



STORECHECK

ROBYDOME ELECTRONICS

STORECHECKSYSTEMS.COM

Storecheck Manual 1.00

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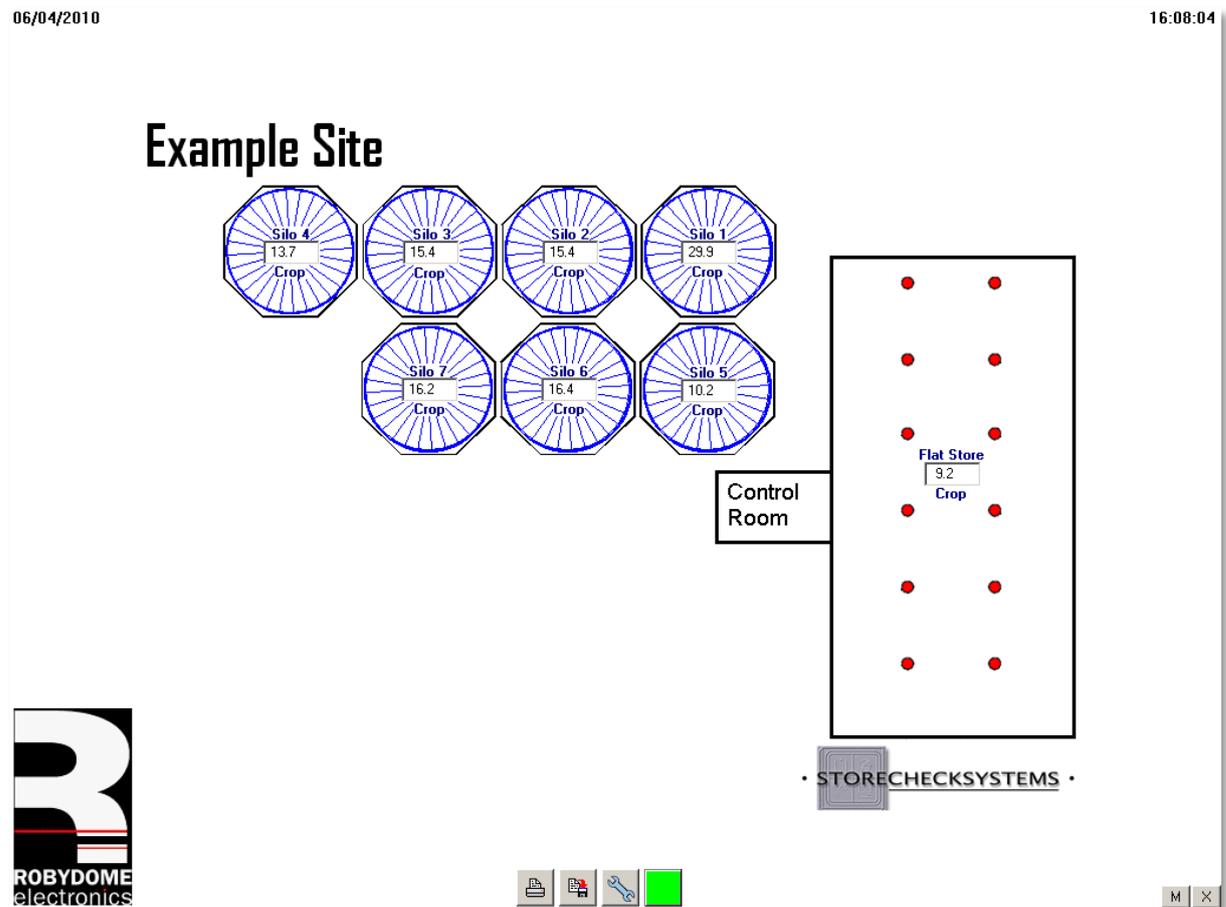
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Introduction

For the purpose of this manual we have created an example store as Storecheck is tailored to each store individually, although your own store may be quite different to the one we have created here the basic operations remain the same. This manual is designed to supplement the onsite training provided by our engineers during system commissioning who will go through any specifics of your site at that time. If you have any further queries please contact the Robydome service department the number for which will be provided at the back of this manual.

Overview

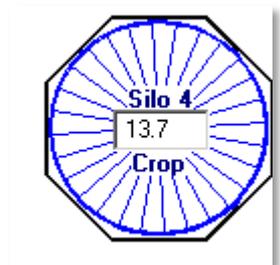
When you first start Storecheck you will be presented with an overview of your store.
(e.g. fig.1.)



As you can see there are a number of boxes and buttons, in the top right is the date, in the top left is the time, on each of the silos and the flat store there is the zone name the average temperature of the zone and the contents of the zone, (e.g. fig.2)

along the bottom is a row of icons which from left to right are print settings, logging, setup and alarms.

See fig.3

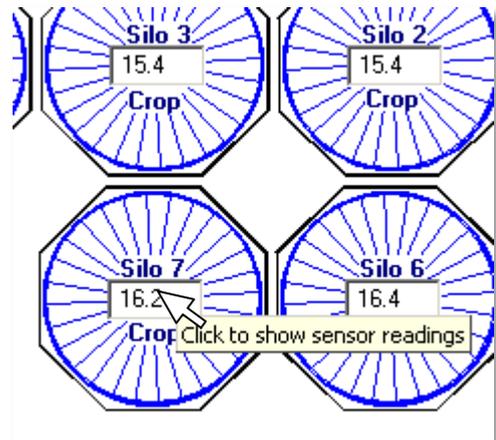


Viewing temperatures

To view the temperatures in a zone simply move your mouse pointer over the box containing the average temperature of the zone you wish to view and click the left mouse button, (e.g. fig.4) you will then be presented with a screen like the one in fig.5 below.

As you can see there are a number of boxes and buttons many of which will be explained later in this manual right now all we're interested in are the temperatures and other basic controls. On

the bar at the top you can see the name of the zone we are currently looking at below that we have the ambient temperature and RH which are blanked out because there is no ambient sensor currently connected to this system, there is also the average temperature of the zone.



(fig.5)

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09:53:38

The screenshot shows the 'Silo 7' monitoring interface. At the top, it displays 'Ambient °C: ---', 'RH%: ---', 'Average °C: 16.2', 'Hi Alarm °C: 35.4', and 'Lo Alarm °C: -9.9'. Below this, there are two tables for 'Cable 1' and 'Cable 2'.

Cable 1	
1	16.9
2	16.0
3	14.5
4	18.9

Cable 2	
1	14.5
2	15.0
3	15.0
4	18.9

At the bottom of the interface, there are buttons for 'Graph', 'Alarm Settings', 'View log...', and 'DONE'. The 'ROBYDOME electronics' logo is visible in the bottom left corner.

In the centre of fig.5 we have cable names with grids below them, (see fig.6) each grid represents the temperature sensors in a cable from top to bottom with the temperature reading next to it's sensor number, thus you can easily see the temperature at given level of your silo, for example in fig.6 we can see that the temperature at the very top of the silo is significantly colder than that at the bottom.

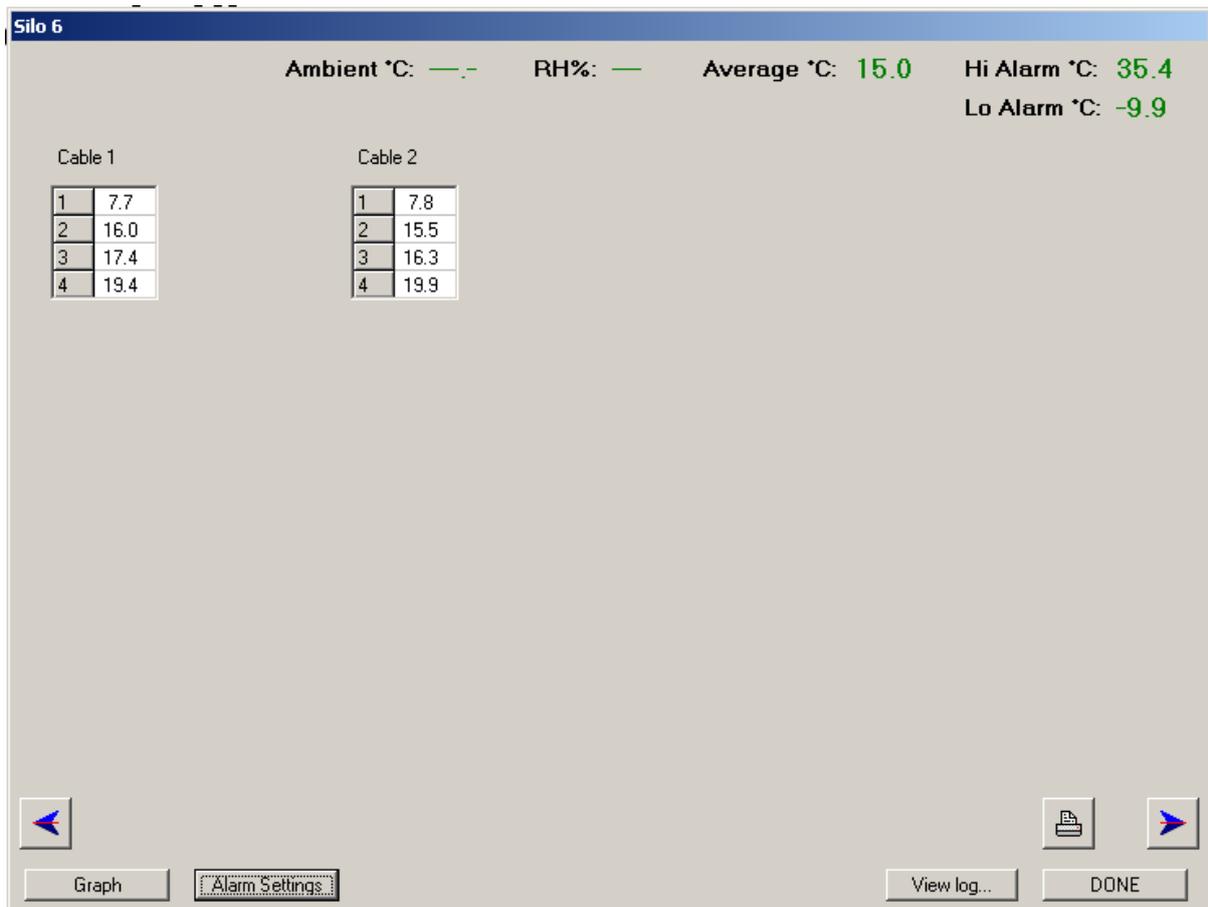
Cable 1	
1	7.7
2	16.0
3	17.4
4	19.4

The average temperature is taken from the average of all the sensors in the silo. In our example silo 6(fig.7) is not filled to the top and we don't want the temperature outside of the grain throwing off our average reading so to ignore a temperature we just double click on it, this will mark it with a star (see fig.8) to show that it is being ignored, to bring it back to normal just double click on it again.

Cable 1		Cable 2	
1	* 7.7	1	7.8
2	16.0	2	15.5
3	17.4	3	16.3
4	19.4	4	19.9

Double click to exclude/include sensor

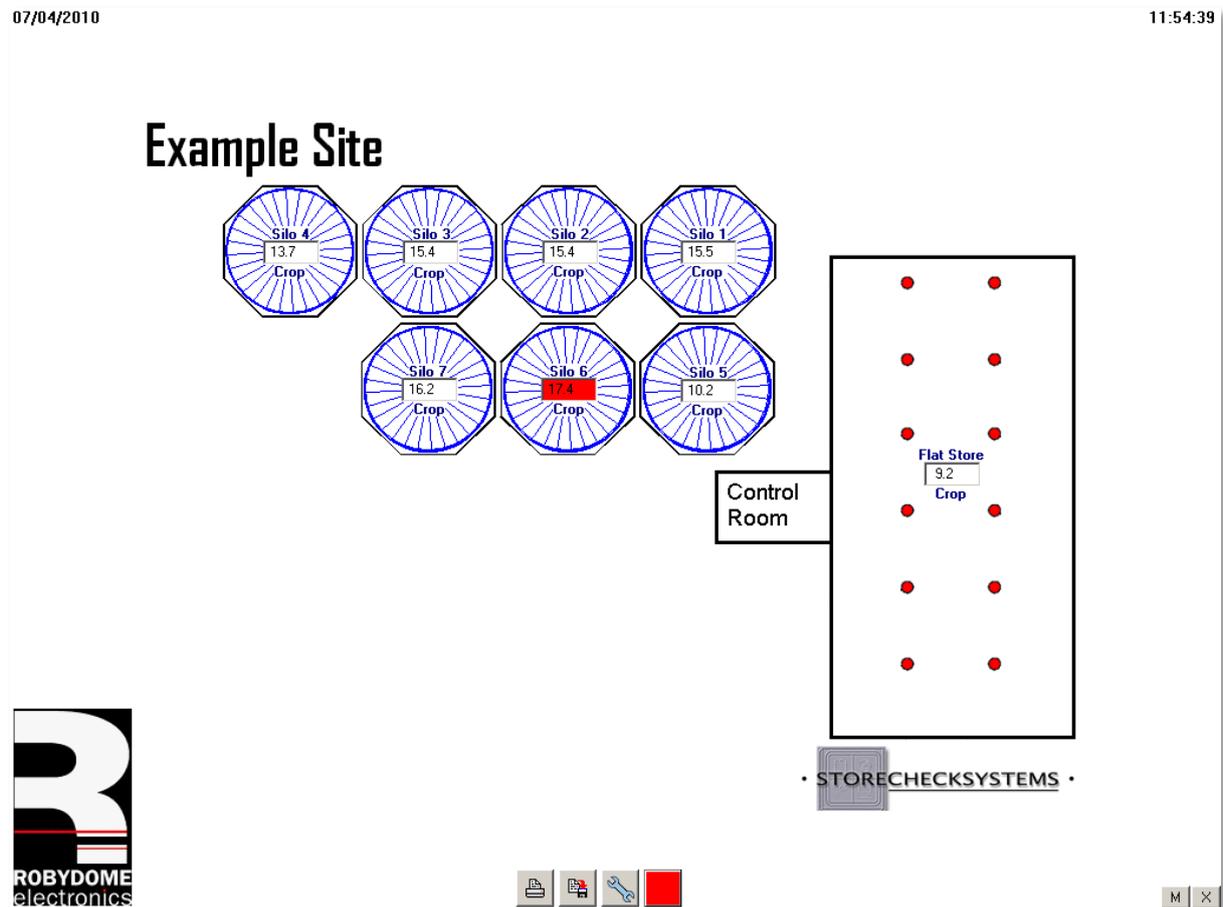
Fig.7



Alarm settings

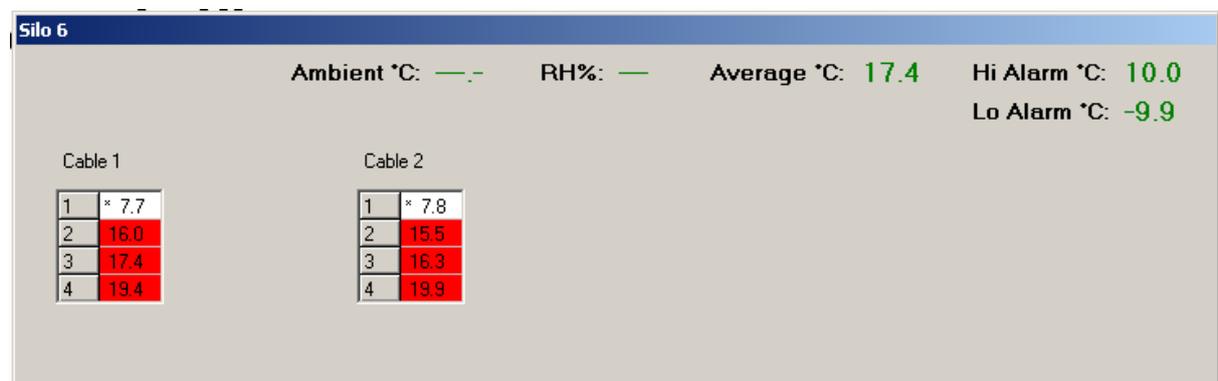
When a zone exceeds its high alarm it will turn red to alert you to this fact (see fig.9), the button on the bottom of the screen will also turn red if there is a current alarm condition.

Fig.9

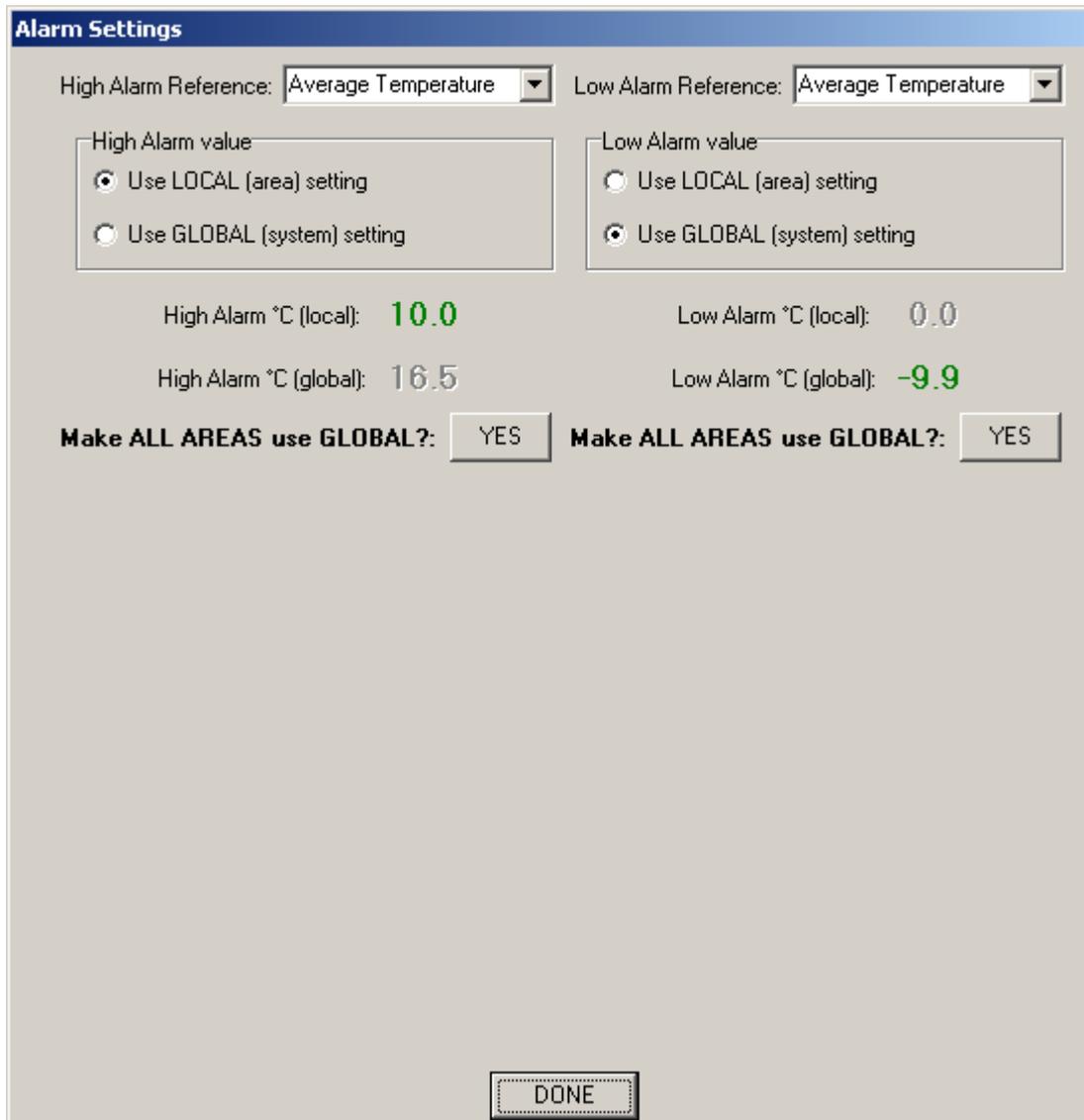


As you can see in fig.9 silo 6 is showing a high alarm, if we select it we can see which sensors are reading too high and what the alarm for this silo is currently set to.

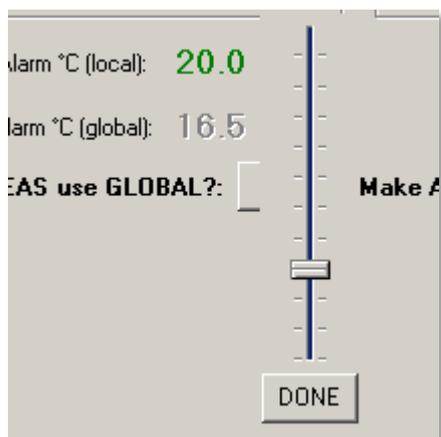
Fig.10



As you can see in fig.10 all the sensors in the crop are reading too high but this is because the high alarm is only 10°C which is too low. To change the alarm settings we click on the button labelled alarm settings (see fig.7) this will bring up the alarm controls (fig.11)

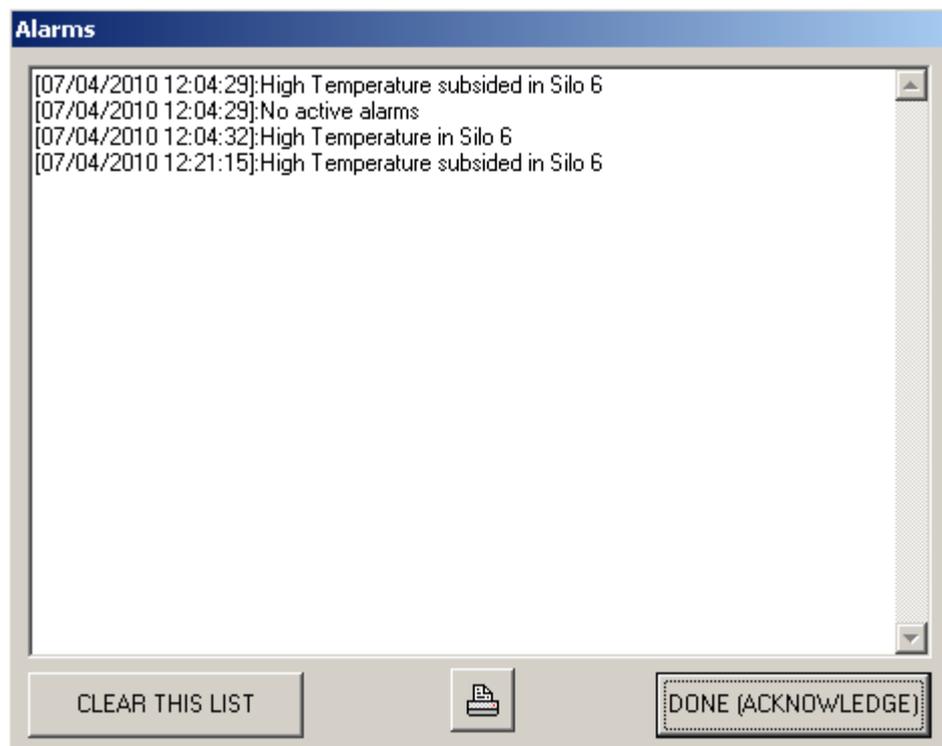


As you can see there are a number of options that can be changed, the alarm reference is a dropdown box that can set to either average, highest or a nominated sensor. The local settings affect only this silo whereas the global settings affect every zone that is also using global settings.



To change the alarm temperature simply click on the green temperature and drag the slider that pops up to the temperature you wish then click the done button. (see fig.12)

Now that we have set the alarm setting for silo 6 to 20°c the temperature box for that silo has gone back to being white but the button at the bottom of the screen is still red this is to



let you know that there was a problem, if you click on it the window shown here in fig.13. As you can see you have a list of the date and time an alarm was reported and the date and time it subsided, you also have the option to clear the list, print it or acknowledge it.

When you click the acknowledge button the alarm log will close and the button will turn yellow, after a while if there are no more alarms the button will turn green otherwise it will turn red again.

Printing

If you click the print button seen in fig.3 you will open the print settings window (see fig.14)

this allows you to setup automatic printing to print at a certain time of day, only on specific days, everyday or even to set it to print every, let's say 15 minutes, or whatever you like.

You can get a printout immediately by clicking the print now button.

The printer setup button will take you to the Windows print setup page, for

instructions on using Windows print setup please refer to the Windows manual relevant to your version of Windows.

There is also a printer icon on each zones window, (see fig.7) if you click on that button it will print out the temperature readings specific to that zone.

Printing

Print At: 13:00

Print Every: 00:00

Last Print: 07/04/2010 13:00:00

Next Print: 08/04/2010 13:00:00

Printing Enabled

Print ALL
 Print selected ONLY

Append alarms to printout

Title: Example site

Printer Setup...

PRINT NOW

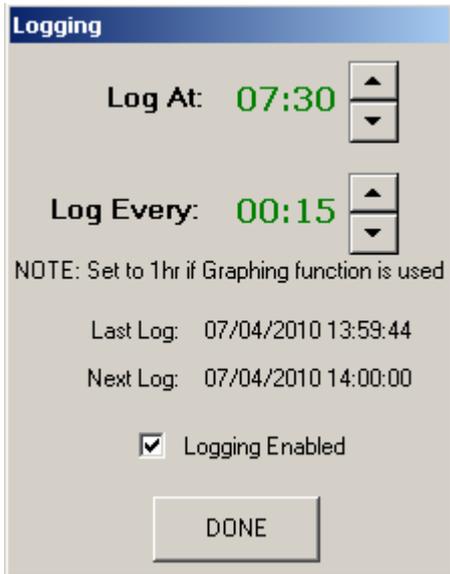
DONE

Printing days

Monday Friday
 Tuesday Saturday
 Wednesday Sunday
 EVERY day

Logging

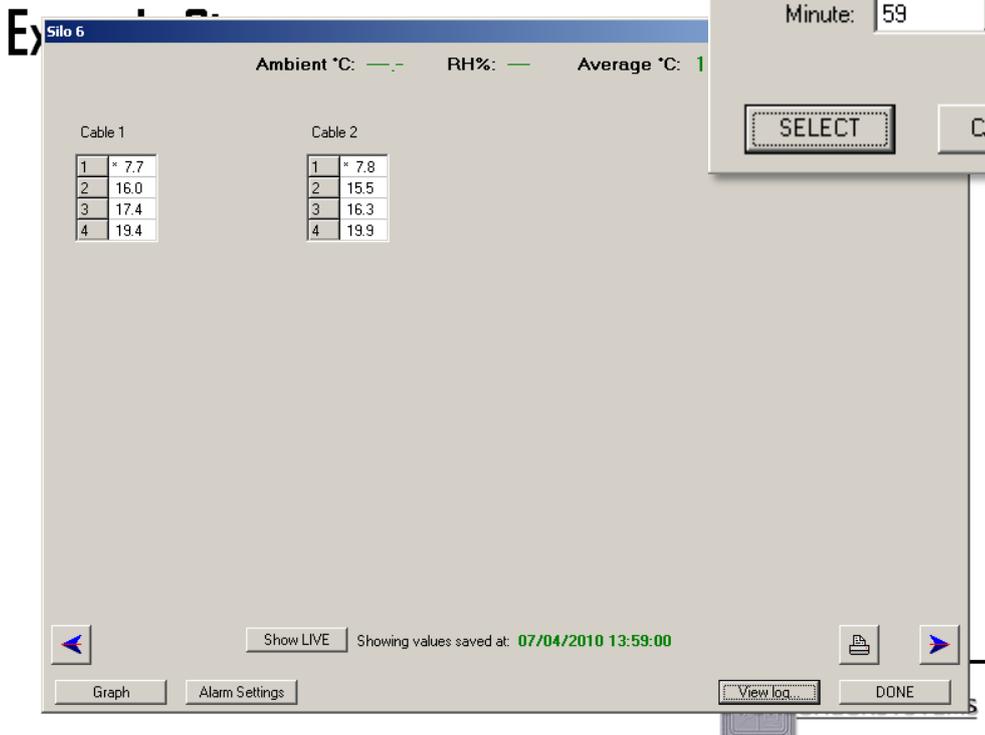
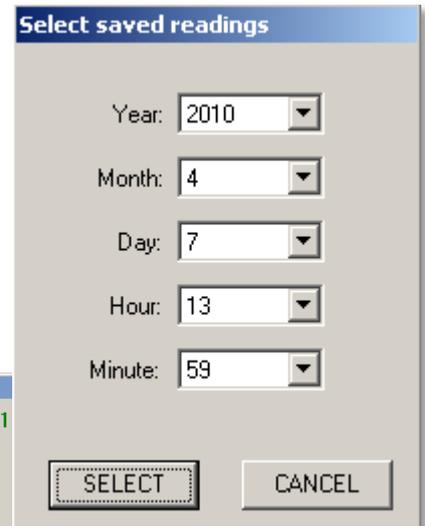
The centre icon at the bottom of the screen (see fig.3) is the logging icon clicking it will open the logging window as shown in fig.15 on the left.



The logging can be set to log at a set time and every set period after that, our example is set to start logging at half seven and to log every fifteen minutes. You can enable or disable logging by clicking on the logging enabled box.

There are two ways to view logs, if you wish to view the temperatures in a zone for a specific date and time simply click the view log button in the corner of the window for the zone you are interested in (see fig.7) this will open the window shown in fig.16 on the left where you can select the

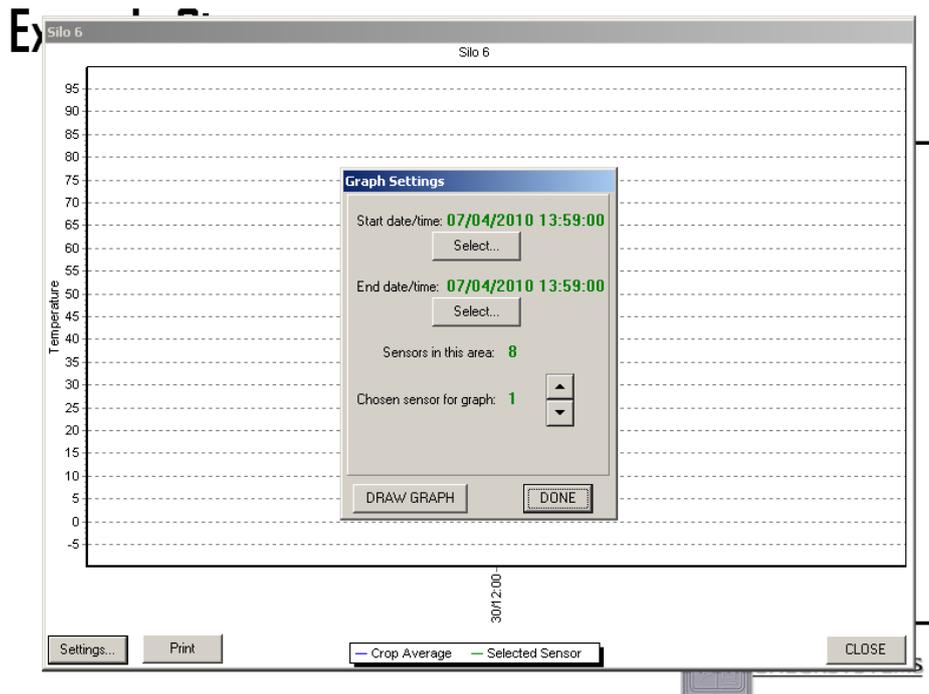
date and time of the log you wish to see, when that's done click select and the zone window will change to show the readings at that date and time as seen in fig.17 below, when you wish to return to the current readings just click the show live button.



The second way to view logs is as a graph, to do so click the view graph button in the bottom right of the window of the zone you are interested in this will open the graph window to select the start date and time and the end date and time click the settings button in the bottom left corner this will bring up the graph settings window as seen in fig.18 below once you have set the start date and time and the end date and time click the draw graph button to plot your graph. You can print the resulting graph by clicking the print button. To properly use the graphing feature you must be logging at least every hour and have at least a days worth of log files.

07/04/2010

14:33:55



Ventilation

Your system may not have automatic ventilation control if this is the case feel free to ignore this section. If you wish to investigate the possibility of adding ventilation control to your system then our contact details can be found at the back of this manual please don't hesitate to give us a ring.

If your system has automatic ventilation control you will find another button labelled ventilation next to the alarm settings button in each zone, if you click this button it will open the ventilation controls for that zone as shown in fig.19 below, the controls are as follows

Ventilation operate temperature is the value the system is trying to cool the zone down to just click on the green number and drag the slider up or down to set the temperature then click done. If you don't have an ambient sensor then the fans will run as long as the reference temperature is above the operate temperature.

Maximum RH and ambient differential are explained in the ventilation settings window itself.

Once all the ventilation settings are setup correctly you can just leave the system running and it will bring the fans on and off as needed.

Ventilation Settings

Ventilation Operate Temperature : 0.0

Reference Temperature : Average Temperature

Maximum ambient RH : 0 Ignore RH

[Ventilation will not operate if RH is above maximum]

Ambient differential °C: 0.0 Ignore Ambient Temp

[Ventilation will not operate unless Ambient is less than (Reference - Differential)]

Force Ventilation ON

Total run time (hrs) : 0.0

Last 24 hours : 0.00

DONE

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