

Airflow Measurement Experiment

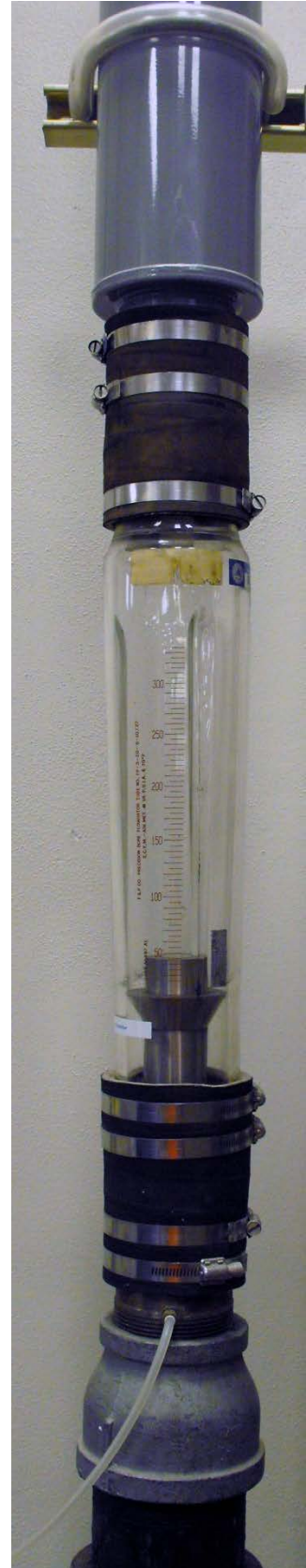
ver 6.50

Startup:

1. Open the Labview controls (find them [here](#)).
2. Manual control override should be toggled to auto.
3. Request control of the VI.
4. Keep in mind that each pressure and temperature corresponds to a point along the pipe as shown in the diagram.
5. Begin your data acquisition by selecting time between data points (recommended between 1 & 5 sec), specifying the number of data points and clicking the Push to Record button (It will light up)
6. Once it is all set up, go behind the air blower and press start.
7. Labview measures and records every meter except for the flow meter (rotameter) which is read manually. The best way to take a reading is to take not one but several measurements (10-30) over a specified time (10-30 seconds for example) and then take the average.
8. Arrange within your group to have someone read the flow meter, another to record what the first person reads, and another to look at either the absolute time or the sample Labview is on. That way your flow rate data will correspond to what Labview records.

Shutdown:

1. Reduce the air flow rate.
2. Turn off the blower by pressing the red STOP button on the wall.



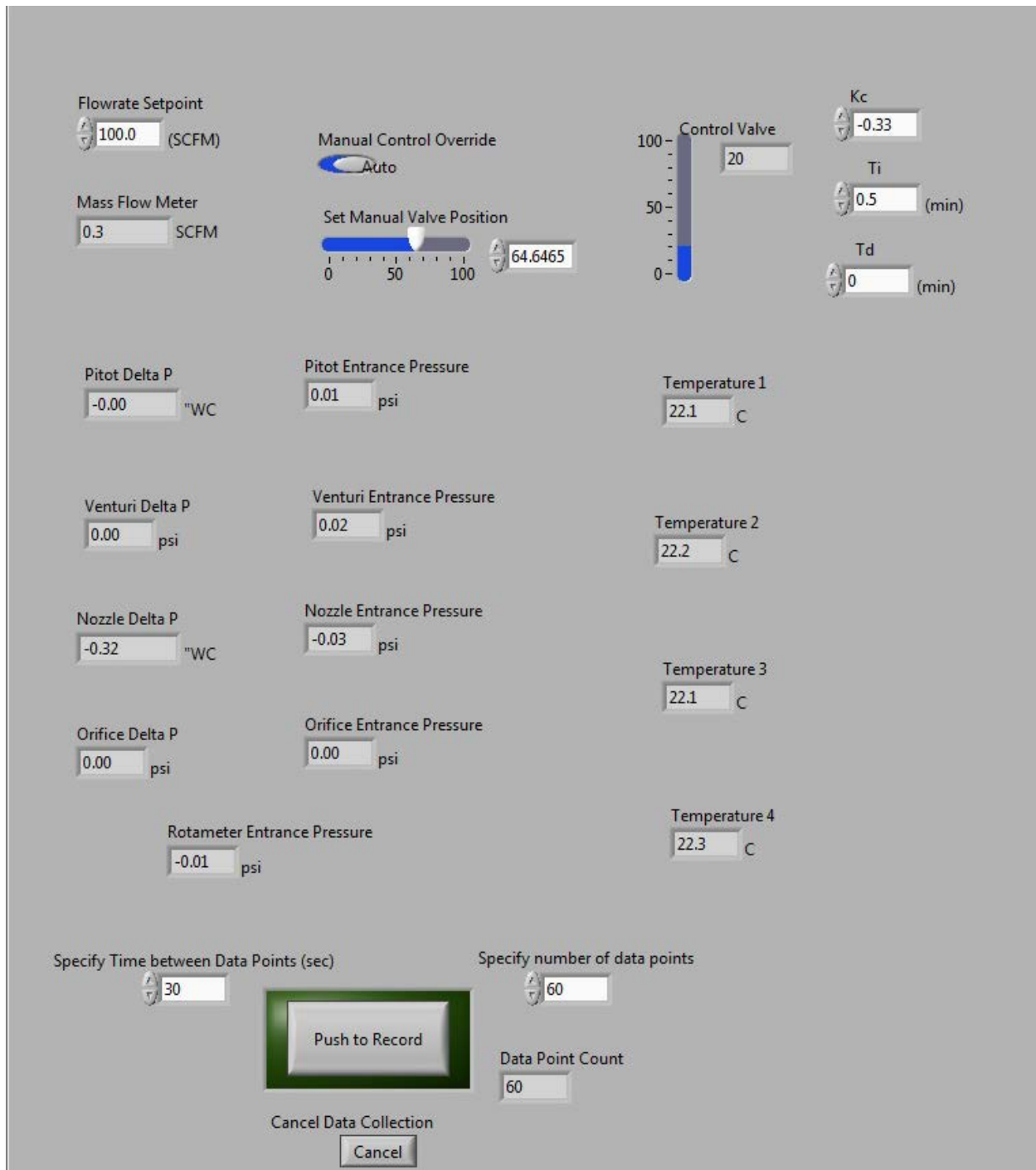


Figure 1 Labview VI for Airflow