

Food & Beverage Flow Solutions | Flowmeter Food Grade

Xian, Shaanxi Feb 27, 2026 ([IssueWire.com](https://www.IssueWire.com)) - **Lonnmeter** flow meters have been applied in food and beverage industry in a variety of scenarios. The **Coriolis mass flow meters** are applied in measuring starch solutions and liquified carbon dioxide. The electromagnetic flow meters are also could be found in brewery fluids, juices and drinking water. Moreover, Lonm Meter has offered a variety of solutions for practical application in food and beverage industry. Learn more about [Lonnmeter](#).

Fermentation Process Measurement

The generated heat and carbon dioxide should be monitored meticulously in fermentation. Valuable chances of reuse occur in capture and liquefaction of carbon dioxide in beverage processing. Advanced mass flow meters contribute to accurate measurement and controlling through the processing, improving efficiency and product quality.

It's possible that operators are able to get a clearer picture of the actual mass of liquified carbon dioxide in filling operations. Precise control with the help of mass flow meters makes simultaneous filling from different transport vehicles possible, reducing errors incurred by large-scale operation.

Flow Measurement in Breweries

Precision is the cornerstone of brewing industry. It starts from blending of malted barley and water in a mash cooker following a precise ratio. Starch is transformed into sugars and brewed to malty solution. This vital mixture, after mashing, is precisely measured before it flows to a filter press that separates the grains. Those filtered grain could be sold to local farmers as by products from time to time.

The solution, passing through the filter press, now called wort, is transferred to one of two steam-heated kettles for boiling. Two kettles undertake different role: one for boiling and one for cleaning and further preparation. The steam coil at the bottom of the kettle operates for the wort preheating.

The steam in the preheat coil shuts off and the automatic steam heating system takes effects when the wort reaches its boiling point. Then saturated steam from the steam header passes through an adjustment valve and the mass flow meter works to measure the accurate quantity of steam goes into the kettle. The volume of steam fluctuates with those in pressure and temperature. An integrated [mass flow meter](#) featuring both pressure and temperature compensation performs better than other steam flow meters, which offer parameters of temperature, pressure and flow separately.

Going out from the mass flow meter, the saturated steam rises to the top of an internal boiler, which is positioned in a shell-and-tube heat exchanger. The wort is heated by the down-flowing steam, which starts to condense. A deflector at the top of the shell-and-tube heat exchanger prevents the formation of foam, smoothing the boiling process.

After measuring and computing mass flow rates of steam, temperature of heating is taken under control in 500 bbl kettles. 5-10% solution evaporates in the 90-minute boiling. Then those evaporated gases are captured and measured by a **gas flow meter** for further optimization of the process. Added hops sterilize the wort and affect flavour, stability and consistency of the solution. Then the solution will be packed into bottles and kegs after a period of fermentation.

Our mass flow meter is versatile for steam, mash solution; gas flow meters for carbon dioxide and other vapours. Comprehensive solutions are available that encompass all flow meter requirements, optimizing mass balance and control. [Contact us](#) for more **steam flow measurement**.

Starch Concentration Measurement

It's paramount to figure out exact starch content and adjust it to targeted percentage in removing water from wheat starch suspension. In general, starch content ranges from 0-45% with densities of 1030-1180 kg/m³. Measuring the **concentration of starch** would be tricky if it is measured by an electromagnetic flow meter. The starch content could be controlled via adjusting the speed of centrifuges.

A Coriolis mass flow meter is an ideal instrument to measure the starch content in online mode, and the corresponding flow rate of the starch solution. The starch content is taken as a control variable for the centrifuges. Specific requirements on density measurement could be met on the basis of the objective of processing industries. The output signal of concentration and mass flow measurement are taken as references to set point for centrifuge speed control.

The versatility of modern flow meters not only provides insight into mass flow rates but also ensures that density measurements remain accurate, allowing for seamless adjustments and enhanced productivity in starch processing.

Flow Measurement in Beverage Processes

Soft drinks face unique challenges in the process of carbonization, especially the measurement of co₂. Traditional gas flow meters are junior to advanced thermal mass flow meters for their sensitivity to pressure and temperature fluctuations. Soft drink manufacturers are allowed to get mass flow directly when the processing system is equipped with a thermal mass flow meter, avoiding the complexities of temperature and pressure corrections. The innovative flow meter streamlines system operation and improves accuracy to a higher level, which ensures the right amount of co₂ each time.

In conclusion, the integration of advanced flow measurement technologies across various industries not only enhances operational efficiency but also reinforces the quality and consistency of the final products. Whether in brewing, starch processing, soft drink production, juice processing, embracing these innovative solutions positions businesses for sustainable success in an ever-evolving market.

Media Contact

LONNMETER GROUP

*****@xalonn.com

Operations Center  Room 202, Unit 4, Building 1, Jiaotong Nanyuan, No.12 Chang 'an South Road,

Yanta District, Xi 'an City, Shaanxi Province

Source : LONNMETER GROUP

[See on IssueWire](#)