



Level



Pressure



Flow



Temperature



Liquid Analysis



Registration



Systems Components



Services



Solutions

# Levelflex M FMP 40 in Flour- Food

## FMP 40 in a Dusty Application



Levelflex M on top of the silo



FMP 40 and RIA 452



Flour

### FMP 40 outrivals a high alarm switch from our competitor.

#### Customer Information

This customer manufactures and distributes fresh and frozen bakery products from bakeries located across the country. The customers' products are sold to retail customers, in-store bakeries, restaurants and institutional accounts throughout Canada.

#### Process Information

Medium:	Flour
Silo:	Cylindrical silo with a conical bottom
- Height	33 ft (10m)
- Diameter	10 ft (3m)
Process Temp:	Ambient
Ambient Temp:	68 to 86°F (20 to 30°C) mounted inside a building
Nozzle	16" (DN400), Height: 1" (25mm) Thread in the middle for Levelflex
Conditions	Dusty during filling
Surface	Angled, due to filling from the top

#### Competition

The customer previously used a high alarm switch from our competitor which would sometimes switch opposite of the actual level in the silo. This caused the silo to overfill, causing costly spilling of product. The customer relies on this measurement and decided to seek a continuous level transmitter that could handle:

- Dust
- Angled surface
- Low and high level detection
- Volume measurement

#### Solution from Endress+Hauser FMP40 VAA2CNJB21JA + RIA452

#### Instrument description

The FMP 40 guided level- radar measures in liquids and solids using the Time of Flight principle. The Levelflex unaffected by complicated tank geometry.

The measurement has no problem with foam on the surface and is independent of:

- Density
- Bulk density
- Temperature
- Dust, e.g. during pneumatic filling

The RIA 452 process indicator is a universally usable 96x96mm front bezel display. Four preset table alarm relays monitor the analog measured signal for any infringement of preset values. A clearly readable, three color back-lit LC display shows the values both digitally and as a barograph. Set point infringements are also permanently displayed.

#### Benefits for the customer

- TDR technology independent of the flour dust
- Continuous level measurement
- Switching point (high and low) realized with RIA452
- Linearization of the output signal for volume on the display and FMP is possible
- Easy installation
- Low costs for continuous level transmitter with switching points

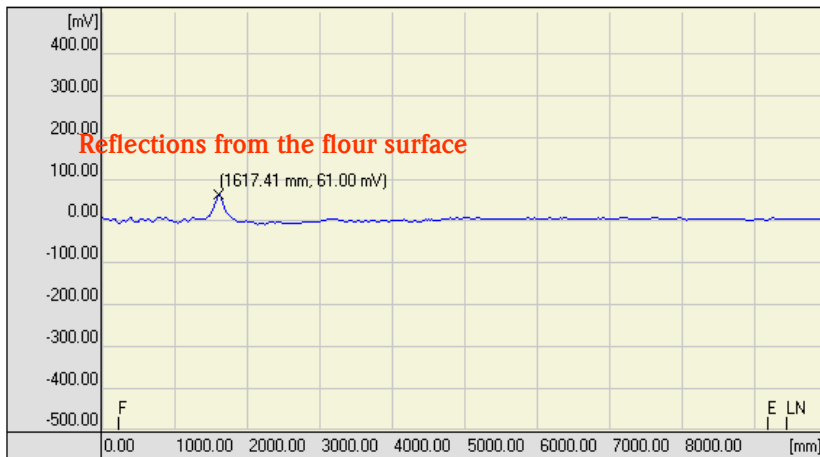
#### Result

The customer is very satisfied with the reliable level reading. Thanks to the RIA452 he can now not only check the level (0 to 100%) but also the volume (0 to 76000kg) He is very pleased with our technology and has ordered 3 additional Levelflex M with the RIA display unit for the 3 remaining silos.

Endress+Hauser

People for Process Automation

## Flour silo with the dust collector in the center



ISO 9001:2000 Certified

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