

# PIPE VISCOMETER EXPERIMENT

ver5.08

## Startup:

- (You may want to start this experiment 2 hours before lab time.)
- First make sure the power is on. There should be three things plugged in: the power box, the hanging power drop, and the mixer.

- Then make sure the control valve is turned on using the ball valve (turned parallel to the pipe). You should usually find this valve turned on and do not turn it off during the course of the semester.



- Go to the Bailey Controls (Click [here](#) to learn how to run the Bailey Controls).
- Go to group displays, scroll down to the pipe viscometer and push enter.
- To find the practical flow rate, select flow rate and put it in manual control.
- Raise the control output to 100%.
- Select the large or small pipe for use. (Never switch between the pipes while the pump is on.)
- With a pipe selected, go to pump control and turn it on using F7.
- Now you can read your flow rates, pressure drop, and fluid temperature.
- To switch to the other pipe, use F9 to turn the pump off.
- De-select the window and go back to pipe select and make your choice.
- Now you can go to pump control and turn it back on to read variables from the other pipe.
- Once you have values from both pipes, you can select what flow rates you would like to use.
- Then turn your pump off and de-select the window.
- Go to the flow control and select auto-control.
- Now you can use your set point to set target values below your maximum values.
- Then go to pump control, turn it on, and record the important variables.

## Shutdown:

- Go to pump control and turn it off.
- Go over to the mixer and turn it off.
- Leave everything plugged in and the air on.