TC Valve Series
- The TC-1 model in this series is a 1” O.D. valve.
- The TC-1.5 model is a 1-1/2” O.D. valve.

Applications
These valves are used with tubing-retrievable gas lift valves that do not have an integral check valve, such as the TP-1 and TP-1.5 gas lift valves. A primary application for these valves is preventing back flow from the injection valve which damages casing. Other applications include preventing production commingling in dual gas lift installations and improving pressure integrity during acidizing and circulation operations.

Features
- Stainless steel or Monel® materials available
- Inconel® spring
- Eliminates need to re-unload annulus liquid since valve prevents annulus fill up during shut down periods
- Combination resilient/metal-to-metal seat for bubble tight seal
- Seal system options available
- Valves can be stacked for additional protection

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TC-1 Check Valve
TC-1.5 Check Valve
Plunger Tracking and Fluid-Level Measurement

Leutert’s sonoecho™ plunger-tracking and fluid-level measurement instrumentation tracks the fall velocity of any plunger during its shut-in to optimize production and ensure safety without the need for costly wireline techniques. The sonoecho™ includes equipment, software, and allows technicians to gather and interpret the fall data.

Applications

- Determination of plunger-fall times to ensure that the plunger has enough time to reach bottom
- Assessment as to whether the plunger got stuck in the tubing string, due to tight spots, hydrates, or scale
- Determination if liquid loading is preventing the plunger from surfacing
- Indication of tubing leak above the fluid level
- Understanding of the liquid levels and their effect on inflow performance, bottomhole pressure, fall velocity, and uplift potential

Features

- The sonoecho™ incurs less cost than wireline because it can be run easily on wells already operating with plungers with only equipment rental and the services of one technician.
- The sonoecho™ is attached to the lubricator with minimal disturbances to surface equipment so the well does not need to have to be shut in and can operate normally for an accurate plunger fall measurement.
- Because the well requires no additional shut-in that would build unneeded perforation pressure, the plunger is in a fluid column when it reaches bottom, which keeps personnel safe and avoids damage to the bottomhole, plunger, and surface equipment.
- Files from the software can be interpreted on site and sent by email to a remote office for timely well optimization.