

# Rosemount® SIL2 Level Switch Provides High and Low Level Alarms in Safety-Critical Application

## RESULTS

- Overfill prevention and environmental protection
- Reduced costs and easier operation
- Pumps protected from running dry



## APPLICATION

Pump protection and high/low level alarms in toxic chemical storage tanks

## CUSTOMER

A chemical company in Jiangsu Province, China

## CHALLENGE

The customer uses Rosemount non-contacting radar to measure and control their tank levels, but needed critical high level alarms for their agrochemical storage tanks at their new production and recovery site. The tanks contain product that is toxic and could cause environmental damage if an overfill occurred. This is a new site using SIS systems and the customer required SIL- certified equipment. They also needed to ensure the presence of liquid in their pipes to prevent pumps from running dry. Reliability was a key concern.

Due to the corrosive nature of the product, the customer required switches with special non-corrosive coating. In addition, stainless steel housings were needed to combat environmental corrosion.

## SOLUTION

The customer chose Rosemount 2130 Series Vibrating Fork Level Switches. The switches are SIL2 certified to IEC61508 and this additional level of reliability gave them the peace of mind needed. The switches were supplied with stainless steel housings and ECTFE/PFA coated forks.

*The customer found the Rosemount switches easy to operate, stable and reliable.*



Rosemount 2130 SIL2 Vibrating Fork Level Switch mounted on top of the reactor

If the tank contents reach a critical level - either too high or too low - the level switch will change state and indicate a high or low level alarm. Similarly, for pump protection, if the switch detects that no liquid is present, the output can be used to disable the pump and prevent it from overheating.

Compared with the alternative switches that were evaluated, the customer found the Rosemount switches easier to operate, stable, and reliable.

### RESOURCES

#### Rosemount 2130 Series

[www2.emersonprocess.com/en-us/brands/rosemount/level/2100-series-level-switches/2130-level-switches/pages/index.aspx](http://www2.emersonprocess.com/en-us/brands/rosemount/level/2100-series-level-switches/2130-level-switches/pages/index.aspx)

#### Emerson Process Management Chemical Industry

[www2.emersonprocess.com/en-US/industries/Chemical/Pages/index.aspx](http://www2.emersonprocess.com/en-US/industries/Chemical/Pages/index.aspx)

## Rosemount 2130 Vibrating Fork Level Switch installed in pump for liquid detection



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#### Global Headquarters Emerson Process Management

6021 Innovation Blvd.  
Shakopee, MN 55379 USA

+1 800 999 9307 or +1 952 906 8888  
+1 952 949 7001  
RFQ.RMD-RCC@EmersonProcess.com

#### Europe Regional Office Emerson Process Management Europe GmbH

Neuhofstrasse 19a P.O. Box 1046,  
CH 6340 Baar, Switzerland

+41 (0) 41 768 6111  
+41 (0) 41 768 6300  
RFQ.RMD-RCC@EmersonProcess.com

#### Middle East & Africa Regional Office Emerson Process Management

Emerson FZE P.O. Box 17033  
Jebel Ali Free Zone - South 2  
Dubai, United Arab Emirates

+971 4 811 8100  
+971 4 886 5465  
RFQ.RMDMEA@EmersonProcess.com

#### Asia Pacific Regional Office Emerson Process Management Asia Pacific Pte Ltd

1 Pandan Crescent  
Singapore 128461

+65 6777 8211  
+65 6777 0947  
Enquiries@AP.EmersonProcess.com

00830-0100-4130, Rev AA