Collecting Wellhead Samples in Classic IsoTubes®

The IsoTube wellhead sampling device includes a pressure regulator that is rated for a maximum of 3000 psi (200 bar). If pressures higher than this could be encountered, additional pressure control is required.

IsoTubes are NOT suitable for gases containing hydrogen sulfide (H_2S, sour gas).

The Wellhead Sampler and Classic IsoTube have been discontinued. These instructions are provided for those clients who may have legacy equipment still in use. Instructions for the IsoSampler™ GO can be found at isotechlabs.com.

1. Locate a suitable, vertical port for collecting a sample. A 'suitable port' will supply a dry gas sample, and should consist of both a ¼" female NPT port and a control valve that can be used to turn the gas on and off.
2. Make sure that the threads on the Wellhead Sampler are clean, and then wrap 2 or 3 layers of Teflon® tape clockwise onto the male threads of the bottom ¼" NPT adapter.
3. Screw the Wellhead Sampler into the sampling port and then tighten by using a wrench on the body of the filter.
4. Place the Wellhead Sampler 3-way valve in the SHUT (horizontal) position and slowly open the **control valve on the sampling port.** Line pressure will be indicated on the **inlet pressure gauge.**
5. Insert the bottom IsoTube valve into the Wellhead Sampler by simply pushing it firmly into the chuck (there are cogs in the chuck which grip the threads on the IsoTube valve and hold it in place). To further tighten the IsoTube in place, lightly rotate it with your fingers, screwing it into the chuck.
6. Turn the 3-way valve to the OPEN (vertical) position. The IsoTube will fill with gas. Note the pressure on the outlet gauge; it should be less than 80 psig.
7. With the 3-way valve still in the OPEN position, the Wellhead Sampler and the IsoTube can be purged by depressing the pin of the top IsoTube valve (like letting the air out of a tire). Hold the spring valve open for a few seconds. This shortcut should be minimized if you are sampling very wet gases or under very cold conditions, as it can result in condensing liquids in the IsoTube.
8. Final purging and filling of the IsoTube is accomplished by rotating the handle on the 3-way valve OPEN and SHUT to alternately pressurize and vent the IsoTube.
   - Turn the 3-way valve to SHUT to vent the IsoTube to atmosphere.
   - Turn the 3-way valve to OPEN to re-fill the IsoTube.
   - We recommend repeating the above for at least 10 cycles.
   - After the IsoTube is filled for the last time, leave the 3-way valve OPEN.
9. The IsoTube may now be removed from the chuck by sliding the knurled sleeve on the outside of the chuck down, away from the IsoTube. This process should be done quickly to minimize the amount of gas lost. If the IsoTube is held very lightly, it will generally pop up out of the chuck from the spring action of the valve and the gas pressure – be ready to catch it.
10. Replace the end caps on the IsoTube valves and fill out one of the included labels with the sample information using a ball point pen (press hard, as three copies are made). Attach the label to the IsoTube and return the IsoTube to the shipping carton. When an entire sheet of sample tags has been used, one of the copies should be placed in the box with the IsoTubes and the other can be retained for your records.

Shipping instructions for return shipping to the laboratory are included with every box of IsoTubes and can also be found at isotechlabs.com. ***Please note that IsoTubes containing pressurized or flammable gas are considered hazardous materials for shipping purposes.***

ISOTECH
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