FOOD FOR THOUGHT

Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering. Here, its Industry Manager for Food and Beverage, *Tim Schrodt*, explains how the company's solutions helped Eltville-based sparkling wine producer, Rotkäppchen-Mumm.

Rotkäppchen-Mumm chose Endress+Hauser to be the complete supplier of its measurement technology and automation solutions. Persuaded by its extensive industry expertise, the Eltville-based sparkling wine producer relies time and again on Endress+Hauser's entire service portfolio. Utilising Endress+Hauser's industry know-how, Rotkäppchen-Mumm was able to successfully standardise its measurement technology and implement a wide range of automation solutions.

Technology leadership

As Endress+Hauser measurement technology is used in all Rotkäppchen-Mumm's winemaking systems, which nonetheless stem from various manufacturers, a well-thought-out standardisation concept was developed to keep the variety of instrumentation at a manageable level.

Endress+Hauser was also called in to consult on solutions projects. The automation specialist supplied a complete wastewater neutralisation system, for example. The planning, design and selection of all system components was in the hands of a single provider. Wastewater treatment and discharge monitoring is now fully automated. As part of a second project, a calibratable system for loading tank vehicles with alcohol was realised, which permits complete, location-wide documentation and accounting of the goods transport. Serving as a link between the system manufacturer and producer for the mixed wine beverage project, Endress+Hauser brought the project managers for Rotkäppchen-Mumm and corosys, a specialist for continuous blending systems, to the table.

Unique process

With the support of the University of Geisenheim, the dealcoholisation process, which relies on spinning cone technology, was leveraged for the production of foamy beverages made from non-alcoholic wine. Measurement technology from Endress+Hauser is used to monitor every step of the distillation process at Australian manufacturer, Flavourtech, to ensure that the fine aromas and typical wine taste are preserved. Only by rapidly and precisely measuring pressure, flow and temperature can the interaction of these parameters be constantly optimised during the process. That applies to the initial wine product, the intermediate products and the steam. Because alcohol accrues during the distillation process in concentrations that can explode, all the system components are ATEX-certified.

In the upstream process areas, the wine is preserved by briefly heating it, after which it goes through a fining and cross-flow filtering process. This base wine is then stored in a tank where Micropilot radar devices measure the level. Thanks to the PTFE-filled horn antennas, the sensors are flush-mounted on the tank. Here, Rotkäppchen-Mumm places special emphasis on hygiene-sensitive products and relies on EHEDG-certified measurement technology. Ceraphant pressure switches

TIM SCHRODT

Industry Manager Food and Beverage, Endress+Hauser Messtechnik GmbH+Co. KG, Weil am Rhein, Germany

,immediately register the beginning of undesired fermentation at the riser pipes by detecting increased headspace pressure in the tank. Liquiphant sensors monitor the fill level. Thanks to build-up compensation, the robust Vibronic principle also functions reliably even if there is tartar build-up on the oscillation fork.

Tank inventory management is carried out effectively and decentrally with the upstream and downstream processes using touch panels on the valve terminals. Inductive flow measurement instruments can immediately create mass balances between the individual process steps. Automated phase separation between wine and water is also possible through the integrated conductivity measurement of the Promag H100. This results in minimal product loss. 🗂

For further information, please visit **www.endress.com**.



Improve your processes with our comprehensive portfolio of measuring instruments:



Deltapilot FMB50: Compact pressure sensor for hydrostatic level measurement is condensate-resistant and accurate.



Promag H 100: Flow measurement specialist with an ultra-compact transmitter is designed for hygienic applications.



iTHERM TM411: Modular thermometer provides outstanding measurement performance with best-in-class hygienic design.

