



APPLICATION REPORT

Minerals & Mining

Level measurement of aggregates for reliable stock management

- Increased accuracy in the supply inventory of nine aggregate silos
- Simple flush installation prevents deposits on the antenna
- Uninterrupted and stable measurement despite vibrations



1. Background

The ITESYA Group, headquartered in Autechoux, France, specialises in the three segments "industry", "tertiary sector" and "automation systems". The company is particularly active in the field of quarries and cement plants.

PLATTARD, a building material and concrete manufacturer, hired ITESYA to build a new production unit for aggregates at the factory in Villefranche-sur-Saône.

2. Measurement requirements

The end customer required level measurements of the different aggregates for its stock management. ITESYA was looking for a sturdy, vibration resistant level transmitter for each of the nine, 5.60 m / 18.4 ft high silos. The transmitter needed to be fitted with an orientation system with flange for antenna adjustment. Both the price and the response time played an important role for the supplier during selection.

3. KROHNE solution

KROHNE recommended using the OPTIWAVE 6500 FMCW radar level transmitter in the nine silos. Due to its 80 GHz radar, the 2-wire device is perfect for applications featuring powdery, bulk materials that generate a lot of dust in tight installation spaces.

The flush-mounted PEEK Lens antenna does not protrude into the tank, which prevents the antenna from product build-up and contamination.

Thanks to its narrow beam angle, this radar level transmitter is well suited for continuous, non-contact level measurement in tall, narrow silos or other storage tanks (up to 100 m / 328 ft).

The level transmitters were installed with antenna aiming kit with flange on top of the silos. This allows the beam angle of the radar to be ideally adapted to the material cones of the products created when filling and emptying the silos.



OPTIWAVE 6500 radar level transmitter on aggregate silo



Orientation system with flange for antenna adjustment

4. Customer benefits

Through optimised stock management, ITESYA was able to improve the internal process monitoring at PLATTARD. This also contributed to a cost reassessment. Thanks to the new level transmitters, manual measurement is no longer necessary. Employees are no longer required to make the risky climb onto the roof of the silos.

The simple installation of the measuring device was also attractive. KROHNE's application expertise and quick response to customer inquiries qualified them as a supplier.

5. Product used

OPTIWAVE 6500

- FMCW radar level transmitter for applications with powdery solids and dusty atmospheres
- 80 GHz radar, flush-mounted PEEK Lens antenna
- Available with antenna adjustment system
- Measuring range: 0...100 m / 328 ft



Contact

Would you like further information about these or other applications?
Do you require technical advice for your application?
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