

Temperature Chamber

Product Overview



Built for reliability and efficiency, our temperature chambers deliver rapid, accurate environmental control using forced convection heat transfer.

TotalTemp's chamber offerings includes:

- Cryogenic Chambers
- Mechanically refrigerated
- Hybrid Chambers
- High Performance Rapid Transition Chambers
- Fully Custom Built



Standard Cryogenic



C460 Stack



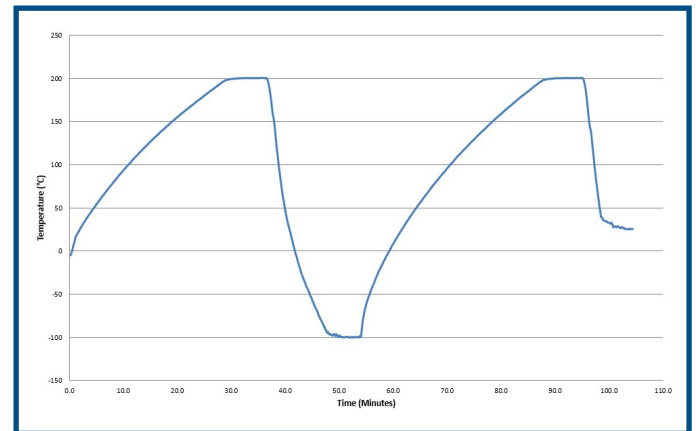
C230 Mechanically Refrigerated



HBC144 Hybrid Chamber

Features and Options:

- Designed for uniform airflow for precise control
- Stainless steel interior/ powder coated steel exterior
- High density, thin insulated walls
- Apertures for DUT accessibility
- Overheat and redundant cooling runaway protection
- Built-in thermal failsafe system
- Purge system to prevent condensation
- Fully featured, programmable touch-screen controller



Chamber Thermal Transition Rate (Typical)

Cryogenic Temperature Chamber Specifications

Temperature Range	-100°C to +200°C (L-N ₂)
	-65°C to +200°C (L-CO ₂)
	Extended temperature range available
Temperature Transition Rate	Cooling: 25°C/minute (Typical.)
	Heating: 15°C/minute (Typical.)
	Rapid thermal transition rates available
Temperature Control Tolerance	±0.1°C
Temperature Uniformity	±1.0°C maximum
Power Requirement	100-120V / 50-60Hz / 1PH / 15-30A max
	200-240V / 50-60Hz / 1PH / 15-30A max
Construction	Stainless steel interior and powder coated steel exterior

Mechanically Refrigerated Temperature Chamber Specifications

Temperature Range	-45°C to +175°C (Single Stage)
	-75°C to +175°C (Cascade)
Temperature Transition Rate	Cooling: 4°C/minute (Typical.)
	Heating: 13°C/minute (Typical.)

