

Smart tips for avoiding trapping air bubbles in fluids.

Air pressure tanks or pneumatic pressure tanks are often used on production lines to feed various industrial fluids and chemicals to spraying and dispensing systems. They represent a simple and inexpensive solution; however they can cause issues in the process by trapping air bubbles in the fluid they contain.

By following the few steps below, operators can easily minimize or eliminate these issues.

For applications not involving adhesives or other sticky fluids, a non-return valve fitted at the end of the dip tube can prevent air coming in, whilst the tank is opened to atmosphere for refill. There is wide range of non-return valves available on the market and compatible with a lot of applications, including food related applications. They can be very inexpensive and significantly reduce the risk of air entering the system.

Another source air bubbles forming into the reservoir, comes from the jet of pressurized air entering the tank.

Once a vessel has been refilled, pressure should be increased in a progressive and slow manner. This will prevent from a sudden jet of air hitting the fluid surface and penetrate it.

If increasing the pressure slowly is not possible, the alternative is to deflect the air jet from the fluid surface by simply adding an angled fitting on the air outlet on the underside of the reservoir lid.

If you need further advice on reducing or eliminating air bubbles inside containers or improve your fluid control, please contact us at technical@sr-tek.com or visit our website www.sr-tek.com