



# Application Case Study

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Product	<b>Model 702 Top Mounted Displacer Level Switch</b>
Application	<b>Gas Field Condensate Tank High Level Switch</b>

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## The Problem

Many corporate or even government regulations require redundant instrumentation as a back up to primary measurement methods. The often debated question is always “what is the best technology to use for this safety device?” Recently, a well known oil and gas producer was faced with this exact dilemma.

Historically it has been common for them to use side mounted point level detection devices such as horizontal float, vibrating fork, ultrasonic gap, or RF switches. The mechanical float does offer an advantage over the rest because it does not require external power to operate like the electronic switches do. Yet all of these products are susceptible to fouling as the tank liquid comes in contact with the switch chamber or sensor.



## The Solution

After years of trying to find newer solutions, this customer has found that the “old” top mounted displacer switch to be the most robust and reliable method to meet this challenge. The operating principle of the displacer makes it remarkably tolerant of fouling without the additional power requirements.

In a recent appointment by the local SOR<sup>®</sup> representative they selected the model 702 top-mounted displacer level switch for these safety applications. They felt the reputation of SOR combined with the price and features of the model 702 displacer level switch was enough to make the decision easy.

SOR makes several level and pressure switches that are used extensively in the oil and gas field, products that are well known in the industry for reliability and ruggedness. This customer has used SOR switches for years in their gas fields. No matter what the conditions they know the SOR displacer switch will be ready.

## The Results

An initial order for the SOR model 702 displacer level switches was placed with the local representative and with a prompt delivery time, the first of the units were installed on the well head condensate tanks. The displacers are now functioning as a backup in case of a level transmitter failure and the customer couldn't be more pleased: “...the installation looks good and is working well.” This preferred method of level transmitter redundancy has become the new, “old” approach for high level safety measurement.

## Ordering Information

### Customer Specifications:

Model Numbers: 700 Series, 730 – 750

Ranges: vac – 1000 psi, vac – 69 bar; -65° - 450°F, -54° - 232°C

Certifications: UL, CSA, GOST, ATEX, SAA, ASTM materials

Warranty: 5 years

Ask your local SOR Representative for the top mounted displacer level switch models that meet your specifications.