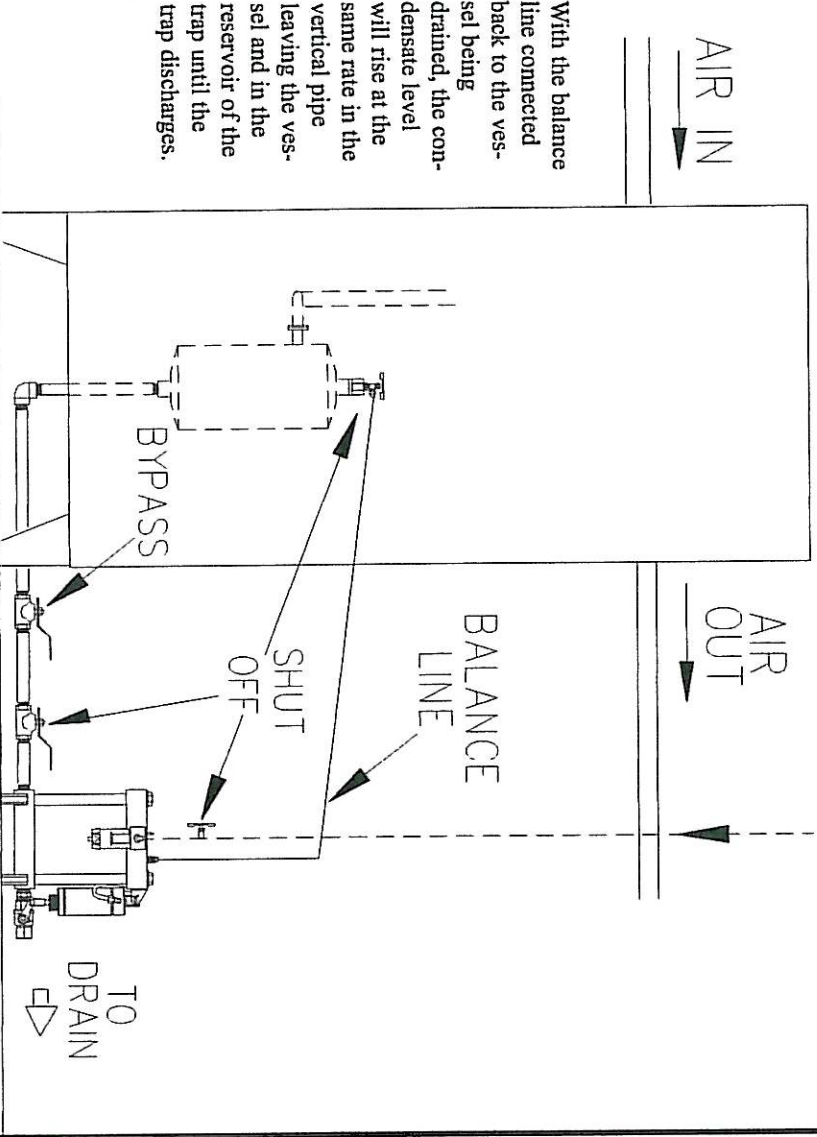




# Dryer

All horizontal runs in the balance line must be sloped slightly downward toward the balance line port on the top of the trap. No condensation can be allowed to lay in any dips in this piping since that will block air flow.

Bring control air from clean dry air source if at all possible.



With the balance line connected back to the vessel being drained, the condensate level will rise at the same rate in the vertical pipe leaving the vessel and in the reservoir of the trap until the trap discharges.

Method -1 is used for connecting the balance line in the dryer application shown.

For this trap the balance line is connected back to the dryer producing the condensate. The incoming condensate to the trap and the balance line pressures are the same in this arrangement and the trap is filling by gravity.

When a trap is connected this way and is filling by gravity the top of the trap must be below the bottom of the vessel being drained. As shown in the drawing by the dotted line, when a trap is filling by gravity the condensate level will rise the same amount in the pipe leaving the vessel being drained as it will rise in the reservoir of the trap.

The height of condensate in the trap to cause it to cycle and discharge is called the trigger point. If the bottom of the vessel being drained were lower than the trigger point of the trap, the condensate would back up into the vessel being drained. To be safe, always try to have the bottom of the vessel being drained higher than the top of the trap even though the actual trigger point of the trap is approximately 75 % of the height of the reservoir sleeve. This will insure that no water will back up into the vessel being drained.

Should the bottom of the vessel be lower than the top of the trap Method-3 should be used, which is to vent the balance line to atmosphere using a needle valve.



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**Margie Moschetti**

President

Steam—Vacuum—Water

Air

2503 Monroe Drive

Gainesville, GA 30507

(800) 752-0556

Local: (770) 532-7736

Fax: (770) 535-0536

Cell Phone: (404) 401-4431

Home Phone: (706) 367-7340

Email: [mkmoschetti@aol.com](mailto:mkmoschetti@aol.com)

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