

ABB MEASUREMENT & ANALYTICS | APPLICATION NOTE

Palm kernel level measurement with LWT320

LWT320 application note



LWT320 withstands 11m of palm kernel tensile force.

Measurement made easy

01 Palm kernel, the edible seed of the oil palm fruit.

Introduction

Palm oil is a product obtained from the palm kernel, which is extracted by applying a sequence of stages where only mechanical processes are involved. After thermal conditioning, palm kernel oil is extracted from kernel by pressure in the pressing stage. In later stages, this oil is purified, dried, and conditioned until the final product is obtained.

Challenge

Monitoring the level of palm kernel in the tanks in real time and avoid overflow. More accuracy and avoid emergency stop.

02 Palm kernel storage vessels, more than 11m of height

03 Guided wave works perfectly even with high electric noise.

ABB solution

Due to the use of many motors in the process, there is a lot of electrical noise which can cause false signals in the measurement. Unlike traditional guided wave radar that uses device parameters requiring multiple adjustments, LWT300 series does it for you. The instrument uses built-in intelligence to differentiate between the actual level and other false signals. It also keeps monitoring all these false signals while maintaining a reliable level reading. It is like having a level expert in each device.



Conclusion

The customer feels happy with this solution.

Benefits:

- Easy and fast maintenance
- Robust equipment avoids emergency stop.
- The 6.4 mm diameter antenna easily withstands the tensile force of 11 meters of palm kernel.



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