

# Power Station Manages High and Low Level Control in Aggressive Chemicals with Level Switch

## RESULTS

- Reliable high and low level protection in the most aggressive fluids
- Eliminated false switching

## APPLICATION

Regenerative fuel cells

**Application Characteristics:** 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 station in Europe

## 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.

This application frequently has high electrical potential where no metal parts can come in contact with the process fluid. These installations also frequently have a mixture of safe and intrinsically safe hazardous area requirements that must be met

## SOLUTION

The Rosemount 2120 Vibrating Fork Level Switch with the Halar ECTFE/PFA coating option was an ideal solution for providing high and low level control with aggressive chemicals, high electrical potential, and where hazardous area approvals may be required.

The Halar coating option was compatible with all of the aggressive fluids and vapors that might be present in the process. The high electrical potential in the process fluid is well suited to the Halar coated vibrating fork product where other level technologies may not have been acceptable.

To achieve the safe area requirements, the 2-wire direct loading switching output option can be selected. In intrinsically safe environments, standard NAMUR switching barriers make it possible to achieve the suitable hazardous area approvals using standard off the shelf barriers.



*The Rosemount 2120 Vibrating Fork Level Switch provided reliable high and low level control under very challenging conditions.*

Upon commissioning, the Rosemount 2120 managed all high and low level switch controls by connection to the plant monitoring system. There it supported a level control strategy that included batch processes, control valves, and pumps.

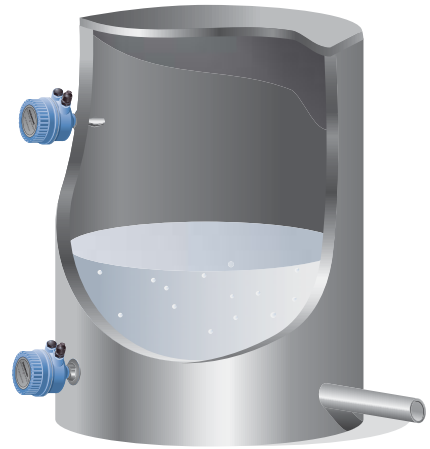
### RESOURCES

#### Rosemount 2120

<http://www.emersonprocess.com/rosemount/products/level/m2120.html>

#### Emerson Process Management's Power Industry Page

<http://www.emersonprocess.com/solutions/power/>



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

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