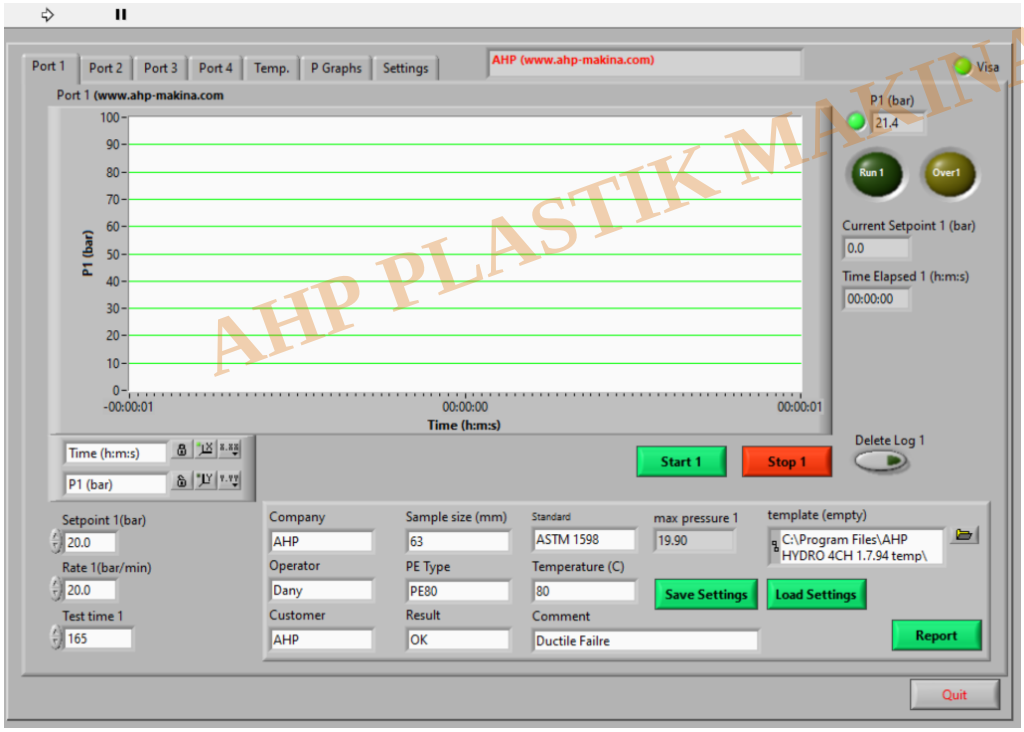
Using AHP Hydrostatic Pressure Test Software

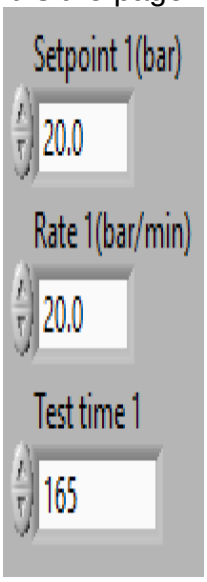
Description

Hydrostatic Pressure Test Unit

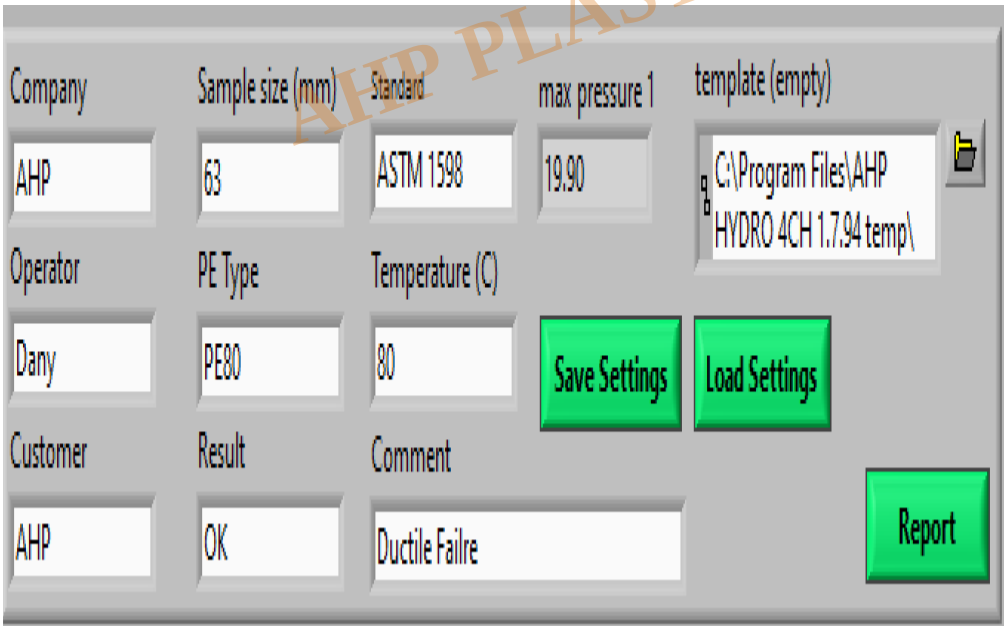


Port 1:

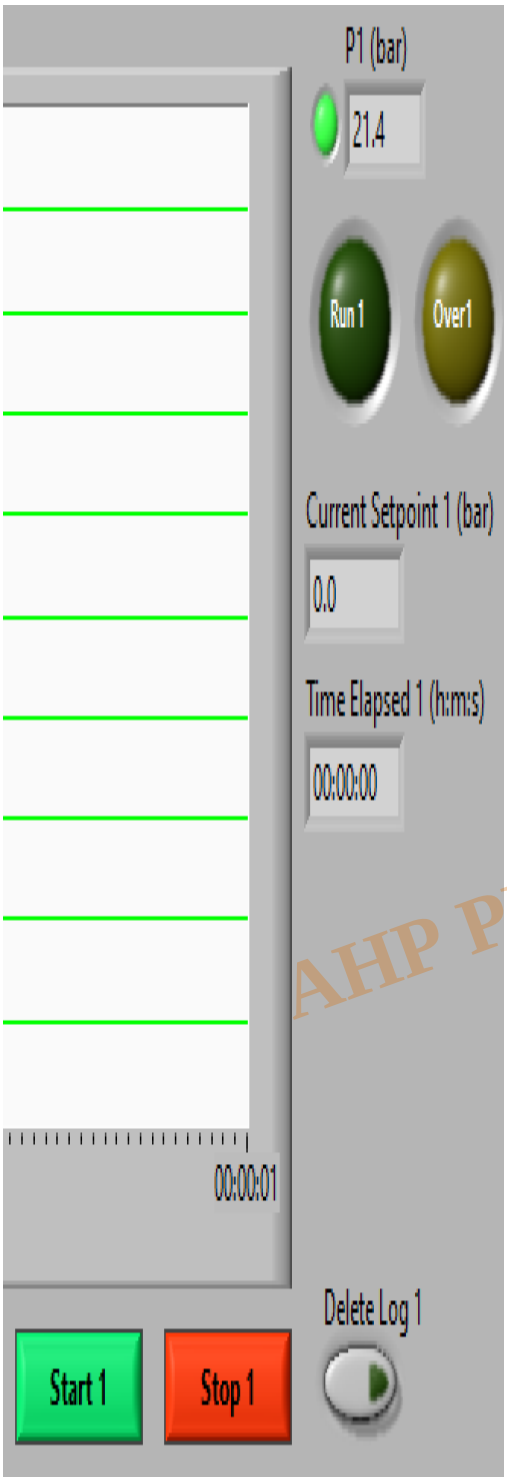
it is the page related to station number of 1 of the hydro test unit



Setpoint1(bar): setpoint of requested pressure in bar
Rate1(bar/min): Rate of pressure increase, It is used mainly in burst test of pipes and fittings. because in burst test sample need to be burst in definite time of 60-70s. if you know approximate burst pressure of a sample piece, for example 50 bar, then set the rate to 50-60bar/min so that sample can be burst in about 60 seconds.
Test time1: It is test time set for line 1.

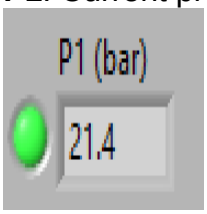


Company, Operator, Customer, Sample size, PE Type, Result, Standard, Temperature, Comment all are general parameter of the sample is going to be tested in station no.1
Save Settings: if operator want to save setting parameters as .txt file and load them the day next can use this key. be noted when saving the file name put .txt at the end of file name.
Load Settings: Used for loading general sample parameters
Report: Used for making Report of the station number 1 in MS WORD.

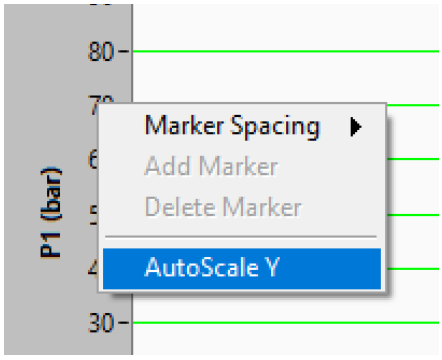


Delete log: When you want to start new test with line no.1 , before starting of the line click on the “delete log” so that log file being deleted and ready for next test.
If you want to continue the last test, you can click on start without deleting the log.
Run Led: It is green when the line is running
Current setpoint: When you set specific rate for pressure increase, program sets the pressure as per that input pressure increase rate. Current set is the current set pressure sent to the controller of the unit.
Start1: Start of the line 1 for testing and graphing
Stop1:

Stop of line 1 for testing and graphing
P1: Current pressure of the line 1 in bar

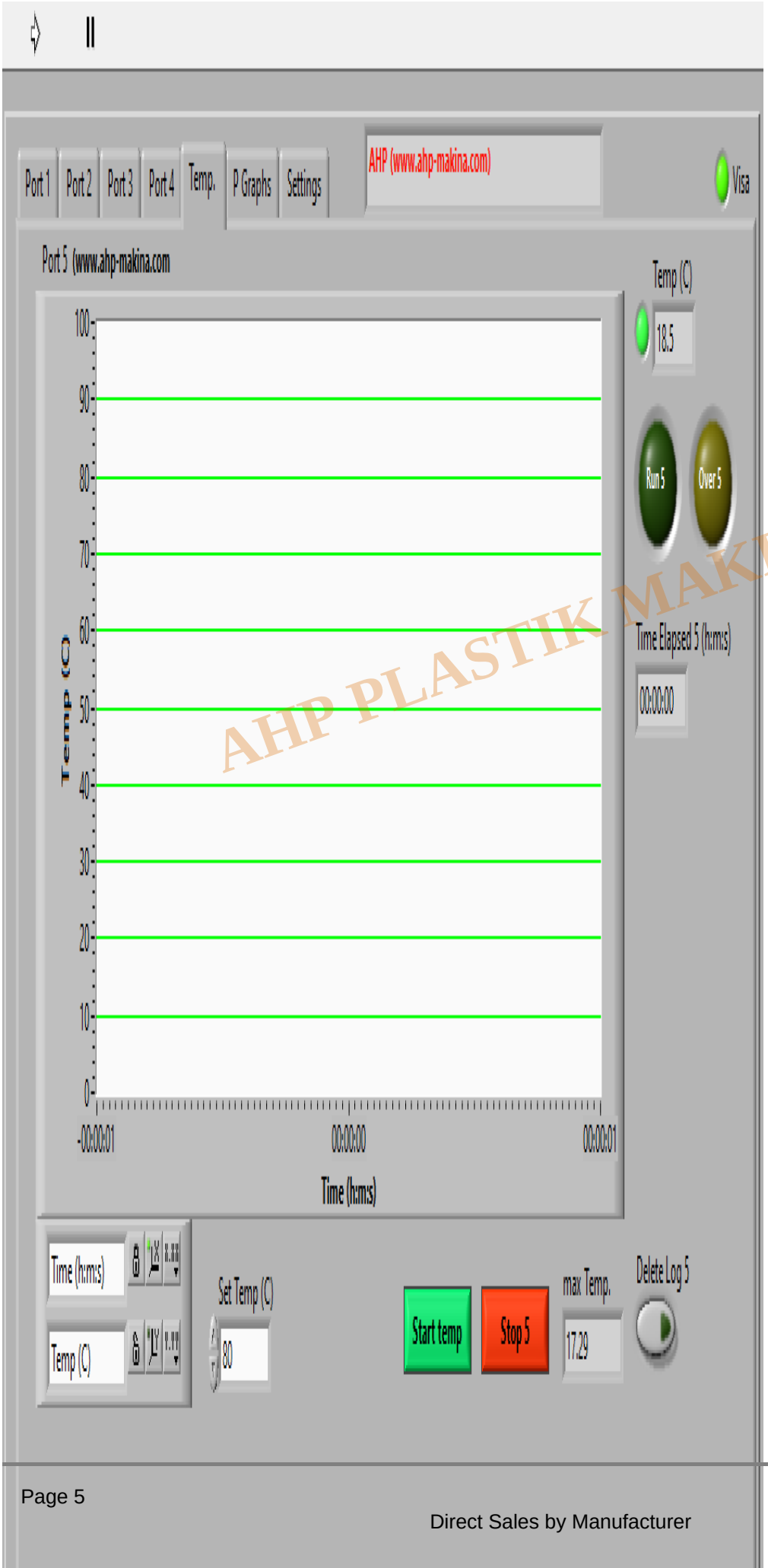


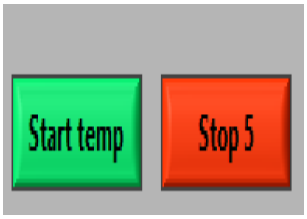
When the green led is in red means that there is not any connection between software and machine.



You can click on vertical line of the graph to set the Y axis to AutoScale mode. meaning that lower and upper limit of the vertical line is set as per current value of the pressure automatically. If you make this parameters OFF, you can define lower and upper limit of the graph manually. You can do the same setting for X axis of the pressure graph.

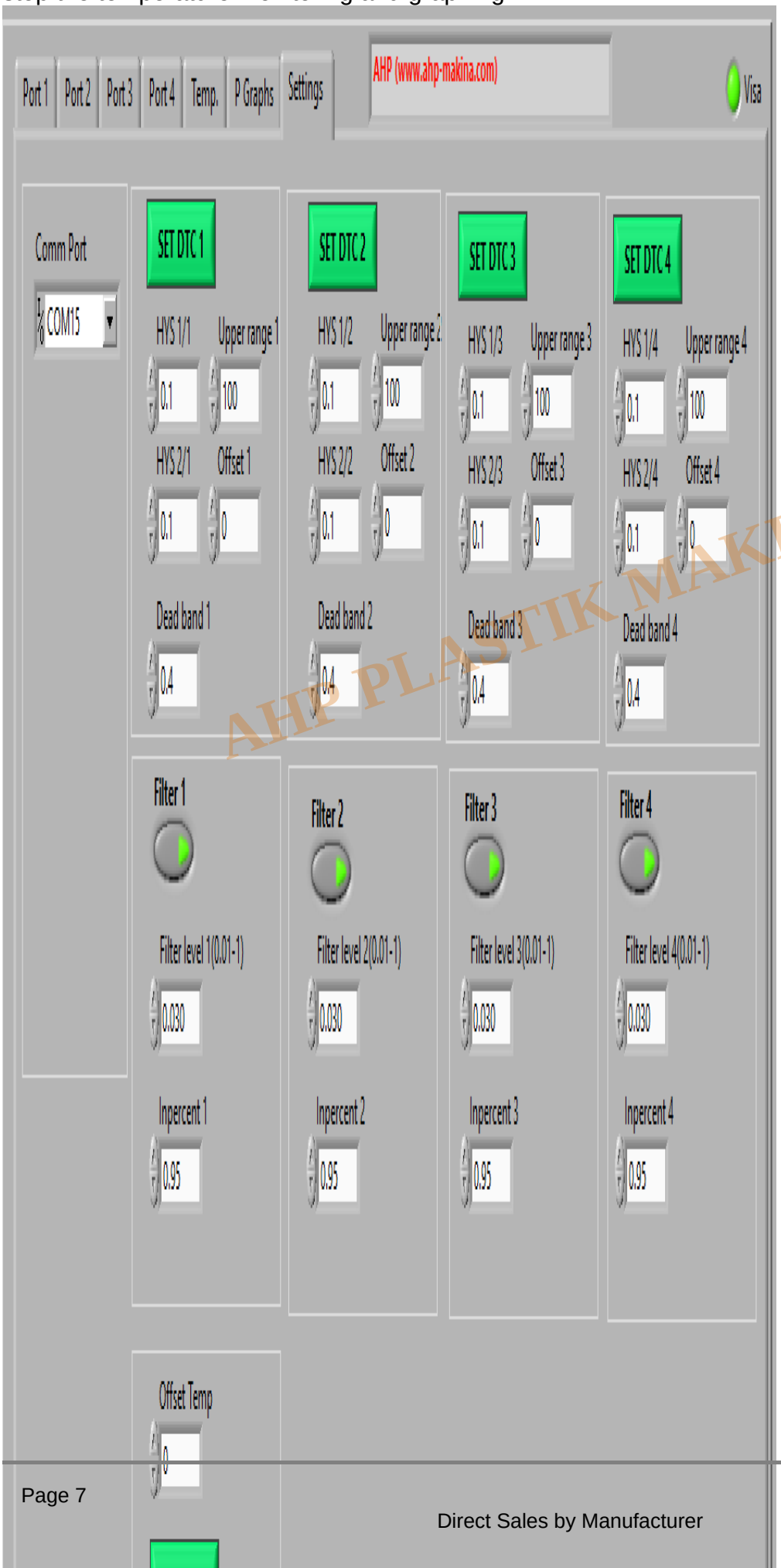
It shows maximum pressure applied to the line 1 after starting the line

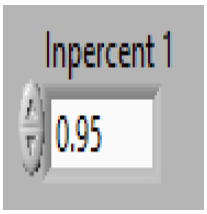




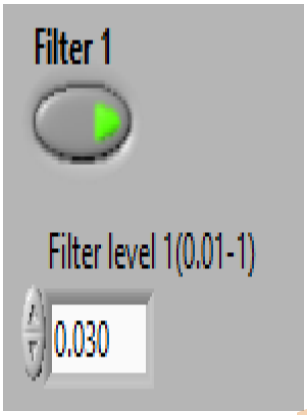
You have same setting for the Temp page of the software. When you start definite pressure line also click on “Start temp” for graphing the temperature of the test tank. after stop of the pressure line also

stop the temperature monitoring and graphing.

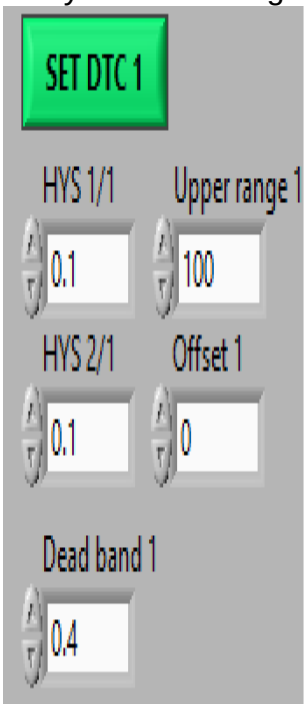




Inpercent1: means when the pressure of line 1 drops for definite percent, machine will automatically stops the line. suppose that you set this value to 0.95 , it means that 1-0.95=0.05, 0.05*100=5 when pressure drops suddenly for 5% in line one , machine recognize that sample burst. Set this value for small samples in high values like 0.95, 0.98, 0.97 … depending on the pipe size. for big pipe sizes when machine starts pressurizing of the sample, it expands and pressure drops time to time. Then when starting big pipe sizes set this parameter to small values like 0.85, 0.8, … after pressure reaches to set value you can set again to high value for recognizing even the leak of the sample and stopping of the line.

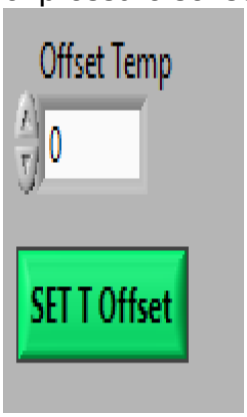


This filers the noises of the read pressure. less value for Filter level means stronger filter and more delay of the reading of the signal.



setting the parameters of the controller for line 1. **HYS1/1** is the pressure value upper and lower of the

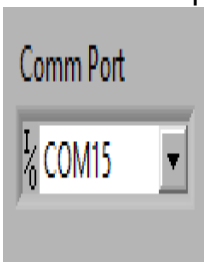
set values that runs and stops the motor and pump. **Dead band** is the range around set point of pressure that controller does nothing. **Offset** is the pressure offset value for calibration and correction of the read pressure comparing to reference reading device. **Upper range** is the upper pressure range of pressure sensor. After setting of the proper parameters click on **SET DTC1.**



It is the temperature offset for reading temperature of tank. When calibrating read temperature of the tank comparing with reference reading device, you can set the offset value here and click **“SET T Offset”.**

When you want to turn off computer, dont forget to click on Quit. unless, last settings of the pressure in controllers of each line will be remained and when you turn on machine next time, it will start working automatically.

After clicking on Quit, if you want to run software again you can click on “right arrow key” on top left corner of the panel.



It is the communication port number of the computer to the machine. for more detailed guide about installation of the driver for communication of AHP machines with computer refer to link below:
Install RS485-USB Drive for AHP’s Products

When software is connected to machine, this led will be green, unless it is red color meaning there is not connection between software and machine.

Category

1. How to Use