9 ADVANTAGES OF THERMAL MASS FLOW METERS VS. OTHER TECHNOLOGIES

1. **HIGH TURNDOWN RATIO**
   A high turndown ratio of at least 100 to 1 means the meter accurately and repeatably measures a substantially greater range of flow rates over other flowmeter technologies.

2. **UNAFFECTED BY PRESSURE VARIATION**
   Since the thermal mass flow meter counts molecules, pressure variations do not impact the measurement.

3. **LOW PRESSURE DROP**
   The sensor and probe have a minimal physical obstruction in the pipe; therefore, it has an extremely low pressure drop (even measuring in inches of water).

4. **LOW FLOW SENSITIVITY**
   Most thermal mass flow meters have extreme low-end sensitivity, capable of detecting even a pilot light in a natural gas line.

5. **NO MOVING PARTS**
   Thermal meters have no moving parts. Instead, the technology relies on the heat transfer passing a pair of resistance temperature detectors consisting of stable platinum wound sensors protected with a SS sheath.

6. **EASY TO INSTALL**
   The thermal flow meter is easy to install, particularly the Sage insertion models, which only require a weldolet to accept the Sage isolation valve assembly (no cutting into the pipe to insert spool sections).

7. **EXTRAORDINARY REPEATABILITY**
   Thermal mass flow meters offer extraordinary repeatability and reproducibility, requiring minor maintenance over a broad flow range.

8. **CALIBRATION VERIFICATION**
   Like the Sage Paramount and Prime, some thermal mass flow meters offer a simple calibration verification routine to reassure the user that the meter performs accurately without removing it from service.

9. **ECONOMICAL**
   The thermal mass flow meter is economical, mainly because it eliminates the cost and installation of ancillary temperature and pressure transmitters.

For more information on how thermal mass flow meters can serve your application, visit SageMetering.com/industry-news/9-thermal-mass-flow-meter-advantages/, or call (831) 242-2030.