

Radar Level Measurement

Endress+Hauser 

reliable level measurement of IBC contents with non-invasive radar

Amcor Beverage Cans Ltd in Manukau City recently had an application for reliable Level Measurement in their Intermediate Bulk Containers (IBCs).

As the contents were highly corrosive and the IBCs are regularly replaced, it was essential that a non-contact / non-invasive technique was used.

EMC suggested that the Endress+Hauser FMR240 Micropilot M could be suitable for the job and a successful trial was arranged.

The FMR240 Microwave Radar is able to reliably and accurately detect the liquid level through the IBC tank ceiling ensuring that Amcor can monitor their inventory levels without problem.



IBC at Amcor - FMR240 circled



FMR240 Micropilot M mounted above IBC

Micropilot M - safe level measurement of liquids in extreme process conditions

The FMR240 used in the above application is just one model in Endress+Hauser's Micropilot M series of Radar instruments. They are used for continuous, non-contact level measurement of liquids, pastes, and slurries.

The measurement is not affected by changing media, temperature changes, gas blankets or vapours. Typical models include:

- FMR230 - especially suited for measurement in buffer and process tanks
- FMR231 has its strengths wherever high chemical compatibility is required
- FMR240 with horn antenna is ideal for small vessels and has an accuracy of $\pm 3\text{mm}$. The Wave Guide provides the

- solution for horizontal cylindrical tanks
- FMR244 combines horn antenna advantages with high chemical resistance
- FMR245 - highly resistant, easy to clean

Micropilot M benefits

- 2-wire technology, low price: A real alternative to differential pressure, floats and displacers. Reduces wiring costs and allows easy implementation into existing systems
- Measurement is non-contact & almost independent from product properties
- Easy on-site operation via menu-driven alphanumeric display
- Easy commissioning, documentation and diagnostics via operating software (ToF Tool)
- 2 frequency ranges - 6 GHz (FMR230/FMR231) and 26 GHz (FMR240/244/245): No compromises, the right frequency for every application
- HART (standard), PROFIBUS PA or FOUNDATION Fieldbus all optional
- Suitable for process temperatures up to 200°C (400°C with high temperature antenna)
- Rod antenna with inactive length: Reliable measurement in narrow nozzles, with condensation and build-up
- Application in safety related systems (overspill protection) with requirements for functional safety up to SIL 2

More information?

Circle Enquiry No: 1102
Contact: Howard Berry

enviroNZ05

EMC supports the NZWWA 47th Annual Conference and Expo

As mentioned in our last Newsletter, the New Zealand Water and Wastes Association's annual conference and Expo was held at the Aotea Centre in Auckland at the end of September.

EMC were to pleased to participate in the successful expo and to demonstrate our support for this important industry.

EMC Sales Engineers were on hand to discuss the diverse range of Endress+Hauser instrumentation on display which included:

- magnetic flowmeters
- level switches / measurement
- ultrasonic level / flow measurement
- portable water sampler
- suspended solids measurement
- pH and other analytical sensors
- displays and data loggers
- temperature measurement

EMC are your ideal partner - we can



EMC's exhibition stand at enviroNZ05

supply the whole basket of instruments used in the water and wastewater industries and support this with trained and knowledgeable staff.

More information?

Circle Enquiry No: 1103
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