

# Rosemount 2120 on Hazardous Chemicals

## RESULTS

- Reliable and high integrity overfill protection
- Resistance to false switching
- Halar coated wetted parts allow use in aggressive fluids

## APPLICATION

Regenerative fuel cells. High and low-level alarm and pump control of various aggressive fluids in storage process vessels, sumps and bund walls. Process fluids include solutions of sodium bromide, sodium hypochlorite, sodium polysulphide, and water.

## CUSTOMER

Power stations

## CHALLENGE

The aggressive nature of certain fluids and product vapors means that the material selection is critical. Lower quality solutions using reconstituted coating material are often attacked and blister because of the impurities and porous structure. Some of the product vapors, particularly free bromide, tend to blister other coatings.

Many of the products requiring alarm status and control may also have high electrical potential meaning that no metallic product can be in contact with the process fluid.

Plants often require a mixture of safe area and intrinsically safe area level switches.



*Figure 1: The Rosemount 2120 vibrating fork level switches offers reliable high and low level control in arduous conditions.*

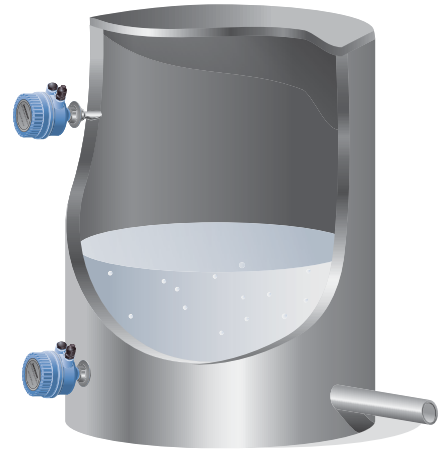
## SOLUTION

The Rosemount 2120 meets all of the requirements and concerns of Electrical and Chemical Hazardous Area issues, offering high and low-level control reliability in arduous conditions.

The Halar ECTFE/PFA coating option on the Rosemount 2120 is perfectly suited to aggressive fluids and vapors, due to its non conductive nature, and makes it ideal for situations where high electrical potentials exist. The coating and tuning fork technology enabled the level switch to operate where other technologies may not.

For safe area applications the 2- wire direct load switching output option can be selected for ease of installation. Hazardous area units utilize NAMUR switching barriers meaning customers can standardize on one supplier of barriers.

The digital output from the 2120 tuning fork can be fed into the plant monitoring system. The level + control loop philosophy is to control valves, pumps and the batching process called into operation when a low and/or high trip occurs.



*Figure 2: Maximum and minimum detection in vessels containing many types of liquid is measured reliably using the Rosemount 2120.*

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