

## Curing Tanks

### Standard Curing Tanks

For sample cylinders to undergo compression testing (and some other lab tests) they must be cured. Curing involves immersing the samples in a water bath at least 8 hours after placing them into the sample moulds. The primary purpose of curing is to ensure that all samples are similar with regards to quality and strength.

### Curing Tank Range

PCTE and Utest offer an array of curing tank options:

- The metal tanks (UTC-0950 large, UTC-0965 small) are made from zinc coated sheet steel and supplied complete with base rack.
- The plastic (UTC-0960 large, UTC-0970 small) tanks are Polyurethane and have a bearer metal carcass and base rack.

Upon request, suitable upper racks to hold concrete cubes are available (max. 8 pieces). The tank is also supplied with a submersible circulator pump to ensure good temperature consistency.

The temperature is adjustable and can be kept constant by an electric resistance incorporating a digital thermo regulator which maintains the set temperature between ambient to 40 °C with  $\pm 2$  °C accuracy.

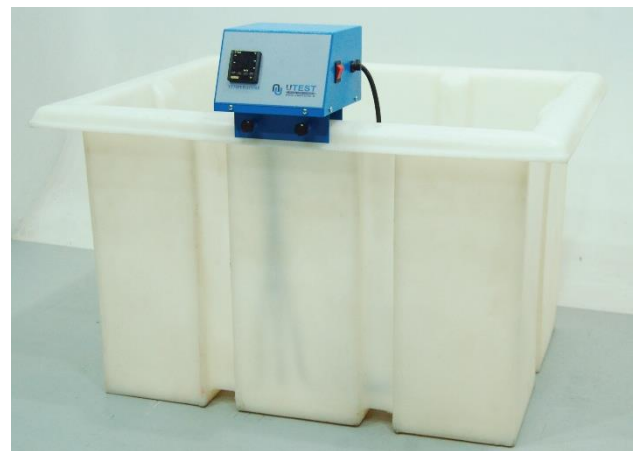
All Curing Tanks are supplied complete with:

- Base Metal Rack
- Heater
- Submersible Circulation Pump



### Technical Specifications

Steel Tanks	UTC-0965	UTC-0950
<b>Internal Dimensions</b>	710 x 710 x 610 mm	860 x 1560 x 615 mm
<b>External Dimensions</b>	650 x 650 x 550mm	800 x 1500 x 550 mm
<b>Weight</b>	55kg	92kg
<b>Capacity (100mm dia samples)</b>	36 (single layer)	120 (single layer)
Plastic Tanks	UTC-0970	UTC-0960
<b>Internal Dimensions</b>	915 x 1250 x 660 mm	800 x 1800 x 1100 mm
<b>External Dimensions</b>	800 x 1100 x 550 mm	700 x 1700 x 1000 mm
<b>Weight</b>	60kg	88kg
<b>Capacity (100mm dia samples)</b>	88 single layer	119 single layer



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### Heater

The thermostat fitted to this curing tank is designed to work with a band of 2°C. The heat input of 1000 watts is sufficient to maintain the temperature at 20°C under normal laboratory conditions approximating to 20°C and 50 % relative humidity. If the room temperature exceeds 20°C, use a portable cooler unit or cold water in order to set the curing at 20°C. Alternatively, if the room temperature is lower than 15°C, insulation of the tank is recommended in order to maintain the required temperature.

### UTC-0980 Accelerated Curing Tank

The Accelerated Curing Tank is constructed to perform hot water curing of concrete sample to speed up curing, and therefore strength development. The unit has a capacity of 350L and the tank is made from stainless steel. The tank is then insulated with a double wall construction. The temperature control is achieved with a PID controlled thermoregulator which has a  $\pm 3$  ° C accuracy. The system also has a timer.

### Curing Cabinet

#### UTCM-0100

The UTCM-0100 Curing Cabinet is used for curing of cement, concrete cubes or other mortar specimens. It can be used for curing cement specimens within the mould, or after removing from the mould. The curing cabinet provides  $20 \pm 1$ °C temp. and over 95% RH humidity for cement specimens. Internal chamber and racks are made of stainless steel. The temperature is maintained at  $20 \pm 1$ °C by a immersion heater and refrigerator unit which are supplied complete with cabinet. The cabinet is equipped with a digital control unit which controls and monitors the temperature. The humidity is maintained from 95% to saturation by water nebulizers and is also monitored on the digital control unit.



## Technical Specifications

### UTC-0980

<b>Internal Dimensions</b>	600 x 900 x 640 mm
<b>Approx Weight</b>	70kg
<b>Power</b>	4500W

### UTC-0100

<b>Internal Dimensions</b>	900 x 700 x 1350 mm
<b>External Dimensions</b>	1100 x 1000 x 2200 mm
<b>Weight (approx.)</b>	150kg
<b>Power</b>	1200W



## About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing

Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal

Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclometers, Extensometers, Tiltmeters, Load Cells and Dataloggers