

## Guided Radar Measurement RM71 on Cement Application



In the cement industry, dusty vapor space within the silo causes unreliable measurement. Cement produces large amounts of dust during emptying and filling which makes it difficult to use traditional level gauges and ultrasonic technology. Cement typically has a low dielectric constant (dK) of approximately 2.2.

Application opportunities include: cement silos, clinker level, raw meal silos, cement grinding plants and cement storage bins.

### Solution

In cement manufacturing companies, Honeywell's RM71 with single flexible probe of 4 or 8 mm can be used to measure Cement powder in the silo. The dusty environment and low dk does not affect the measurement quality.

Optionally if the silo requires a measurement of more than 35 m you can offer RM 70 which also performs well due to Honeywell FMCW (frequency modulated continuous wave) technology. Also FMCW precludes the need for a positioner kit as required by our competitors who use PTOF (pulse time of flight) technology. The availability of high frequency (24-26 Ghz) signal with a narrow beam angle and high power (500 times more powerful than PTOF technology) brings about reliable measurement. The measuring range of 40 to 50 m can

achieved using either 6" drop antenna or 4"/6" horn antennas.

Note that the instrument is a maintenance free instrument resulting in labor cost savings. The measuring range of 40 to 50 m can be achieved using either 6" drop antenna or 4"/6" horn antennas.

- Silo: Vertical cylinder at height 9.5M
- Temperature: Ambient
- Device:
  - Connection: 1"G
  - Sensor: Single cable 4 mm
  - Sealing: Viton
  - Approval: Without
  - Mode: Direct



### More Information

For more information on radar measurement RM71, visit <http://www.honeywell.com/ps/hfs> or contact your Honeywell account manager.

### Automation & Control Solutions

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