

# Reliable CIP performance in beer keg filling machine using Capacitive Level Switch

## The Anderson-Negele solution

Every step matters in the beer manufacturing process and that is why good breweries always pay attention to minutest of detailing required for making a perfect beer. They also made sure that the CIP process is completely finished before the refilling of beer happens in the kegs. This is one of the critical operations where the beer can be compromised if any step goes wrong and ultimately the brand image can go on stake. Till now being one of the leading commercial breweries of India they have maintained this process at the best and delivered the same taste of beer from decades.

Anderson-Negele Capacitive Level switch NCS is installed at their Southern brewery plant in keg re-filling machine for cleaning the kegs so that the bacteria are totally removed before any filling of beer happens in each keg. The level switch should not fail in this process as it might create big issue which in turn can lead to huge losses.

Our Capacitive Level switch NCS has to monitor the presence and flow of CIP chemicals. Primarily the function is to continuously detect the existence and flow of caustic acid and purified water during CIP. If there is no flow of either of these chemicals the CIP sequence comes on hold by the PLC. This ensures proper cleaning of the beer kegs before refilling of beer happens again. Since Anderson-Negele NCS capacitive level switch is independent of Foam and adhesion as well as conductivity of the media, it ensures to give consistent performance through out the CIP process even though caustic is soapy in nature and on top of it the purified water has very low conductivity value.



NCS-11 installed at one of the Brewery Plant in south

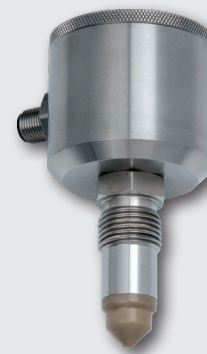
## Anderson-Negele advantages

- » Independent of the conductivity
- » Insensitive to foam and adherence, reliable at pasty media
- » Short response time (< 1 s)
- » Reversible output (full / empty active)
- » Heated electronic to avoid condensation
- » Simulation of sensor status possible
- » Pump / dry running protection

Last but not the least our Hygienic CLEANadapt fitting also makes sure that there is no leakage due to its Gap free design. Additionally we do not use elastomer which can lead to some severe damages and leakages. Anderson-Negele's CLEANadapt fittings ensures zero dead leg in the process lines for better cleanability and drainability. Moreover it is EHEDG approved fitting which makes it extra reliable. We are proud to be associated with such a reputed commercial brewery brand and able to meet their set expectations so far.

## Sensor used in the application

### Capacitive Level Switch NCS-11



### Advantages

- Independent of the conductivity of the medium
- Extended measuring range  $D_k \geq$  for critical media (e.g. oil, fat, ...)
- Short response time