



Measurement technology improves brewing processes

Water, hops, malt and yeast – these are the ingredients permitted by the German Beer Purity Law. It's a short list and yet the variety of beers on offer is huge. This is due to the great creativity of the brewers. These craftsmen rely on their skill and dependable measurement technology in the brewing process – with so few ingredients, correct control is all the more important.

Where is measurement technology needed in a brewery?



- Pressure
- level and
- switching

are important parameters to keep an eye on at all times during brewing. Alpirsbacher Klosterbräu, a traditional brewery in the Black Forest whose beers repeatedly win awards, also uses a large number of measuring instruments from VEGA.

Measurement technology facilitates the brewing process in many places and thus ensures optimised processes and reliable production.

Differential pressure measurement across the filter: What is it good for?

Beer contains a large amount of yeast, which, however, has to be filtered out during the brewing process. Most of it is already removed in the separator after leaving the green beer storage tank, before it enters the filtering stage. Turbidity and the remaining yeast cells are removed to give the beer its bright, clear appearance. Precise monitoring of the differential pressure is very important, in order to be able to react quickly and provide the right amount of diatomaceous earth for the beer being filtered.

Alpirsbacher Klosterbräu accomplishes this quite well with the VEGABAR pressure sensor. "We can now measure very accurately," says Jürgen Wöhrle, the man responsible for quality assurance and quality management at the brewery, and who is more than satisfied with the sensor.

The quick installation and user-friendly operation via the VEGA Tools app on a tablet or smartphone further simplify the processes in the brewery.



Where else do the pressure sensors provide data?



The measured values from the VEGA pressure sensors are also the basis for smooth-functioning processes in the fermentation and storage tanks. This is where the fermentation and maturing of the beers takes place over a period of several weeks. One particularly important parameter, for example, is the pressure in the tank, which has to be just right to achieve the correct saturation of the beer with CO₂. The level is also a crucial value – filling and emptying the tanks at the right moment depends on it.

“We need to know how much liquid is in the tanks at any given time,” explains Jürgen Wöhrle.

At what point does the point level become important?



The point level plays a crucial role at several points in the brewing process – at Alpirsbacher, for example, the VEGAPOINT level switch is used in the grist mill. This is where the malt is crushed before brewing. This point level sensor immediately detects when a certain value is reached and reports this. It prevents the mill from overflowing or running idle without malt, which can waste energy and lead to damage in the long term.

Many measuring points, but very little work integrating them

Setting up and commissioning VEGA sensors is extremely easy, regardless of the measuring point. The sensors have a common process-fitting adapter system that is compliant with all established food approvals. This reduces downtimes and the stocking of spare parts – and leaves more time to relax and perhaps to enjoy an after-work beer.

[Explore 3D brewery](#)

In this episode of VEGA talk, Stefan and Jürgen show where measurement technology is used in the brewing process at Alpirsbacher Klosterbräu

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Applications

- Diatomaceous earth filter
- Fermentation tank
- Malt mill

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VEGABAR 38



VEGAPOINT 24



VEGA Tools App