



Froth Flushing

Froth Flushing is a high-energy technique applied to piping systems to remove loose mechanical debris and loosely adherent welding slag and corrosion deposits from the pipe surfaces. It is also an effective replacement for conventional pigging of piping systems. Froth flushing is performed by generating a slug of water that has a large number of air bubbles mixed into it. This frothed slug is displaced through the piping system at velocities of 40 to 80 feet per second.



A Slugblast resulting from our Froth Flush

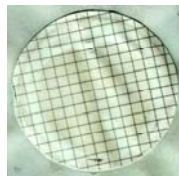
The Froth Flush method ensures that air is mixed into the water slug prior to its introduction into the line. The air filled slug, or froth, will sit up in the pipe better than a solid water slug. When you mix air bubbles into water, the apparent viscosity of the mixture can increase dramatically due to the structure imparted to the fluid by the interference between the bubbles.

Some advantages to the Froth Flush technique employed by BES&T includes:

- Less water consumed than conventional filled flushing techniques
- Less equipment required to reach beneficial range of turbulence in piping systems
- Reactive forces are reduced or eliminated due to compressibility of froth slug
- Greater debris carrying capabilities because of apparent viscosity of two phase slug
- Can be performed with minimal impact to adjacent work
- Eliminates safety issues associated with gas blowing on fuel supply piping
- Takes less time to set-up and perform than conventional flushing or pigging.



Initial Millipore



Final Millipore

Millipore samples – before and after

BES&T has performed Froth Flushing on a variety of plants, and would be happy to design procedures and perform this valued service for you.