

# ZycoTherm

## Metering System

### User Manual

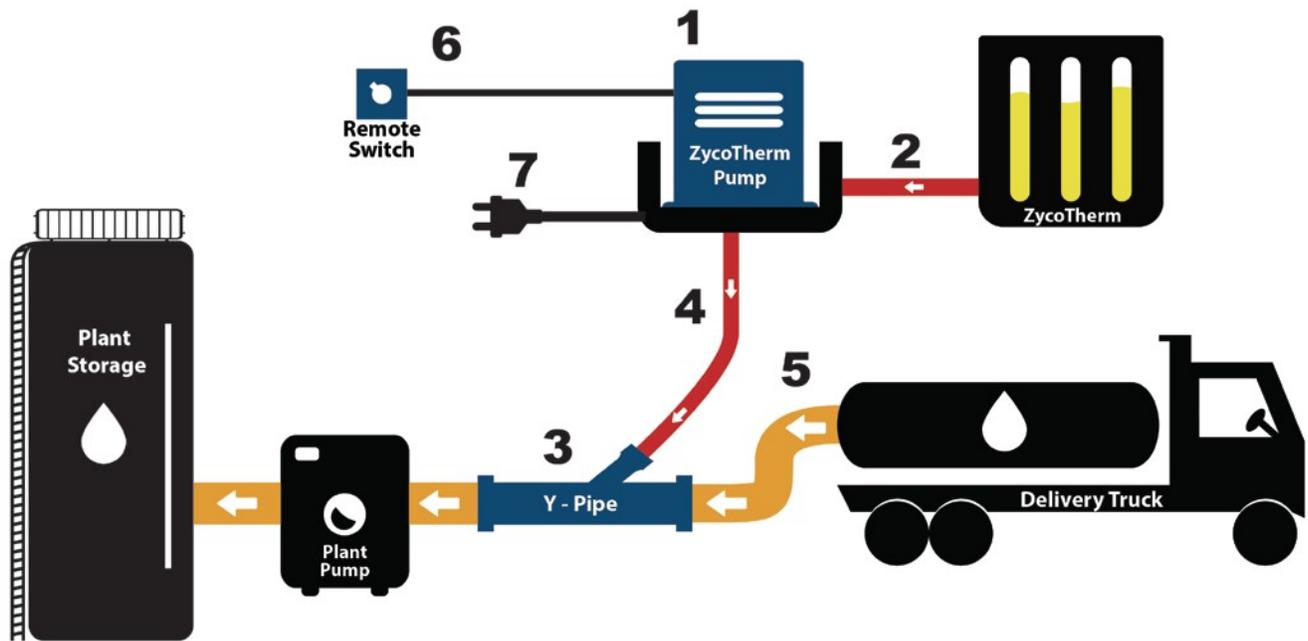
Model: HTAS ZT2



6055 Mechanicsville Turnpike  
Mechanicsville, VA 23111

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## Pump Install and Operation Instructions

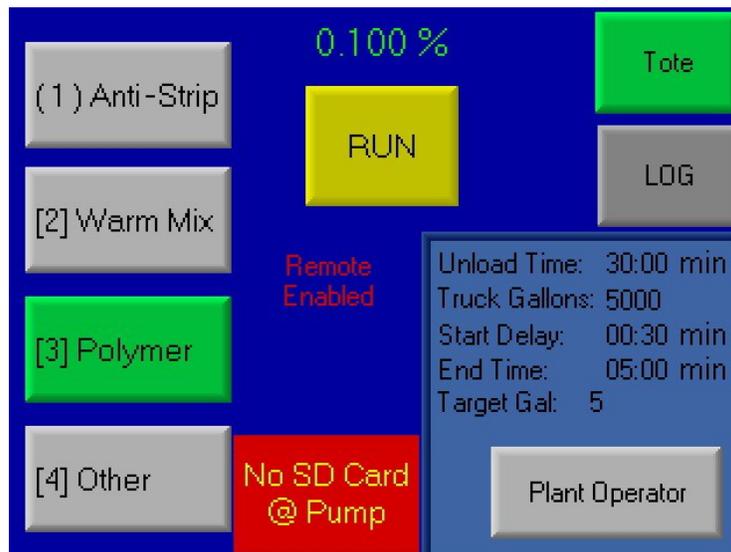
- 1) ZycOTherm Metering System should be positioned as close as possible to your asphalt binder unload pump. It's recommended the ZycOTherm Metering System remain in the delivery crate during operation. If the unit is removed from the crate, the control panel must be placed in a dry location.
- 2) Using the supplied 3/4" hose, connect the ZycOTherm Tote to the ZycOTherm Metering System input port.
- 3) The Y-Pipe should be installed on the input for your existing unload pump. Make sure the direction of flow for all liquids in Y-Pipe match the image above.
- 4) Using the 3/8" hose connect the ZycOTherm Metering System output port to small inlet port on the Y-Pipe.
- 5) Connect your original offload hose from delivery truck to the Y-Pipe.
- 6) The remote switch should be installed near the power switch for your unload pump. Open Remote Switch lid, remove cord and route it through the hole in the crate. Mount the Remote Switch and reconnect the wires. This switch is used to adjust the dosage as needed.
- 7) Remote hook up -- Plant must supply 120VAC from the AC Tank Pump Switch. Wires to be landed on RED TERMINALS " 1 Start " and " N Start " and a Ground terminal ( Green/Yellow ).  
(Green/Yellow Terminal ---Ground ) ( 1 Start Red Terminal --- Positive 120 Volts AC )  
( N Start Red Terminal --- 120 Volts AC Neutral)
- 8) The switch to activate the ZycOTherm Metering System will be linked to the power switch for your existing unload pump. The ZycOTherm Metering System will be started automatically with your AC unload pump. Connect 120v hot and neutral from your AC unload pump control to terminal strip inside control box labeled "Start and Start N." Connect ZycOTherm Metering System to a 120 volt power source. This must be completed by a qualified electrician.

## Startup Screen



This screen will be shown at startup. It will display the software version number and the contact information for Hi-Tech Asphalt Solutions. Touch anywhere on the screen to continue.

## Dosage Screen



This is your Dosage Screen.

The 4 options on the left are programmed dosage percentages.

If you press and hold a preset on the left for 5 seconds you will be taken to the “Button Configuration” screen which will allow you to adjust the dosage percent for each preset.

The yellow “Run” button will run the mix at the selected settings. If Remote Start is connected the mix can be run from there. It is not necessary to use this screen to run the mix.

The red box at the bottom will alert you if there is a fault found in the system to be addressed.

The "Tote" button will open a new screen which will allow you to enter tote size in gallons and set the alert percentage at which to warn when the tote is getting low.

You can view your current run settings in the "Plant Operator" box.

The "Plant Operator" button will take you to the plant operator screen where you can adjust run settings.

To access The Plant Operator Screen you must enter a Password. By default it is set to 1234.

## Tote Screen



This is the tote screen

From here you can change the number of gallons per tote. The default will be set to our standard tote size of 264 gallons.

You can adjust the percentage at which the pump will alert you when the tote is getting low. Once a tote has reached this percentage an alarm will sound after each run until the tote is changed and reset.

You can turn the warning alarm on or off here.

This is also where you will reset the counter when a new tote is installed.

## Plant Operator Screen

The screenshot displays a configuration screen with a dark blue background. At the top right, there is a 'Done' button. Below it, the date 'MM/DD/YY' is set to '07/04/15' and the time 'HH:MM:SS' is set to '11:39:58'. A 'Gallon' button is highlighted in green. On the left, there is a 'Button Configuration' button. The main area contains four rows of parameters, each with a label, a value in a yellow box, and a description:

Parameter	Value	Description
Unload Time / min:	30:00	Typical Time it takes to Unload the Truck
Truck Gallons:	5900	How Many Gallons are on the Truck
Start Delay / min:	00:30	Time Truck Is pumping before injection Starts
End Time / min:	05:00	Amount of Time Injection should be finished before truck is.

This screen will allow you to change several parameters. From top to bottom you can adjust:

**The Date and Time** - Used to record when the pump is metering material.

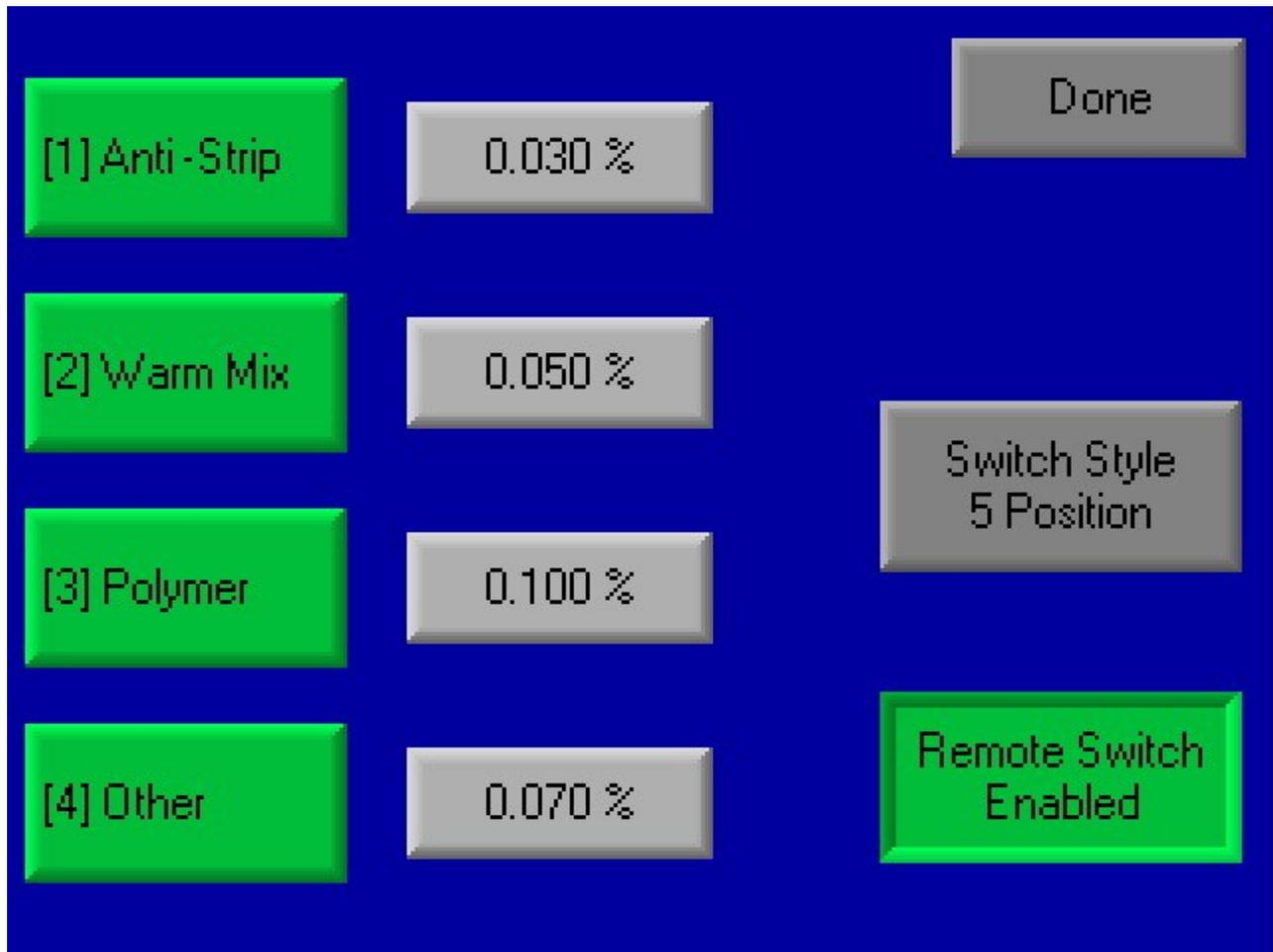
**Gallon / Liter Button** - By toggling this button you can switch between gallons and liters.

**The Unload Time** - This is the typical time it takes to unload your shipment of AC binder.

**Truck Gallons / Liters** - How Many Gallons / Liters are on a typical delivery tanker.

**Start Delay** - How long will the offload pump run before the injection starts.

**End Time** - Amount of time the injection will stop before the offload pump has emptied the delivery tanker.

**Button Configuration Screen**

This screen is accessed by selecting the “Button Configuration” button in the Plant Operator Screen.

This screen can also be accessed by pressing and holding one of the preset selections on the Dosing Screen for 5 seconds.

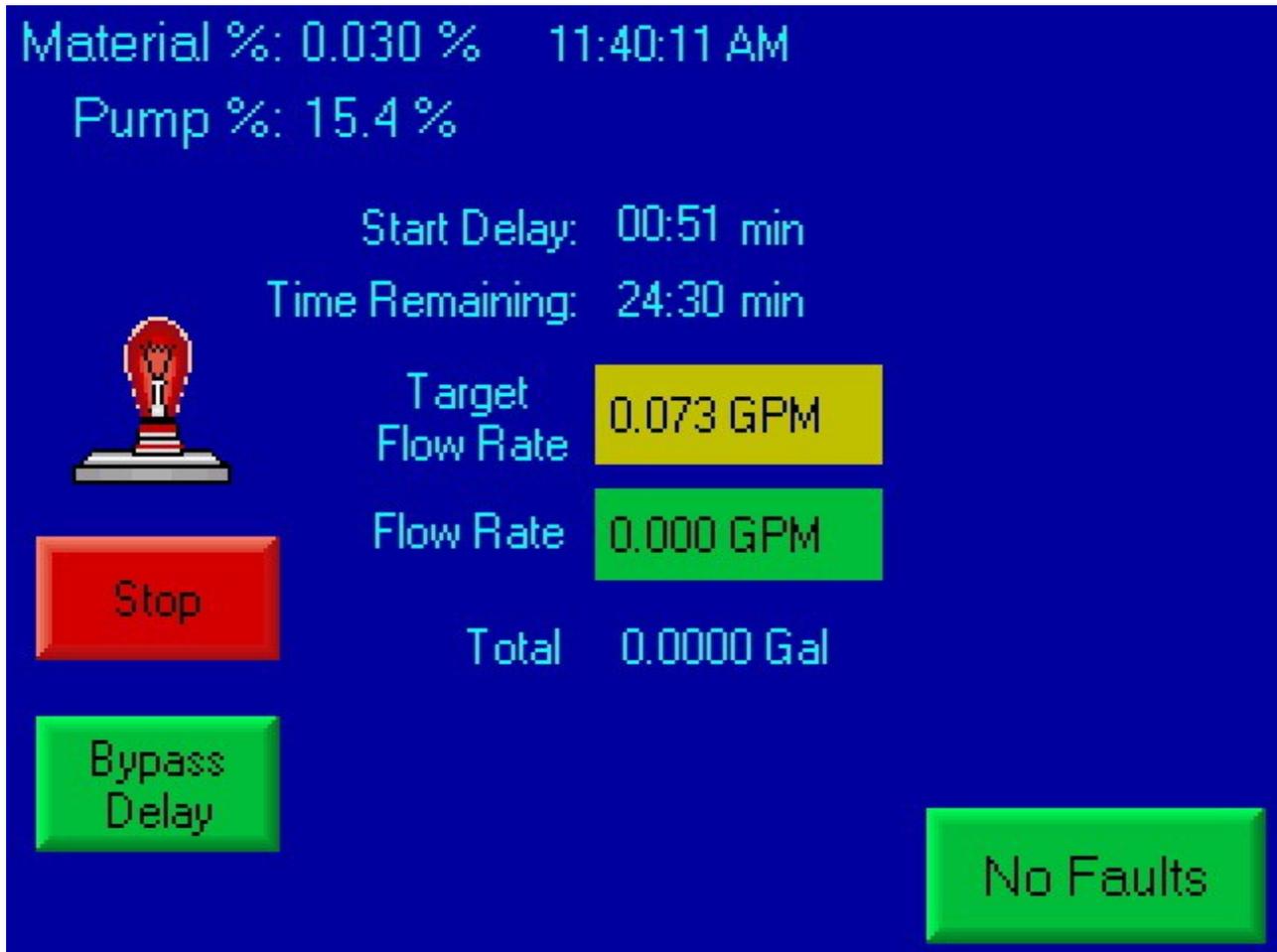
On this screen you can adjust the dosage percentage for each button.

There is also a button here to switch between the 4 position and 5 position remote selector switch. By default it will be set to the switch that was designed for your pump. This should not be changed unless you are sure you have changed remote switches.

From here you can also activate and deactivate the remote dosage selection switch. **CAUTION – The Remote Dosage Switch should always be active during operation. If not, there is no way for the operator to know what dosage is selected.**

Pressing Done will exit this screen.

## Running Screen



This is the Running Screen. This screen will be displayed as the ZycoTherm Metering System is running.

There is a "Bypass Delay" button on this screen that will allow you to bypass the delay and begin injection immediately if necessary or for testing purposes. If you press the "Stop" button or the E-stop, upon resuming delay timer will start again.

Any deviation from this screen will stop the process and print to the table and SD card - On the SD card it specifies User Error if screen was closed by anything other than the big yellow "DONE" Button which will appear upon completion.

## Print Log Screen

Date	End Time	Target	Actual
01/06	05:08	1.77	1.7713
01/06	07:19	1.77	1.7709
01/06	10:58	1.77	1.7713
01/06	13:01	1.77	1.7713
01/06	16:31	1.77	1.7713
01/06	18:24	1.77	1.7708
01/06	21:20	1.77	1.7708
02/06	08:34	1.77	1.7708
02/06	10:43	1.77	1.7709
02/06	13:01	1.77	1.7711

This is the "Print Log" screen. The last 10 runs will be displayed on this screen.

The SD card will save as many runs as there is room on the card for it to save. Each card can hold approximately 2000 logs.

SD cards are sent out with each pump. They need to be formatted specifically for the pump. If you find that you need a replacement or spare card contact Hi-Tech Asphalt Solutions for a replacement or spare.



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