



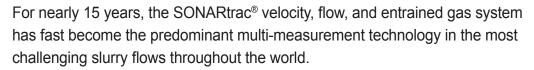
The Only Technology that Provides Flow, Velocity, and Entrained Gas Measurements



Why is measuring flow and entrained gas important?

- More accurate material balance
- Density measurement correction
- Enhanced drag head control
- Environmental benefits
- Increased operational efficiencies
- 'Bottom line' improvements







SONARtrac systems deliver value by increasing pipeline transport uptime, throughput and virtually eliminating recurring maintenance required by conventional in-line flow measurement.

Delivering Value Through Any Market Cycle





A Technology that Provides Benefits Regardless of Market Cycle

Key Features and Differentiators

The SONARtrac® flow and gas void fraction meters are light weight and wrap around the outside of the pipe while the process is running

Ability to accurately and reliably measure flow, velocity and entrained gas

No moving parts or parts prone to wear

Benefits

- Depending on the diameter size, can be safely and quickly installed in under two hours by one or two people without the use of heavy lifting equipment
- Installs while process is running. No periodic maintenance or recalibration required
- No measurement drift, no need to recalibrate
- Long life: Operating in harsh slurry environments for over 12 years without a replacement
- No wetted parts or flanges means that there is no concern for pressure ratings or leakage escapes
- Minimizes the risk of fines carry over through the monitoring and control of entrained gas
- The SONARtrac flow meter's ability to measure gas by volume can be utilized to correct errors in density measurements and provide the true liquid volume both essential for an accurate material balance
- The monitoring and measurement of entrained gas minimizes pump wear, degasser overload and/or pump suction pressure loss resulting in hopper blockage
- Versatile: Can be installed on a large variety of pipe materials and lined pipes

Impact on Company's Priorities

- Safety: Significantly reduces the risk and likelihood of personal injury
- Increases asset uptime and throughput
- Increases in throughput, reduces cost
- Virtually eliminates instrument maintenance costs and investment in inventory
- Enhances safety and environmental initiatives
- Increases in operational efficiency and profit
- Increases asset utilization and operational efficiency
- Increases operational efficiency and flexibility



