## Application report NCS-M-11

# Compact and Durable Capacitive Limit Detection for Accurate Results

### The requirement

**Taj Foods India Pvt. Ltd.,** Ahmedabad, was unable to stop the overflow of sugar syrup (highly viscous medium) in a tank. Due to the slow response of the tuning fork switch used to monitor the tank overflow, the pump failed to stop in time. This was a persistent problem that resulted in unsatisfactory results. It also led to the waste of sugar syrup and distrupted the daily production process.

The cause of the problem was the tuning fork technology, which was unable to produced reliable level measurements due to the sticky and viscous nature of the medium. As a result, the pump did not switch off on time.

The Taj Foods team had the clear objective of stopping the overflow and improving the response time. This issue was discussed with the **Anderson-Negele** team.

#### The Anderson-Negele solution

The **Anderson-Negele** team proposed installing the **NCS-M-11 level switch**, which is a compact capacitive level switch made of PEEK material. It has a very fast response time of < 100 ms and works best in viscous media. Because of its compact design, sticky material is less likely to adhere to the sensor.

The **Taj Foods India Pvt. Ltd.** team was satisfied with the solution of installing the NCS-M-11 level switch at their plant. It fullfilled their requirement for a fast-response level switch in the sugar syrup tank to avoid overflow and to stop the pump in time to prevent wastage.

#### The advantages

- · Very compact device
- · Easy installation without adjustments
- · Faster response time even in highly sticky and viscous media
- · Reduced power consumption because the pump stops on time
- Faster ROI (return on investment)

#### Features

- · Capacitive measuring principle
- Very short response time (< 100 ms)</li>
- Insensitive to foam and adherence
- $\cdot\,$  Sensor made of stainless steel, sensor tip made of PEEK
- $\cdot\,$  Independent of medium conductivity
- · Compliant with 3-A Sanitary Standard

Product information and CAD data





## NCS-M-11 level switch

## NCS-M-11 installed in the tank



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