



Reliable levels for the right taste: Fohrenburg brewery relies on VEGA sensors

Anyone who has a unicorn in their coat of arms must certainly believe in magic and power of legend. Since 1260, the unicorn has featured in both the emblem of Bludenz and the trademark of the Fohrenburg brewery. However, in everyday beer production, instead of magic, it is better to rely on real measured values, preferably those delivered by VEGA sensors.

The brewery, which delivers far beyond Vorarlberg, produces a wide variety of beers. It is known especially for its state-of-the-art brewing techniques, strict hygienic standards and highly qualified employees.

How do you bring traditional processes into the modern age?

In general the company maintains traditional, proven methods, but does attempt to bring them up to date technologically. It is constantly investing in new technologies, like in 2011, in the new brewhouse.

The Vorarlberg brewer also has to think cost-effectively. Hence, the degree of automation is increasing from year to year; for example, almost everything in the brewhouse runs automatically nowadays. But not only are the primary processes becoming more and more automated, the secondary processes, such as bottling, are as well. While you usually have the freedom to choose the equipment and connections for new installations, you have to make the best of the situation with existing systems. One of the problems: many tanks in the brewery are certified. "Welding a nozzle for a new instrument type is often more expensive than the sensor itself. If you add the TÜV inspection, costs increase even more," explains Christian Schneider, master electrician at Fohrenburg. So he always tries to use an existing vessel connection or a capillary tube to install a VEGABAR pressure transmitter. Such a measuring solution is practicable, reliable and ultimately justified in terms of price, too.

When trying to match a specific measuring task to particular environmental conditions, only direct communication between user and manufacturer helps.



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“The collaboration works great, the technical support is reliable and we have a great working relationship,” says Schneider, summarizing his experience with VEGA. Concentrating on VEGA sensors also offers many advantages for the spare parts inventory.

Reliable filtration

The result: in the meantime there are over one hundred VEGA sensors deployed in the brewery. Most of them operate as min./max. detectors and overflow protection in various tanks, but some are also used for continuous level measurement. A particular area of application is the dosing of diatomaceous earth, which is required for filtration. This whitish powdery substance is light and highly porous and binds to any turbid matter in liquids. For that reason it is used to clarify the beer. The diatomaceous earth forms a filter layer that retains turbidity, thus clearing the beer. In the dosing container with agitator, the quantities must exactly match. “If this is not the case, the filtration does not work and the batch has to be discarded,” explains Schneider. Pressure transmitters are used here for contents measurement. Previously, the diaphragms of the pressure measuring cells were damaged repeatedly by the abrasive diatomaceous earth. After switching to VEGABAR pressure transmitters with ceramic measuring cell, the sensors worked flawlessly.



In the beer filtration process, VEGABAR ensures exact quantities in the kieselguhr dosing containers.

Reliable in the CIP system

VEGA sensors are also in demand for use in the fully automatic CIP systems for production line cleaning. The finished beer is transferred from the pressure tanks to the bottling plant to be filled into barrels or bottles. A VEGAFLEX guided radar is now used in the system. Special features: the probe is resistant to aggressive substances, such as acids and lyes, and precisely measures the quantities, e.g. in the hot water tank. Here, exact level measurement is more critical than you would think at first glance. If the level in the CIP system is not correctly measured, the system might very well switch off at night for safety reasons. The whole brewing process would then come to a standstill the following day.



Quick overview of beer consumption at large festivals, thanks to VEGABAR 83. Shown in the photo: Christian Schneider, master electrician at Fohrenburg.

A VEGABAR 83 pressure transmitter, installed in the beverage truck that delivers large quantities of beer directly to tent festivals, plays a small but important role. In the past when the truck returned from the festivities, the amount of beer consumed was estimated using a scale. Now a small fitting allows a specially calibrated VEGABAR 83 to be quickly connected to the tank and the exact consumption displayed. Although this particular installation is not a critical component of the brewery, it demonstrates Fohrenburg's philosophy: always to be on the lookout for ways to simplify processes and make them more reliable. VEGA, with its broad portfolio, supports brewers not only with standard solutions, but also with special ones for unconventional applications.

Products



VEGABAR 83



VEGAFLEX 81

Industries

