

THERMAL GAS MASS FLOW METERS AND CALIFORNIA ASSEMBLY BILL 32 COMPLIANCE

Background

The California Assembly Bill 32 (AB32), sets in motion regulatory and market mechanisms to reduce greenhouse gas (GHG) emissions. The full scope of the GHG rules took effect in January of 2012. AB 32 requires the Air Resources Board (ARB) to monitor and enforce compliance with regulations set forth in the program.

A summary of AB 32 requirements:

- Require the monitoring and annual reporting of greenhouse gas emissions from greenhouse gas emission sources beginning with the sources or categories of sources that contribute the most to statewide emissions.
- Ensure rigorous and consistent accounting of emissions, and provide reporting tools and formats to ensure collection of necessary data.
- Ensure that greenhouse gas emission sources maintain comprehensive records of all reported greenhouse gas emissions.
- **Meters used to calculate GHG emissions must meet a $\pm 5\%$ accuracy requirement.**

GHG sources in California that are required to report include:

- Applicable retail providers*
- Applicable marketers*
- Operators of applicable general stationary combustion facilities within the oil and gas sector *
- Operators of applicable cement plants*
- Operators of applicable petroleum refineries *
- Operators of applicable hydrogen plants*
- Operators of applicable electricity generating facilities*

Fox Flow Meter Accuracy

All Fox flow meters have excellent accuracy at high and low flows or velocities:

- Model FT1/FT4: (Air) $\pm 1\%$ of reading $\pm 0.5\%$ of full scale; (other gases) $\pm 1.5\%$ of reading $\pm 0.5\%$ of full scale
- Models FT2A/FT3: (Inline) $\pm 1\%$ of reading $\pm 0.2\%$ of full scale; (insertion) $\pm 1\%$ of reading $\pm 0.2\%$ of full scale.

Conclusion

Fox Thermal Mass Flow Meters exceed the accuracy requirements of $\pm 5\%$ and may be used to monitor the flow of GHG gases for the purpose of reporting emissions for AB32 compliance.

Sources:

http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf

*For more details, please refer to: <http://www.arb.ca.gov/regact/2007/ghg2007/frofinoal.pdf>