



Volume in Pipe (V.i.P.) Help Document

NOTE: This calculator was developed for estimates only. The calculations from this app should not be used above engineering calculations because there are many factors that are based on “rule of thumb”. An example is the fact that you do not have the ability to load an exact gas analysis for your specific gas make-up. Use only for informational purposes!

It is now more important than ever to understand what type of volume that is being released should you need to blowdown pig receivers / launchers, piping or vessels for maintenance work or due to safety practices in general.

This calculation is done by entering the length, in feet, of whatever you are trying to take the pressure off of such as a pig barrel. You can enter your gas temperature in the pipe, before it has been released. You next need to enter your starting pressure, you can change your ambient pressure, and then your final pressure. You need to select the pipe size that you are blowing down as well from the selection bar.

When you open the app there are some default numbers in some of the textboxes. For example, gas temperature defaults to 60 deg. F, starting psi defaults to 1080 psi, ambient temperature defaults to 60 deg. F, and final psi defaults to 0 psi. The selection bar defaults to 12” pipe.

Once you have entered all of the information, you should click on the “E” symbol towards the middle of the app page. This will do the calculations and present them to you down to the first decimal point.