

## Absurdly Fast Chilling

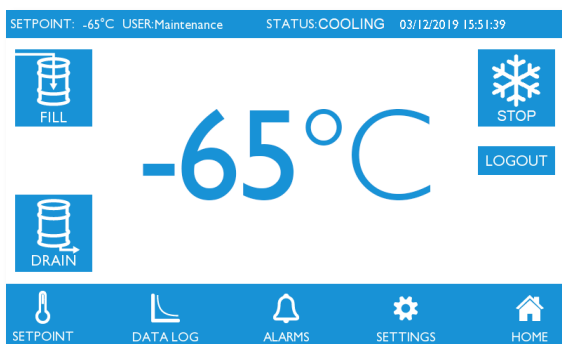
Cool 120 gallons of alcohol-based solvents to -45 °C in 45 minutes, with a machine the size of a refrigerator.

Combined with powerful Cryometrix Liquid Nitrogen Technology, patent-pending liquid chilling technology enables accurate, extremely fast, and ultra-cold temperatures. Reach -65 °C in under 60 minutes. The Cryometrix L-80 Liquid Chiller is opening a new market – the small and powerful solvent chiller market.

The L-80 circulates cryogenic liquid nitrogen (LN2) within its patent-pending chamber design, enabling it to rapidly cool viscous liquids that are commonly used as solvent-extractors. Designed for ease-of-use, with just three button presses the L-80 can cool liquids to temperatures as low as -80 °C from a reservoir and pump it back out.

Cryometrix Liquid Nitrogen Technology doesn't require a mechanical compressor, dramatically reducing energy costs. Zero heat is exhausted to the room, removing the need for expensive HVAC systems. Mechanical compressors also require lots of upkeep and maintenance. The L-80 avoids all of this with simple and robust LN2 technology.

Traditionally, containers of solvent are placed within a large and slow freezer room. The solvent takes several days to reach a suitable temperature and then must be manually moved. The L-80 decreases both chilling time and handling time, using hoses to automatically pump liquid in and out of the chilling chamber. *Increase production yield and reduce production time with the L-80.*



L-80 Touch Screen

### Cryometrix L-80 Capabilities

- Temperature adjustable from +20 °C to -80 °C
- Temperature uniformity  $\pm 1$  °C throughout
- Built-in data logging and security
- Stainless steel liquid containment system
- Optional battery backup
- Approx. 1 hr. 15 mins. cycle time @ -65 °C
- 120-gallon and 200-gallon capacity
- Custom size chillers available – contact Cryometrix

Contact Cryometrix about customized options for your company's needs.



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# Customer-Focused Engineering

The Cryometrix L-80 Liquid Chiller was designed for the customer's ease-of-use.

The Cryometrix L-80 Liquid Chiller brings newfound capability to the solvent chilling market. Chemical extraction technicians get the convenience of contained pumping, extremely fast chilling, and draining, while the overall organization gains the economic and sustainability advantages of greatly reduced energy usage and enhanced performance. The benefits extend to the end users as Cryometrix Liquid Nitrogen Technology can enhance extraction efficiencies.

| FEATURES                                      | BENEFITS  |
|---|---|
| Cryometrix Liquid Nitrogen Technology         | <ul style="list-style-type: none"><li>■ Minimizes service interruptions/downtime</li><li>■ Uses up to 90% less energy than mechanical units</li><li>■ Fastest chill times in the industry</li><li>■ Reduces need for maintenance or repairs</li><li>■ No HVAC required</li><li>■ No chemical refrigerants, oils, CFCs, or HCFCs</li><li>■ Extremely silent chilling operation</li></ul> |
| 304 Stainless Steel Liquid Containment System | <ul style="list-style-type: none"><li>■ Easy cleaning and sterilization</li><li>■ Reliable strength and durability</li></ul>  |
| Touchscreen Interface                         | <ul style="list-style-type: none"><li>■ Simple management, security, and monitoring of chilling processes and user operation logging</li></ul>  |
| Reliability                                   | <ul style="list-style-type: none"><li>■ Optional battery backup allows normal L-80 operation upon loss of power</li><li>■ Emergency LN2 valve for operation w/o power</li><li>■ Downloadable temperature, alarm, and user logs</li></ul>  |



## Dimensions

- Exterior (height x depth x width): 66 in. x 48 in. x 40 in.
- Barrel (diameter x height): 30 in. x 46 in.

## Features

- 7" Touchscreen LCD
- User Log-in w/ Security Restrictions
- Data-logging
- State of the art electronics

## Performance (120 gal Ethanol)

- 6 min fill time
- 12 min drain time at -65 °C
- 60 minutes chill time @ -65 °C

## Electrical

- 120V at 60 Hz
- NEMA 5-15 plug
- Intrinsic Safety Barrier

## Liquid Nitrogen (LN2) Requirements 120 gal Ethanol @ -65 °C

- Approx. 75 gallons LN2 / cycle
- 150 psi LN2 supply pressure
- 0.6 gal LN2 used / 1 gal Ethanol chilled

Contact us at [info@cryometrix.com](mailto:info@cryometrix.com) for information about the L-80 Liquid Chiller!

## Trust Cryometrix

Cryometrix offers a comprehensive array of cryogenic storage freezers, ultra-low temperature freezers, blast freezers, shipping containers, liquid chillers, and transportation refrigeration units. Our business is making things cold. Cryometrix freezing, cooling, and refrigeration products use liquid nitrogen. Cryometrix Liquid Nitrogen Technology does not use compressors or refrigerants and greatly reduces energy usage and maintenance. The L-80 will reduce costs while simultaneously increasing performance. Contact Cryometrix for more information. Patent Pending.