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101-V0097-A185 CURING TANK – BATH ACCELERATED

Instructions for Use

This accelerated curing tank is applicable to the construction testing industry, concrete precast components factory, scientific research etc. It can assist to predict the compressive strength and flexural strength of concrete early strength, 7 and 28 days by different accelerated curing methods. It is an indispensable special equipment item for concrete quality control.

Asphalt Used to maintain compacted asphalt specimens at constant temperature for controlled testing to various standards. The unit is fitted with an electronic temperature controller with a digital display. It is constructed with a stainless steel inside chamber and exterior case in powder coated steel sheet.

Concrete / Cement With the increased power of our design being 2400W we have a maximum temperature of 100 Deg C which can be reached in a short duration. This tank can also be used for concrete and grout accelerated curing applications

The unit is fitted with an electronic temperature controller with digital display. It is constructed with a stainless steel inside chamber and exterior case in powder coated steel sheet.

For Safety, a secondary thermostat is in place to prevent elements running over temperature as water becomes low.

Operation – key controls

Safety controls

1. Over temperature thermostat set to 120 Degrees.
    - This prevents over temperature if the tank is low on water
2. Main power isolation switch on rear of device

Front panel Manual controls

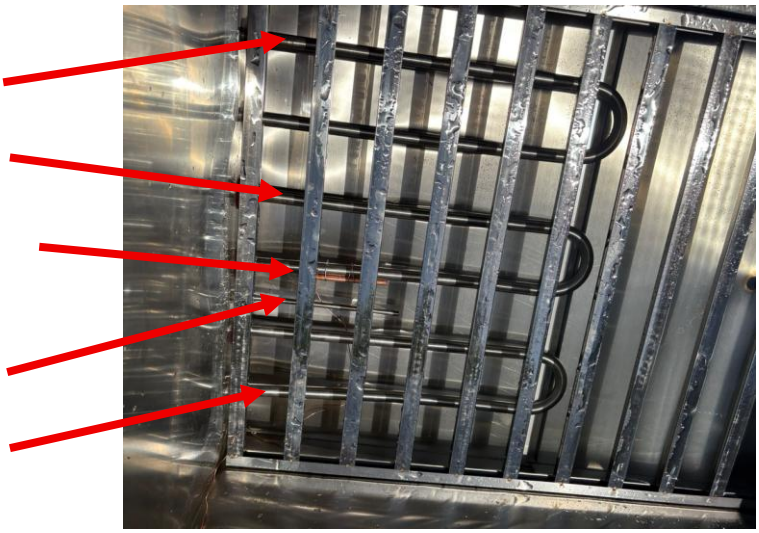
3. The current tank temperature is shown in red as “PV” Present value
4. The “SV” know as Set value can be adjusted by the up and down arrows.

5. The “Power” button turns on/off the heating system.
    - This button brings on the middle 3kW element.
6. The Acceleration button switches on an additional 6kW of power for quick heating
    - these are the two side heating elements in the tank giving 2 x 3kW extra power totalling 9kW
    - When the tank reaches the set temperature the Acceleration elements are turned off and the tank goes back to only 3kW to maintain the temperature.

7. There are two indicator lights on the front of the machine
    - External power active, indicates the main power switch is on
    - Heating, indicated the elements are under power and the water is heating

Operational items - Descriptions

8. Secondary “Acceleration” heating element 3kW
9. Primary heating element 3kW
10. Over temperature thermostat strapped to the (Copper colour) Primary heating element
11. Main temperature controller probe
12. Secondary “Acceleration” heating element 3kW



System shut down and safety considerations

13. DO NOT USE THE HEATING SYSTEMS WITH LOW WATER IN THE TANK. Damage may occur
14. When not used, turn off the Main power switch.
15. Do not leave the system unattended while the heaters are under automatic control.
16. Be aware of the evaporation rate of water at high temperature is significant and can quickly drop to a situation where the heater element can be exposed and overheat.
17. For extended period out of service the water can be drained through the small valve on the bottom of the tank.
18. Open the water valve to drain the water and keep the inside dry and clean.
19. Open the top cover door and cover the protective cover of the temperature sensing probe to avoid damage.

Specification

Internal size	800 x 580 x 400mm
Working voltage	380-415V/50Hz
Heating power	Total 9KW, Split control,
	Single Element: 3KW,
	Total in Acceleration setting 3 x 3KW = 9KW
Temp range Digital controller	10°C-100°C
Continuous working time	>24h
Water storage	125Kg
Over heat thermostat	The device is fitted with a overheat thermostat connected to the primary element. In the event the tank has low water level the overheat will shut the power off to all elements.

Specification Labels on the machine