

Application Note:

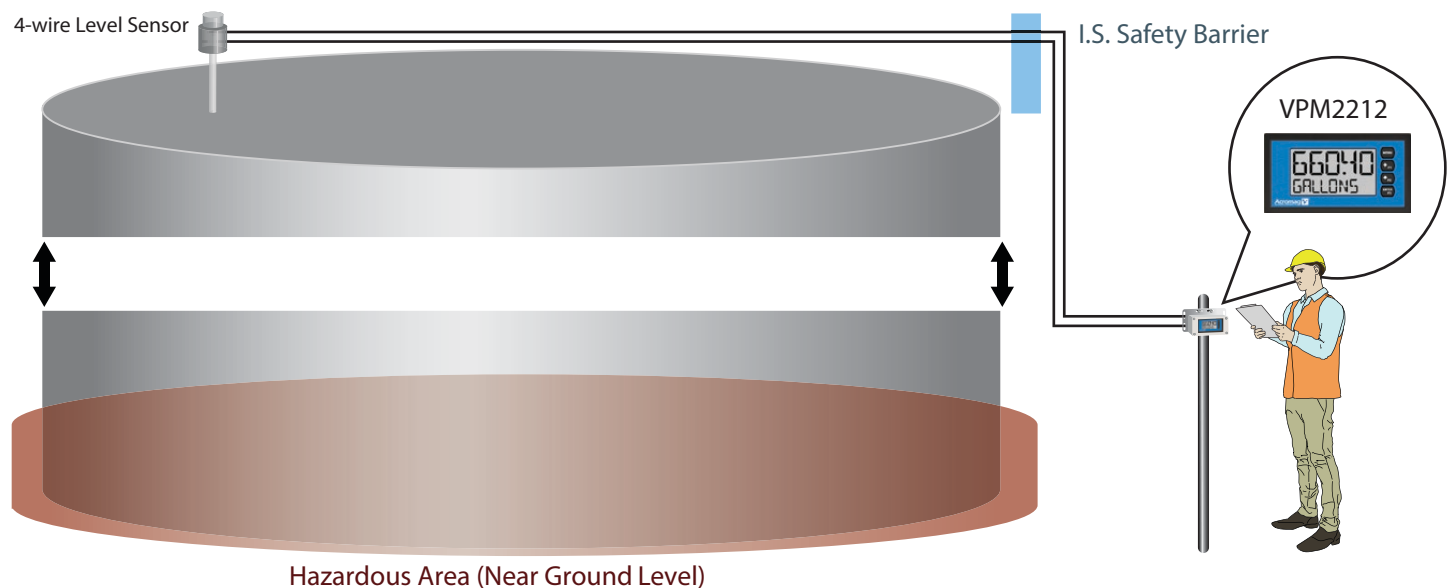
How to Display and Maintain Tank Levels in a Hazardous Area

Defining the Problem:

Chemical manufacturer has various tanks of substances which it combines to manufacture their product. The top of these tanks are a UL rated Class 1 Division 2 hazardous area. They use 4 wire non-contact level sensors and want their operators to be able to read and adjust the tank levels either automatically or manually from the ground level. The spot where this needs to be installed is in a UL rated Class 1 Division 1 Groups A, B, C & D hazardous area and they have no power source available.

System Requirements:

Input loop powered display that is rated for Class 1 Division 1 hazardous areas. Settable solid state outputs for pump control is an additional bonus.



Implementing the Solution:

1. The VPM2212 panel meter has two lines of alphanumeric display and is input loop powered requiring no local power. When installed with an intrinsically safe barrier it is rated for operation in UL Class 1 Division 1 Groups A, B, C & D hazardous zones.
2. The VPM2212 model has the option of two solid state relay outputs that can be set to turn on and off pumps automatically based on levels and can even be set to alternate pumps each cycle.
3. Operators can manually override and turn on or off the pumps from the pushbutton interface on the front panel.

Featured Products:

VPM2000 Series Panel Meter:

[VPM2212](#): Digital display alarm, IS, loop power with relays

Notes:

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Why Acromag:

The Vertu® VPM2212 has all of the features that this customer needed to allow their operators to safely monitor and control tank levels. Other models are available with current output or for non-hazardous locations. All are easily configured through the front panel pushbuttons or the free, Windows® based DisplayWizard™ software. Acromag, your I/O experts for over 60 years.