



APPLICATION REPORT

Minerals & Mining

Level measurement in a pit

- Checking the level in a pit to control the speed of a pump
- Reliable and accurate measurement, even in the presence of vapour, dust and foam



1. Background

Ciments Renforcés Industries (C.R.I.) is a subsidiary of the Belgian group ETEX, specialized in the manufacturing and marketing of construction materials and systems. The company consists of 4 factories that develop and manufacture different roofing elements (slates, corrugated sheets, tile underlay sheets, etc.) for France and other European countries.

2. Measurement requirements

The process used to manufacture corrugated sheets requires the use of water, silica, fibres and even binders. The production cycle operates with a water supply in a closed loop and managing the recovery of this water requires reliable level measurement in order to control the accelerator pumps under any conditions. The manufacturer was using ultrasound for level measurements. However, due to the presence of foam, condensation on the probe or suspended dust the accelerator pumps often did not start or were running dry. It was necessary to make these measuring points more reliable.

3. KROHNE solution

KROHNE proposed and supplied an OPTIWAVE 7300 C radar (FMCW) level transmitter with DN 80 / 3" Drop antenna made of PP. It was installed on the process water sump where it replaced the former ultrasonic device. The customer commissioned it himself without the help of a specialized technician. Start-up was made easy using the Wizard-driven setup.

4. Customer benefits

Ever since this radar level transmitter with Drop antenna has been installed on the sump, level measurement loss is no longer an issue; neither is overflowing nor pump dry-run. Consequently, the production cycle is more efficient and maintenance reduced to a minimum. The customer also decided to install the OPTIWAVE 7300 on other liquid applications of his site, thus using it as a single reference for level monitoring.



OPTIWAVE 7300, installed above collecting chamber for process water

5. Product used

OPTIWAVE 7300 C

- Non-contact radar level transmitter for liquids and pastes
- 2-wire FMCW 24...26 GHz radar technology
- Continuous, non-contact level measurement
- Pre-configured in the factory
- Start-up made easy thanks to wizard-driven setup
- Different antennas for measuring ranges up to 80 m / 262.5 ft
- Maintenance-free



Contact

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