



Always under steam - Radar sensor ensures fuel supply for power plant

- Reliable
- Reliable measurement independent of the process conditions
- Cost effective
- Optimal plant operation
- User friendly
- Simple mounting and setup

A manufacturer of corrugated fibreboard uses waste paper as a raw material. In the course of its preparation, up to 40 tons of reject are sorted out every hour. This consists of components associated with paper, e.g. foils, textiles, composites and printer's ink. Such materials cannot be recycled or landfilled. However, due to the high calorific value of the rejected material, it is burned in the company's own RDF power plant. The generated process heat and electrical energy is used in the paper production facilities. The combustible material is fed via conveyor belt into a hopper and transported further with a screw conveyor. Continuous monitoring of the hopper is required here. The ultrasonic measuring technique used until now did not work reliably and led to backups several times. The result was mechanical damage to the conveyor system and additional costs from having to switch the power plant to a different fuel. Therefore, a search was undertaken to find a measurement technology that functions more reliably.



VEGAPULS 67

The solution

Due to the measurement situation and the characteristics of the material, a VEGAPULS 67 radar sensor was deployed. The instrument measures contactlessly and can be aligned perfectly to the funnel with the help of its swivel mounting bracket. Thanks to its high dynamics, it can automatically adapt to changes in the reflective properties of the reject material. With its completely encapsulated antenna system, it is designed for maintenance-free, continuous operation. The sensor delivers a reliable, continuous output signal that shuts down the conveyor belt when the hopper is 80% full. Backup, equipment damage and losses caused by outages of the power plant are now a thing of the past.

User benefits

- Reliable operation of the conveyor system thanks to dependable measurement
- Continuous power plant operation provides cost-efficient energy for paper production
- Significant time savings during installation and commissioning due to matching accessories and simple adjustment
- No servicing costs thanks to maintenance-free sensor





VEGAPULS 67

Measuring range - Distance

15 m

Process temperature

-40 ... 80 °C

Process pressure

-1 ... 2 bar

Accuracy

± 2 mm

Frequency

26 GHz

Beam angle

≥ 10°

Version

with plastic horn antenna ø 80 mm

Materials, wetted parts

PP

Flange connection

≥ DN80, ≥ 3"

Housing material

Plastic

Aluminium

Stainless steel (precision casting)

Stainless steel (electropolished)