Application report NCS-L **FOOD**

Reliable empty indication in quark tank with NCS-L-11/50 point level switch

The requirements

In a mixing tank for cream, quark and yogurt, the empty indication is verified by means of a point level switch. Until now, a conductive rod probe was used along with evaluation electronics installed in an external switch cabinet. However, this probe erroneously output a "medium present" signal (full indication) when residual medium in the tank foamed up during cleaning of the tank. This caused the mono pump to switch on, which ran dry after a short period because of the absence of medium in the tank. As a result, the system switched into a malfunctioning state, interrupting the cleaning cycle and requiring a manual restart.

The Anderson-Negele solution

The NCS-L-11/50 point level switch features a special design with a probe tip that is offset inwards by 50 mm. This has a two-fold purpose. It ensures that adhesive media like quark or yogurt can be reliably detected in the tank, and it enables the sensitivity of the probe to be adjusted to a variety of media.

The advantages

- The device can differentiate between foam and product.
- Due to the internal evaluation electronics, external devices (in a switch cabinet) are not required.
- A conical sight window (option) in the cover allows the switching state display to be viewed from any direction.

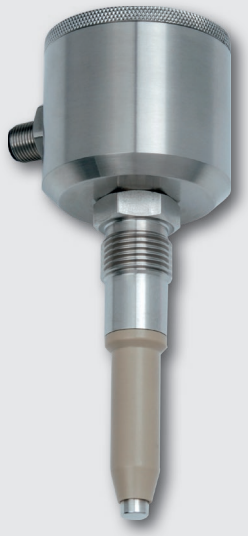
Why the dairy chose Anderson-Negele

- The NCS-L-11/50 point level switch reliably detects the product level in the tank.
- Cleaning times are optimized. The cleaning cycle is no longer interrupted by foam caused by residual media in the tank.
- The switch ensures that the mono pump does not run dry.
- Maintenance costs are lower. Service or production staff no longer need to manually intervene or restart the equipment.

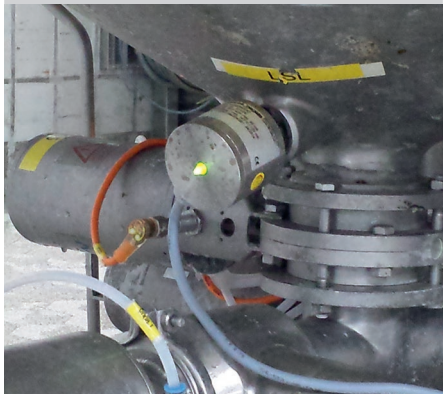
Customer

FrieslandCampina Germany GmbH
Cologne Plant

NCS-L-11/50 point level switch



View of installed sensor from the outside



Inside view of quark tank

Product information and CAD data

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