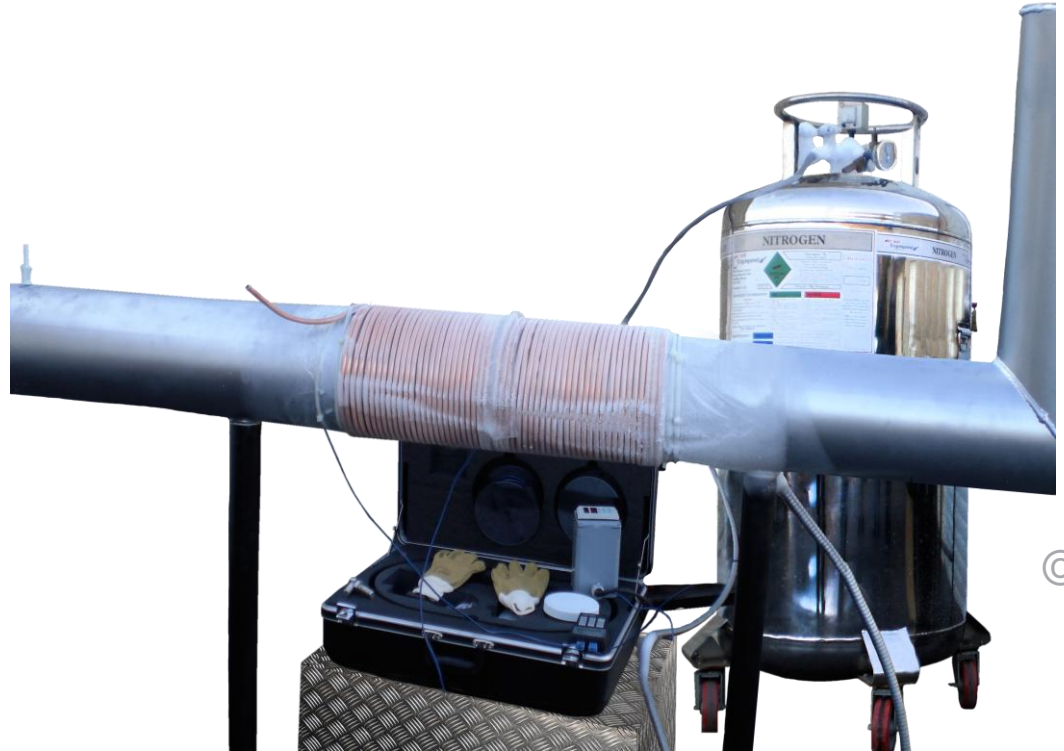
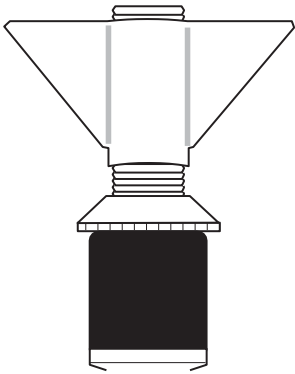


# Accu-Freeze™

## Automatically Controlled Liquid Nitrogen Pipe Freezing System



### Accu-Freeze™ The Automatically Controlled Liquid Nitrogen Pipe Freezing System

Accu-Freeze™ utilises liquid nitrogen in a controlled system to freeze stationary liquids in a selected section of pipe or tubing.

By controlling the surface temperature of the pipe, Accu-Freeze™ can accurately and safely form an in-line ice plug, capable of withstanding 138 bar (2000 Psi) in pipe up to 12 inch (300 mm) diameter.

This temporary plug isolates the section, allowing repairs or modifications to be made without shutting off or draining the entire system.

Accu-Freeze™ is the world's only patented, digitally controlled pipe freezing system thus allowing you to accurately and safely create an ice plug.

The ice plug only forms beneath the Accu-Freeze coil wrap and jacket which is used on a 6 to 12" (150 to 300 mm) pipe and does not expand outside of this point.

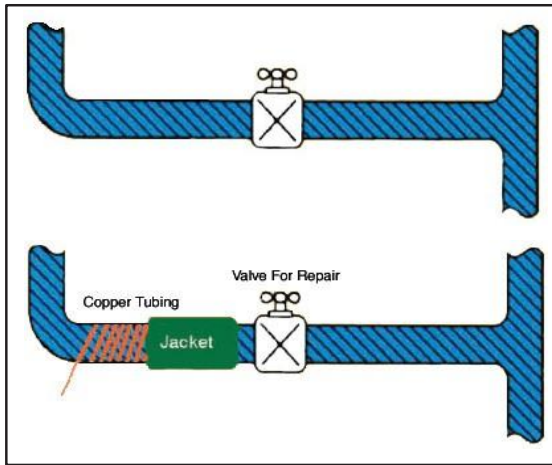
### MAJOR ADVANTAGES OF ACCU-FREEZE™

- Saves valuable time normally lost draining and refilling a system.
- Avoids complete shutdown of systems and equipment.
- Prevents waste of large amounts of water.
- Eliminates handling of contaminated water.
- Safe and cost effective.
- Standard products to suit pipe and tube sizes up to 12" (300 mm) .
- Accu-freeze is more cost effective than other refrigeration systems.
- Liquid N<sub>2</sub> delivery system is notably colder than other refrigerants.
- Ability to digitally set a specific freeze temperature.
- Ability to automatically control the freeze temperature.
- Able to control the system from a remote location.

## Accu-Freeze™ Procedure

An Accu-Freeze™ ice plug starts with wrapping copper tubing and a specially designed insulated jacket around the section of pipe to be frozen.

The nitrogen is then injected through the patented control system.



Water is brought to a static condition (no flow).

The Accu-Freeze™ wrap is placed around the pipe upstream from the section to be repaired.

Next, set the recommended surface temperature of the pipe in the digital controller.

Accu-Freeze® takes over by automatically injecting the liquid nitrogen through the system over the in-line ice plug.

Once the plug is formed, maintenance and repair can take place without draining or shutting off the entire system.

### Jacket Sizes

The Accu-Freeze™ insulating jacket accommodates pipe sizes from 6" (150 mm) to 12" (305 mm).

The design of the jacket incorporates adjustable straps, this will allow the user to alter the jacket size according to the application requirements.

### Factory Set Options

Each Accu-Freeze™ unit can be set to 220 V or 110 V and a working scale of °C or °F.

Optional Aluminium jackets.

## The Accu-Freeze™ Kit Contains

- Carrying Case
- Control Solenoid Valve Header Complete
- Digital Controller Complete
- 10 ft. Flexible Cryogenic Hose
- Ferrules, Fittings, T- Connectors
- "T"Connector Plug (Male)
- "T" Connector Jack (Female)
- 4 ft. T/C Wire With Male End Connector
- 33 ft. T/C Wire With Male & Female Connector
- Spool
- T/C Support Strap
- 2 Channel Temperature Monitor (Battery Operated)
- Operating Instruction Manual
- Roll of Soft Copper Tubing (5/16" or 1/4")
- Insulated Gloves
- Safety Glasses
- Insulating Jacket
- 35 Psi Relief Valve
- 50 Psi Relief Valve



### Safety Notes:

- Accu-Freeze™ utilises liquid nitrogen to create the cryogenic temperature necessary to form ice plugs.
- Safety precautions must always be taken with use of this product.
- Protective clothing i.e. gloves, goggles, etc. must be worn at all times when operating this product.
- Liquid nitrogen is heavier than air and will displace oxygen. Sufficient ventilation is required, especially when operating in confined areas.
- Accu-Freeze™ is designed to operate with liquid nitrogen tanks fitted with low pressure safety valves.
- Use with any tanks other than properly specified, will cause damage to the unit and possibly harm the operator.