

# FTS Systems HistoChill™

## Tissue-Freezing Bath



HC80

HC55

### Features

- Hinged and insulated reservoir lid.
- Mechanically refrigerated.
- Rapid freezing of samples.
- Optional temperature control (HC80 only).

### Benefits

- Allows for more stringent, tissue specific or R & D applications.
- Provides easy access to bath
- Eliminates the need for expendable refrigerants.
- Minimizes ice crystal formation allowing for more precise microscopic examination of the sample.

### Agency Approvals

- CE (2006/42/EC), (2006/95/EC), (006/108/EC)
- UL #61010-1, CAN/CSA 22.2 #61010-1

### Performance Specifications

	HC55	HC80
Maximum Low Temperature	-55 °C	-80 °C
Temperature Control	N/A	Optional <sup>§</sup>
Temperature Control Range	N/A	-80 to 0 °C
Temperature Control Stability*	N/A	± 0.1 °C
Temperature Indication Display	N/A	0.1
Compressor	1 @ .25 hp	2 @ .25 hp
Bath Volume	1.5 L	1.5 L

**Notes:** Performance specifications are based on SP Scientific test data from units using 3M™ Novec™ 7000 Engineered Fluid and operating at an ambient room temperature of approximately 22 °C (72 °F).

The HistoChill is not intended, nor has it been tested / designed to be safely used with extremely flammable fluids (e.g., Isopentane).

### HistoChill™ Fluid Comparison

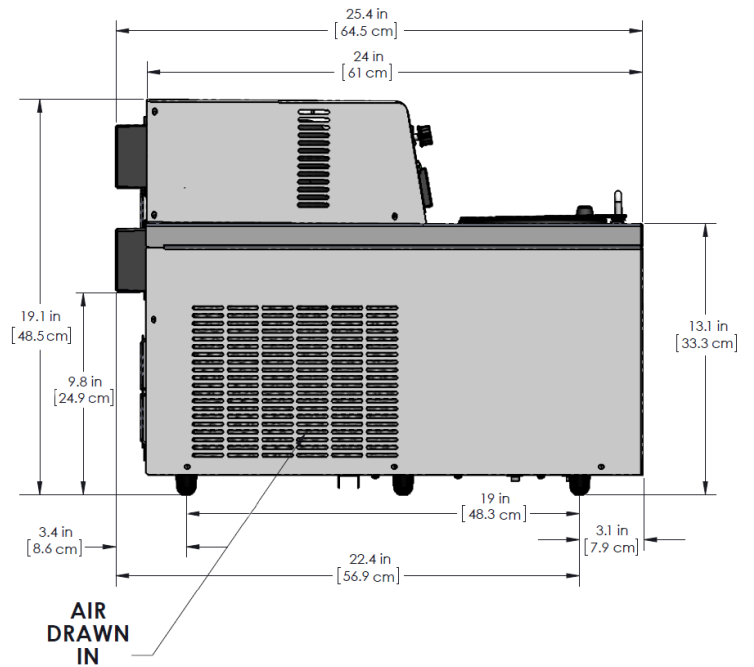
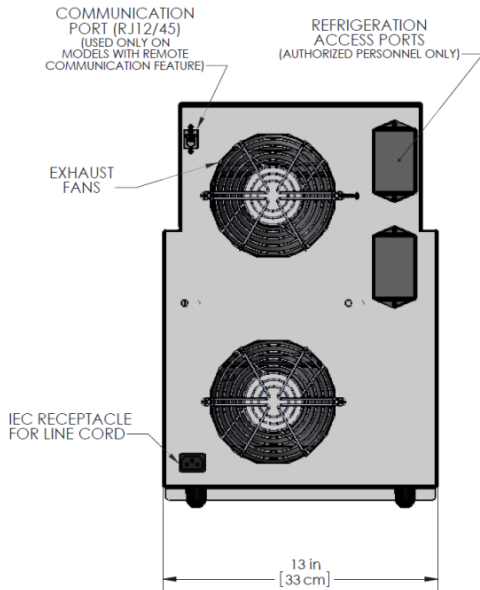
	3M™ Novec™ 7000	Isopentane
Liquid Density	1.4 g/ml	0.616 g/ml
Tox: 8 hr exposure guideline	75 ppmv	ACGIH 600 ppm TWA
Skin Irritation	Negative	Irritant
Eye Irritation	Practically non-irritating	Irritant
Mutagenicity	Negative	Unknown
Flash Point	N/A	-51 °C
Freeze Point	-122.5 °C	-160 °C
Boiling Point @ atmosphere	34 °C	30.6 °C
Flammability	None	Extremely flammable

### Electrical Requirements

	HC55	HC80 (Control)	HC80 (No Control)
60 Hz Option	120 V, 4 A <sup>†</sup>	120 V, 12 A <sup>†</sup>	120 V, 12 A <sup>†</sup>
50 Hz Option	220 V, 2 A <sup>†</sup>	220 V, 6 A <sup>†</sup>	220 V, 6 A <sup>†</sup>

**Note:** All equipment configured with the 60 Hz option is supplied with a 5-15P NEMA configuration (i.e., ⏏). All equipment configured with the 50 Hz option is supplied with a non-terminated AWG 18-3 power cord.

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## Dimensional Data

	HC55	HC80
Width	10.5 in (26.7 cm)	13 in (33 cm)
Depth	20.5 in (52.1 cm)	25.4 in (64.5 cm)
Height	11 in (28 cm)	19.1 in (48.5 cm)
Weight	55 lbs (24.9 kg)	95 lbs (43.1 kg)
Chamber Diameter	4.8 in (12.2 cm)	4.75 in (12.1 cm)
Chamber Depth	6.5 in (16.5 cm)	6.5 in (16.5 cm) <sup>‡</sup>
Height to Work Surface Above Bench Top	10.5 in (26.7 cm)	13.5 in (34.3 cm)

## Optional Accessories

### 3M™ Novec™ 7000 Engineered Fluid

3M™ Novec™ 7000 Engineered Fluid p/n HT-7000 is available for the HistoChill™.

**Note:** Dimensional drawings shown for HC80 only.

\* Temperature control is accomplished by means of a proportional-integral-derivative (PID) microprocessor control which offers rapid temperature stabilization and displays a bright, continuous read of temperature with 0.1 °C indication.

<sup>†</sup> Maximum continuous amperage drawn by the equipment.

<sup>‡</sup> Chamber Depth decreases to 5 in (12.7 cm) for HC80 units with the temperature control option.

<sup>§</sup> Magnetic Stirrer is included with temperature control option (HC80 only).