



Radar sensor VEGAPULS 64 provides continuous stock data for a smooth filling process

A cool, light one, please

Beer actually consists only of four basic ingredients: barley, water, hops and yeast. But to produce a heady, full-bodied beer, a good number of special procedures have to be followed.

South African Breweries (SAB) is one of the largest in the industry and is now a subsidiary of Anheuser-Busch InBev. At the production site Chamdor, the operator was looking for a very accurate level measuring system for his tank farm. This tank farm consists of 30 tanks, which are about twelve meters high and six meters in diameter. They store the finished beer after filtration, before it is bottled.

The entire production process is of course monitored very closely. But special attention is given to this phase of the production process because it deals with the finished beer. Minor deviations could influence the taste or even reduce the quality. For that reason, very strict hygienic requirements are implemented – the area is regularly cleaned and sterilized with great effort. And all process parameters are continuously monitored. The temperature is set precisely, as is the pressure.

Reliable partner

The South African beer brewer has been working together with VEGA for eight years already and appreciates the great reliability of VEGA's measuring instruments, of which there are about 30 sensors installed in the plant in Chamdor. Five of them are VEGAPULS 64 and twenty five still the proven type VEGAPULS 63.



In the SAB (South African Breweries) plant in Chamdor five VEGAPULS 64 and 25 VEGAPULS 63 level sensors measure continuously the level. SAB was actually satisfied with the previous measurement solution they had for the tanks. VEGAPULS 63, a radar sensor for continuous level measurement of liquids, had worked very reliably and had already proven itself in many hygienic applications. The encapsulated antenna system protects against contamination and guarantees continuous, maintenance-free operation. Thanks to front-flush mounting, optimal cleaning is possible at any time. The measuring points and their conversion were stored in the PLC of the customer. The level measurement is not only responsible for correct quantity determination and accurate inventory monitoring, but also assumes the task of overfill protection.

Successful trial run

When VEGAPULS 64 came onto the market, the plant operators were curious as to whether this measuring instrument could measure the level directly. This radar sensor for liquids, measuring at a frequency of 80 GHz, was worth a try, especially since an exchange during the on-going process was possible without risk.

Non-recessed, i.e. protruding sockets often cause interfering signals. However, the narrow measuring beam of VEGAPULS 64 simply passes by the edge of the socket. Dismantling or changing the mounting socket was therefore not necessary for reliable operation of the instrument. This is generally interesting for applications in the [food and beverage industry](#), because here production equipment usually gets certified as a complete system and mechanical changes to the measuring point are not permitted. VEGAPULS 64 has a hygienically flawless antenna connection and can be mounted front flush. Another advantage of the radar level sensor: the huge temperature fluctuations between the normal storage temperature and the cleaning temperature don't bother the sensor, thanks to the front-flush design and the Teflon coatings.



With appropriate adapters the threaded versions of VEGAPULS 64 can be adapted to e.g. clamp connections.



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Good focusing and high dynamics

After installation and setup, the sensor worked to the operators' satisfaction. Thanks to the 80 GHz signal frequency a higher measurement certainty and greater dynamics can be achieved.

Due to VEGAPULS 64's user-friendly design and adjustment concept, it was able to be installed and put it into operation quickly. The sensor has been measuring reliably and accurately ever since the first trial run.

Products

