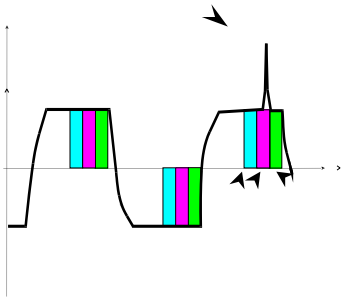
Top 10 Reasons to Use Toshiba Magmeters

1. Mount-Anywhere Technology

You can mount your magmeter next to an elbow! The patented magnetic Functional Field design enables the entire cross-sectional area of the flow tube to have an equal contribution to the signal generated by the electrodes thus making the meter independent of the flow profile. The LF654 Mount-Anywhere meter is 0.2% accurate with only 1 diameter of straight pipe. Other magmeters measure the velocity closest to the electrodes and do not see the middle or top and bottom portions of the pipe thus requiring long straight pipe runs to assume a proper flow profile that matches their lab calibration conditions

2. Noise-Sentry



Toshiba's Noise-Sentry is a highly advanced circuit that rejects flow signal noise caused by air bubbles, electrical, mechanical, and chemical actions. Triboelectric effect creates noise when sand or pulp rubs across an electrode. Mechanical noise occurs when a solid impacts the electrode, and chemical noise occurs when dramatic changes in conductivity occur like salt water or chemical injections near the magmeter. Noise-Sentry is not a software dampening program that adds time lag in the loop, but rather a separate noise rejection circuit.

Noise-Sentry has several components. First, it uses a pulsed square wave DC signal which provides excellent zero stability. Second, it uses a patented Optimized square wave sample circuit that takes readings only at the end of the square wave signal because it is the most accurate and stable portion. Third, it takes three samples per half cycle or six samples per full cycle, so at a 24 Hz pulse frequency with 6 samples per cycle it means the Toshiba magmeter will have 144 samples per second to analyze. Using a patented Division Multi-Sampling circuit, any spurious signals are eliminated rather than averaged into the flow readings. Further, a Rate-of-Change limit can be added to fully reject virtually any flow noise.

3. Superior Calibration

All Toshiba magmeters are wet calibrated *twice* at 3 flow rates. The second calibration run verifies the first run was performed correctly. Every meter is supplied with a NIST Calibration certificate showing data from both runs.

4. Built-in Mag-Prover

Mag-Prover is a built-in three-point magmeter calibration and verification tool that allows you to re-verify the original magmeter flow lab calibration. No need to shut down the process or remove the meter from the line for checking and testing. Mag-Prover also provides continuous operational diagnostics of the flow detector and electronics.

5. Advanced Electronic Converter

The LF600 series is the most advanced magnetic flow converter on the market. It won the IF Gold Medal for quality design, and has many standard features which include:

- Noise Sentry
- Mag-Prover
- Surge Suppression
- HART or Profibus communication
- Through-the-glass, 3 button IR configuration without removing cover
- Electronically rotatable display
- Flow alarm outputs
- Multi range and bidirectional signals
- Digital inputs for totalizer control, range switching or diagnostics
- Class 1 Div 2 approval

6. Mechanically Retained Liner

The Mount-Anywhere meter offers a mechanically retained PFA Teflon liner which is critical if a vacuum develops in your piping system. This can be created by sudden valve changes or flow surges. A mechanically retained liner will not collapse unlike a less expensive meter with a sleeve type liner.

7. Self Cleaning, Leak-Free, Electro-Polished electrodes

Electro-polished electrodes are smoother than glass. Further, Toshiba uses a measuring circuit with a very high input impedance to ignore anything if it did buildup. Finally, the electrodes are internally mounted and sealed so to not have any potential for leaks.

8. Wafer style meter uses exclusive Float-N-Place liner

Toshiba uses an exclusive Float-N-Place liner that protects the ceramic lining from pipe stresses and allows the ceramic to expand and contract with temperature changes without cracking. Ceramic is one of the best liners from a chemical, abrasion, and corrosion perspective. The Float-N-Place feature lets you utilize these strengths and remove the common restrictions of thermal shock and mechanical stresses.

9. Low Conductivity Liquids

The typical Mount-Anywhere or Premium-Value magmeter can measure the flow rate of fluids with a conductivity of 5 micro Siemens/cm or greater. However, the Toshiba LF510 Super-Mag has the ability to measure fluids down to 0.01 micro Siemens/cm with flow rates up to 9.84 ft/s.

10. TEN Year Warranty!

Now that is confidence in the Toshiba quality.