



HONEY STIRRER
CRYSTALLISER (PLC)
2.8TONN +
OPERATIONAL DOCUMENTATION



Safety Information

This machine should only be used by trained personal only, the company operating the tank should complete site specific risk assessment and set up SOP's for the tank and their intended operation.

Do not operate or attempt to operate with the lids open.

Do not defeat or bridge out lid sensors. They are there to monitor the lids are in place and are for your safety and the safety of your work colleges.

Before carrying out any work in the tank or on the stirrer paddles you must follow standard isolation and lock out procedures. These will involve a minimum of padlocking the main isolator switch in the off position and completing any JSA and permits required by your company health and safety procedures.

The electrical control box has dangerous voltages present and should only be accessed by qualified personal.

Operation of the tank – Single speed

This machine has three modes of operation each mode has different run times.

Mode one: Continuous run set speed

From Initial start up time if you wish to have a continuous run at the set speed a press on the start button will activate this mode.

In this mode the green light is on solidly.

Mode two: Initial run at 15 minutes on and 45 minutes off

To activate in this mode press the green start button and hold it down for 5 seconds until the green light starts flashing. The motor will start as soon as you press the start and to activate the mode you must hold it down the button for the five seconds. The machine will run in a 15 minute on and 45 minute off cycle.

In this mode the green light is flashing at one second intervals.

Mode three: Initial run at 45 minutes on and 3 hours 30 minutes off

From start this mode can be activated by pressing and holding the start button for ten seconds the green light will start flashing at five seconds and then go to a slow flash at ten seconds this has set the machine will run in a 45 minute on and 3 hours 30 minute off cycle.

In this mode the green light is flashing at 2 second intervals.

To reset from any mode press the stop button and then select the required mode.

Operation of the tank – Dual Speed

This machine has three modes of operation each mode has different run times.

Mode one: Continuous run low speed

From Initial start up time if you wish to have a continuous run at the set speed a press on the start button will activate this mode.

In this mode the green light is on solidly.

Mode two: Initial run for 1 hour at low speed, then cycle 45 minutes off and 15 minutes on at low speed

To activate in this mode press the green start button and hold it down for 5 seconds until the green light starts flashing.

The motor will start as soon as you press the start and to activate the mode you must hold it down the button for the five seconds.

The machine will run for 1 hour at low speed, then cycle 45 minutes off and 15 minutes on at low speed.

In this mode the green light is flashing at one second intervals.

Mode three: Initial run at 6 hours at high speed then slow to low speed

From start this mode can be activated by pressing and holding the start button for ten seconds the green light will start flashing at five seconds and then go to a slow flash at ten seconds this has set the machine will run in high speed for 6 hours then slow to low speed.

In this mode the green light is flashing at 2 second intervals.

To reset from any mode press the stop button and then select the required mode.

WHEN THE GREEN LIGHT IS ON THE MACHINE IS ACTIVE AND WILL START ON ITS CYCLE TIME WITH OUT WARNING

To stop the unit press the stop button this is a latch in button so will need to be pulled out to enable the machine to start.

The lids must be down to allow the machine to start and lifting them during operation will stop the motor and cancel the operating mode. To reset close lid and press stop button pull out the press start.

Light Matrix

Green light off	Unit is in standby or the stop button may be in, supply power maybe off.	Switch on power, release stop button and press start button to activate required mode
Green light on or flashing	Unit is in a run mode and systems are working correctly. Motor may start at any time	
Red light is solid	Lid switch has been triggered	Close lid before attempting start. Check lid switches are activated (red light on back of switch is on). Then press stop in and release then press start.
Red light is flashing	VSD drive has faulted or cooling fan fault.	Reset drive by switching power off for 2 minutes then switching power back on. Check overload for cooling fan.

Operation of the door safety system

No tanks are designed or intended to be operated with the lid/door open

The controller should never be tampered with or adjusted from factory settings.

The interlock operates as follows.

- 1 – Tank door or lid is open or not in place – Tank will not start or run
- 2 – Tank door or lid is opened during operation the tank will stop and will not re-start when closed
- 3 – If the Tank door or lid interlock is disengaged during operation, put the lid in place and re-start the tank at the controller.

It is recommended that you check and test the operation of the lid interlock weekly and keep a register of this check. This is to ensure that any faults are detected and rectified early.

If a fault is found, do not use the tank, it must be locked out and tagged out immediately informing your staff of the lock-out tag-out of the tank. Engage NZM or a suitably qualified person to repair the tank before removing the lock and tag and putting the tank back into service.

Maintenance

Contact CrystechNZ to arrange and maintenance, servicing or repairs.

Before carrying out any work in the tank or on the stirrer paddles you must follow standard isolation and lock out procedures. These will involve a minimum of padlocking the main isolator switch in the off position and completing any JSA and permits required by your company health and safety procedures. The electrical control box has dangerous voltages present and should only be accessed by qualified personal.

