

Guided Wave Radar Successfully Measures Level of Anhydrous Ammonia

RESULTS

- Accurate and reliable measurement despite heavy vapors
- Reduced maintenance problems
- Accurate level readings independent of density changes



APPLICATION

100% Liquid Anhydrous Ammonia

Application Characteristics: Clean fluid, heavy vapors, variable density

CUSTOMER

The Kerteh Terminals® in Malaysia

CHALLENGE

The Kerteh Terminals in Malaysia previously used a displacer to measure the level of anhydrous ammonia. Displacer technology is commonly used for low temperature applications. These applications can reach as low as -33°C .

When using the displacer technology, the customer faced many problems with the difficult measurement. First, the readings were inconsistent and did not match the actual level. Second, the density of ammonia often changes as it moves between vapor and liquid phases and can also change with moderate pressure or level changes. Lastly, the customer had to do frequent repairs and replace parts regularly on the existing displacer technology.

Because of the small span, heavy vapors, and changing density, differential pressure level and non-contact radar technologies are not good choices for the anhydrous ammonia application.

SOLUTION

The customer installed the Rosemount 3300 and found that it met their expectations. With its low frequency, the Rosemount 3300 is unaffected by heavy vapors that commonly attenuate higher frequency signals. The coaxial probe provides a strong signal that further enhances the level signal in this highly condensing environment. In addition, the Rosemount 3300 has no moving parts, making it virtually maintenance free.

With the Rosemount 3300, the customer has an accurate, reliable, and low maintenance level measurement.



Rosemount 3300 with a coaxial probe is suitable for heavy vapor applications.

ROSEMOUNT®

For more information:
www.rosemount.com


EMERSON™
Process Management

RESOURCES

Rosemount 3300

<http://www.emersonprocess.com/rosemount/products/level/m3300.html>

Rosemount Technical Note - Measuring Ammonia with Radar

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Emerson Process Management

Rosemount Division
8200 Market Boulevard
Chanhassen, MN 55317 USA
T (U.S.) 1-800-999-9307
T (International) (952) 906-8888
F (952) 949-7001
www.rosemount.com

Emerson Process Management

Europe, Middle East & Africa
Health Place
Bognor Regis
West Sussex PO22 9SH
England
Tel 44 1243 863121
Fax 44 1243 867554

Emerson Process Management

Emerson Process Management Asia Pacific
Private Limited
1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
AP.RMT-Specialist@emersonprocess.com



For more information:
www.rosemount.com

