

CANNON[®] CT-1000 CONSTANT TEMPERATURE BATH



CANNON® CT-1000 CONSTANT TEMPERATURE BATH



- ◆ Select temperature from 20 to 150°C; 200°C for HT Model
- ◆ Multiple safety features

The CANNON CT-1000 Constant Temperature Bath maintains the accurate control required by ASTM D 445 for kinematic viscosity measurements with glass capillary viscometers. Within the range of 20 to 100°C temperature is controlled to 0.01°C; above 100°C temperature is controlled to 0.03°C.

Setting Temperature

Ten of the most popular temperatures for kinematic viscosity measurement can be quickly set by rotating a special switch on the bath's front panel. This switch allows 20, 25, 30, 40, 50, 60, 80, 100, 135, and 150°C to be selected. After selection of the temperature, the bath will equilibrate within a fraction of one degree of the desired temperature. A fine tuning control then allows temperature adjustment to within 0.01°C of the target temperature. By switching to the "variable" setting on the front panel, any temperature within the operating range can be obtained.

Bath Features

The bath chamber is a cylindrical clear Pyrex® vessel 300 mm (12 inches) in diameter x 300 mm (12 inches) high. A stainless steel baffle coated with white

Teflon is located in the center of the bath to provide a good background for viewing viscometers. Two fluorescent lamps illuminate the interior of the bath brightly and uniformly, without glare.

Two heating elements inside the bath rapidly heat the bath medium to any temperature within the bath range. A stainless steel cooling coil is also incorporated. When connected to tap water or a recirculating water chiller, the cooling coil allows operation at temperatures slightly above or below ambient.

The top cover contains seven round holes 51 mm (2 inches) in diameter. Up to seven glass capillary viscometers (in holders) can be placed in the bath. Other hole configurations can be supplied on special order.

A solid-state control circuit equipped with a stainless steel-encased thermistor provides proportional control of temperature. A motor-driven stirrer ensures a uniform temperature throughout the bath.

All wetted parts of the bath are made of stainless steel, glass, or Teflon®. The bath housing is fabricated from heavy aluminum and coated with a corrosion-resistant epoxy finish. Viscometers, holders, bath oil, and thermometers must be purchased separately.

Safety Features

There are multiple safety features. A thermistor in the bath senses any over-temperature fault condition. If such a condition occurs, all power is removed from the bath until an operator resets the over-temperature limit control circuit. A second safety feature cuts power to the heaters if the control thermistor is disconnected. A liquid-level sensor prevents the control circuit from heating the bath until a safe operating level is attained.

CT-1000HT Constant Temperature Bath

- ◆ Precision temperature control to 200°C

The CT-1000HT Constant Temperature Bath is identical to the CT-1000, except that the CT-1000HT can achieve a temperature range from 25°C to 200°C. The temperature selection dial includes quick-set options for 25, 40, 60, 80, 100, 135, 150, 165, 185, and 200°C. Temperatures from 150 to 200°C can be controlled to 0.03°C (more precise than required by ASTM D 445 for high temperature viscometry).

CT-1000 Constant Temperature Bath Specifications

Dimensions:	438 mm wide x 464 mm deep x 584 mm high (17.25 x 18.25 x 23 inches)
Capacity:	17 L (4.5 gal)
Weight:	43 kg (95 lb)
Shipping Weight:	55.8 kg (123 lb)

Order Information

Catalog #	Item Description
9726-A20	CT-1000, 120 volts AC, 50/60 Hz, 1400 watts
9726-A25	CT-1000F, 240 volts AC, 50/60 Hz, 1400 watts
9726-A27	CT-1000HT, 120 volts AC, 50/60 Hz, 1400 watts
9726-A29	CT-1000HTE, 240 volts AC, 50/60 Hz, 1400 watts