

Advanced Level Transmitters for Urea/Carbamate Services

Author:

Mr. Prem Baboo
Dangote Fertilizer Projects

Abstract

The microwave level meter can carry out measurement not only with corrosive/high pressure but also in a high temperature or under an environment with corrosive liquid/gases. Accurate measurement has been achieved even under adverse environment conditions.

The microwave level meter contains the self-diagnostic function and informs you of a measurement error of the level meter as soon as possible. Non-contact radar level transmitters are used for the measurement of almost any liquid and many solids in storage tanks, vessels or during processing. Radar level measurement is a safe solution even under extreme process conditions (pressure, temperature) and bi-phased liquid and vapors. Radar level transmitters work based on the time of flight measuring principle or time domain reflect metric type.

Nucleonic transmitters or nucleonic control systems (NCS) are used in urea plants to improve the quality process optimization and accuracy of the control reliability. In some plants stripper nucleonic LT are using for level measuring. The phenomenon of reducing the intensity of gamma radiation when passing through liquids or solids is used in nucleonic devices for measurement of level of liquids and solids. A gamma-detector converts the gamma-radiation into the output signal.

An old plant having nucleonic level transmitter or delta-P type level transmitter can easily convert into the Radar level transmitter and it is easy to install.