

Enhanced Outcome With Intraoperative Hyperthermia

The

# ThermoChem™ HT System

Breakthrough Technology in Intraoperative Hyperthermia



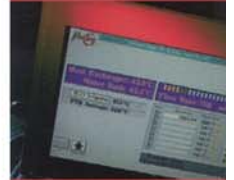
ThermoSolutions

[www.thermosolutions.com](http://www.thermosolutions.com)

**The First Fully Integrated System  
for Intraperitoneal Hyperthermia**

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**he ThermoChem™ HT-1000 System from ThermaSolutions is the first FDA cleared and CE registered, fully integrated system specifically designed and manufactured for intraperitoneal hyperthermia (IPH). By exploiting heat and harnessing its power, this advanced medical technology offers a new choice in adjunctive surgical therapies. Used intraoperatively, ThermoChem™ HT-1000 System raises the temperature in the peritoneal cavity to a target temperature of up to 43.0 °C (109.4 °F) by continuously circulating sterile solution throughout the peritoneum. Use of the system is easy and user friendly.**



## System Operations

The ThermoChem™ HT-1000 continually circulates a heated sterile solution throughout the peritoneal cavity, accurately raising its temperature to a pre-determined target selected by the physician.

### The ThermoChem™ HT System

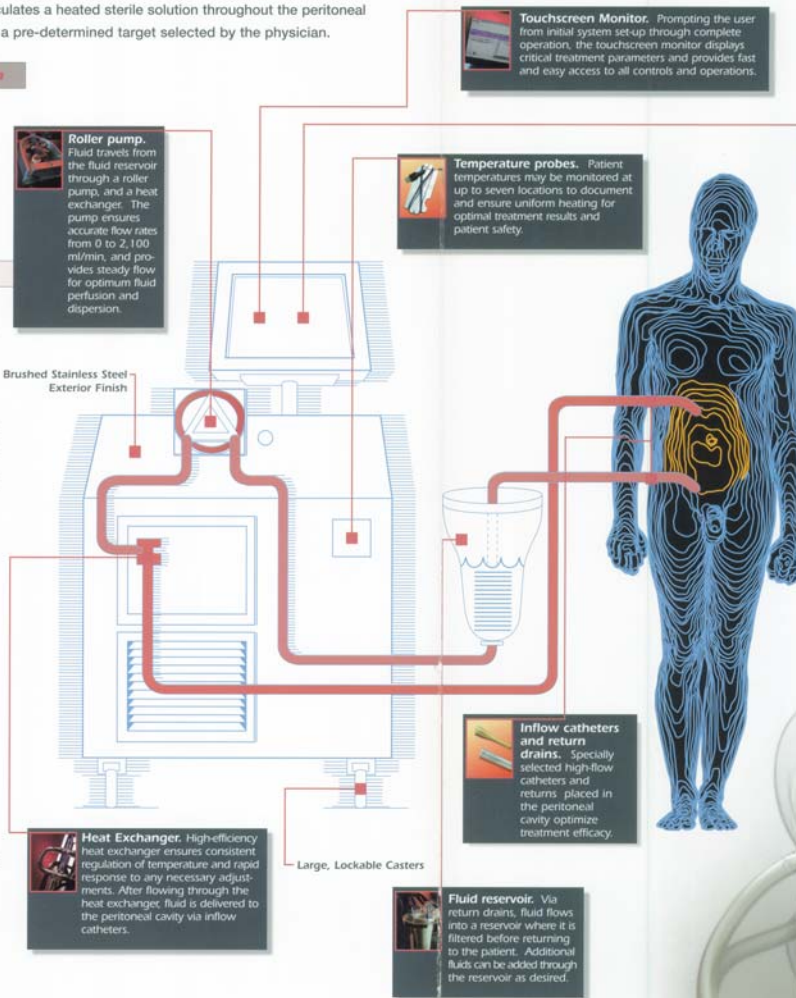
The ThermoChem™ HT-1000 System includes two major components:

- The ThermoChem™ HT-1000 operating unit;
- The ThermoChem™ HT-1000 disposable IPH procedure kit.

### The ThermoChem™ HT-1000

Providing a new standard in intraperitoneal hyperthermia treatment, the ThermoChem™ HT-1000 is a system of specially integrated subsystems and devices for fluid control and accurate temperature maintenance. At its core is a proprietary heater/cooler system that was specifically developed for IPH, and is adjustable from 30 to 47°C (86 to 116.6°F) in 0.1 degree increments. With this level of precision, the targeted treatment temperature can be quickly achieved, closely maintained, and easily adjusted to optimize treatment efficacy and patient safety. In addition, a proprietary fluid monitoring system serves as an added safeguard in preventing any possible 'over-temp' condition. Fluid flow is controlled by a roller pump system with a flow rate range of zero to 2,100 milliliters per minute.

All operating parameters are monitored by a computer, and displayed and managed through an interactive touchscreen monitor. The operator can access all system controls and operations, input all necessary patient data, and define and adjust treatment parameters with just the touch of a finger.



**Touchscreen Monitor.** Prompting the user from initial system set-up through complete operation, the touchscreen monitor displays critical treatment parameters and provides fast and easy access to all controls and operations.

**Temperature Monitoring System.** Proprietary safety system monitors patient and device operating temperatures, for patient safety, and maximizes treatment effectiveness.

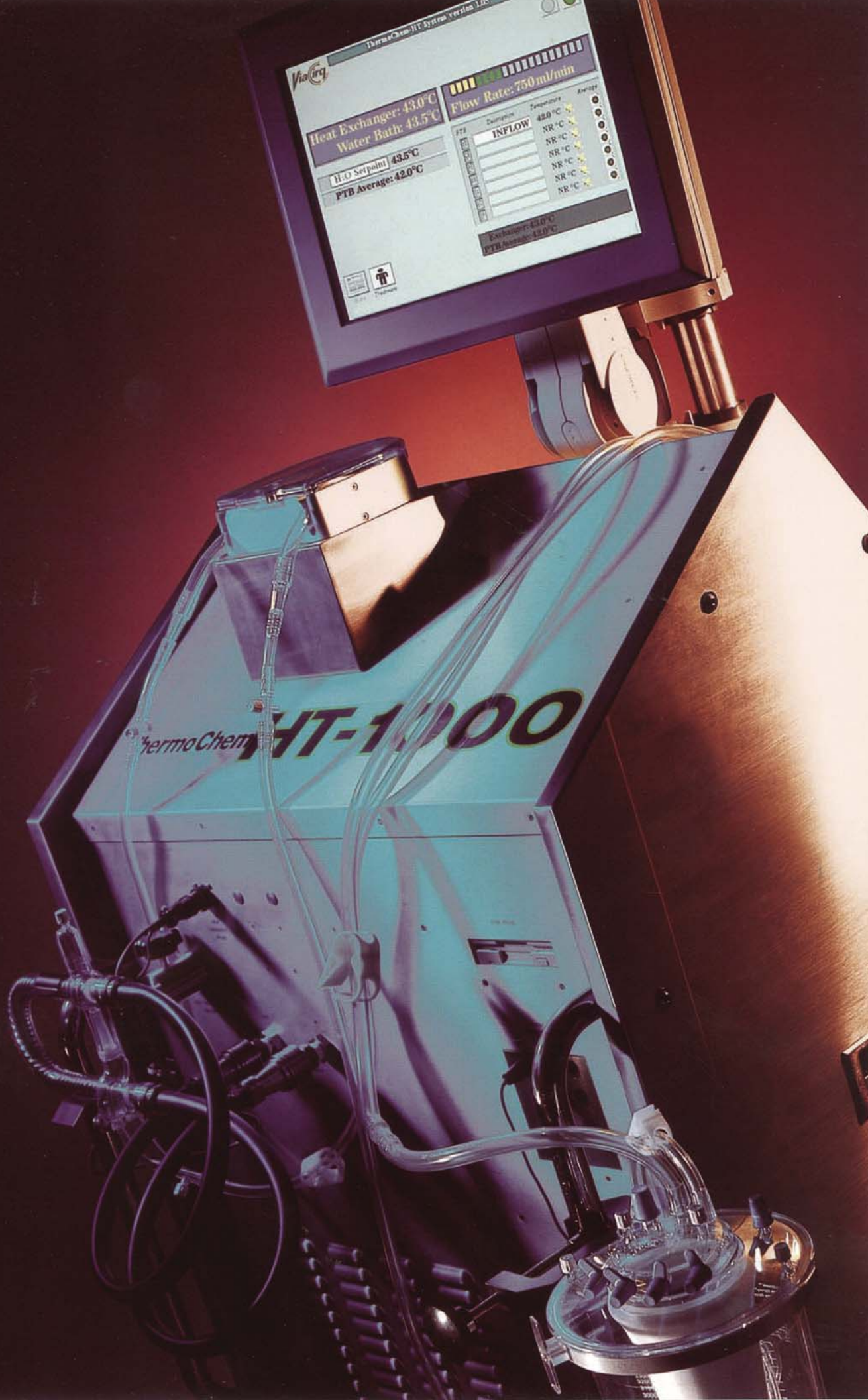
**Temperature probes.** Patient temperatures may be monitored at up to seven locations to document and ensure uniform heating for optimal treatment results and patient safety.

**Roller pump.** Fluid travels from the fluid reservoir through a roller pump, and a heat exchanger. The pump ensures accurate flow rates from 0 to 2,100 ml/min, and provides steady flow for optimum fluid perfusion and dispersion.

### ThermoChem™ HT-1000 IPH Procedure Kit

Accessories necessary for an IPH treatment are pre-assembled in a single, ready-to-use sterile package, including fluid reservoir, high-flow heat exchanger, patient temperature probes, PVC pump tubing set, inflow catheters, and return drains.





ThermoChem-HT System version 1.00

ViaQ

Heat Exchanger: 43.0°C  
Water Bath: 43.5°C

H<sub>2</sub>O Setpoint: 43.5°C  
PTB Average: 42.0°C

Flow Rate: 750 ml/min

Destination	Temperature	Alarm
INFLOW	43.0°C	OK
	NR °C	OK
	NR °C	OK
	NR °C	OK
	NR °C	OK
	NR °C	OK
	NR °C	OK
	NR °C	OK

Exchanger: 43.0°C  
PTB Average: 42.0°C

thermoChem HT-1000



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**ThermoChem HT-1000\* Technical Specifications**

**Weight and Dimensions:**

Depth: .....26 in/66 cm  
Width: .....29.5 in/75 cm  
Height: .....69 in/175 cm (w.Touchscreen Monitor)  
44.5 in/113 cm (w/o Touchscreen Monitor)  
Weight: .....332 lbs/151 kg  
Shipping Weight: .....540 lbs/245 kg

**Electrical Supply:** .....US: 120VAC, International: 230 VAC  
50/60 Hz, 1800 W

**Performance Specifications:**

Fluid Flow Rate: .....User adjustable 0 to 2100ml/min  
Maximum Water Temperature: .....+ 47°C  
Minimum Water Temperature: .....+ 30°C

**Environmental Operating Range**

Ambient Temperature Range: .....+ 10°C to + 40°C  
Humidity Range: .....30% to 75% non-condensing relative humidity

**Ordering Information USA and rest of the world\***

<b>Product</b>	<b>Reorder Number</b>
IPH Procedure Kit.....	101-3100
IPH Procedure Kit.....	101-3150

\* Federal law restricts this device to sale by, or on the order of, licensed physicians.

**Ordering Information Europe**

<b>Product</b>	<b>Reorder Number</b>
HIPEC Procedure Kit.....	TSP1006
HIPEC Procedure Kit.....	TSP2001

The ThermoChem™ HT System has been independently tested and approved to comply with IEC 601-1. United States and International patents pending.